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The Economic Relations between China and the United States of America

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Declaration:

I hereby declare that I am the sole author of the thesis entitled "The Economic Relations between China and the United States of America". I duly marked out all quotations. The used literature and sources are stated in the attached list of references.

In Prague on May, 2014 …………………

Student's Signature

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Abbreviations

BEA – Bureau of Economic Analysis

BOP – Balance of Payments

FDI – Foreign Direct Investments

GATT – General Agreement on Tariffs and Trade

GDP – Gross Domestic Product

GVC - Global Value Chains

IFC - International Finance Corporation

IMF – International Monetary Fund

MBOP – Monetary Balance of Payments

NTT – New Trade Theory

OECD – Organization for Economic Co-operation and Development

PLC - Product-Life-Cycle

PPP - Purchasing Power Parity

TARP - Troubled Asset Relief Program

USA – United States of America

USD - United States Dollar

WB – World Bank

WTO – World Trade Organization

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Abstract

The master thesis emphasizes the economic relations between China and the United States. It gives an overview and theoretical background support on the significance of contemporary the economic relations between countries in today`s globalized era. Secondly, it analyzes how the theoretical background of economic and trade relations affect the empirical case study of the economic relations between China and the USA. The goal is to show how the economic and trade relations between China and the United States influence each other`s economies and what is the effect of such relations on the economic performance of both countries. More precisely, in order to answer the question above, the master thesis deals with complex analysis in regard of historical perspective concerning the economic relations between these countries, their ongoing cooperation in terms of balance of payments, the current and potential issues what both countries face and the existing challenges for the future. In order to complete the analysis and answer the research question, list of various sources will be used, starting from academic journals, books, literature reviews, reports from the World Trade Organization (hereafter WTO), reports from the respective countries on their economic progress, data available from the ministries of trade of respective countries and other sources related to the analysis of the contemporary economic and trade relations between the countries participating in the global economy.

Keywords: Free Trade, Balance of payments, Exports, Exchange Rates, China, United States, Foreign Direct Investments, Current Account.

INTRODUCTION

The global economy in the past several decades has been part of one of the greatest changes in regard of countries involved, trade opening, information technology, the emergence of global institutions regulating the trade, the decrease of the economic borders between developing and the developed countries and many other factors that directly influence the course of events in the global economic and trade relations. As for the purpose of the thesis, a brief chronological order of events needs to be given in order to represent the full picture of the current status of the global economic relations between the countries participating in the global economy. This will help the study to analyze the case studies of China and the US, as these are part of the inevitable changes occurring in the global economy. Their relationship is reciprocal, meaning that China and the US affect each other`s economies, they are affected with the global economic trends and at the same time, they are also influencing the global economy.

Going back before the 50s, it can be noted that the global economy has been mostly divided between developed or the so called "industrialized countries" from the North, against the developing "non-industrialized" countries from the South. The former, were participants of around 90% of world manufacturing output and 90% of world exports of manufactured goods[1]. This has resulted in the fact that the production mostly has been concentrated within national boundaries, meaning that the international trade was not developed to the extent as it is developed today. In other words, almost all of the production has remained within the patterns of the respective country specializations. Despite the great imbalances of trade between developed and developing countries, another important figure is the fact that there has been a dramatic imbalance of living standards, political systems, ideologies and similar. All these figures had affected the stagnation of the international economic relations between the two blocks.

[1] Holton, H. R,. (1989) "U.S.-China Economic Relations: Present and Future" University of California Berkeley Institute of East Asian Studies. Berkeley, CA

The period after the 50s, is representing the initial change, where the share of the manufacturing output of the developed countries had been constantly falling. In this period, the potential for substitution of the traditional production with international trade, as well as finance patterns had begun to be visible. This means that the changes for replacing the old trade patterns with the new and more balanced configurations have been constantly increasing. This was all possible thanks to the rapid development of the information technology, the trade liberalization and many other economic reforms that resulted from the fall of the Eastern Communist Block. The markets have been opened for other billions of people as a labor force. Moreover, the opening of China and the opportunity for free movement of capital and technology from developed countries to developing countries had led to increasing the size of the global economy. The growth had affected almost each region in the world, at the same time giving a change to the developing countries led by China, India, and Brazil to account the major share of the global growth. Nevertheless, other countries such as Indonesia, Mexico, Russia, Turkey, and Vietnam cannot be underestimated. Statistical reports show that the faster growth has enabled developing countries to expand their share of global GDP, rising from around one-fifth of global GDP in 2000 to more than one-third of world output today[2]. This leaves one question open – whether the world's economic balance of power is rapidly shifting away from the United States and Europe towards the rising powers in Asia and Latin America or all of these countries together are the driving force for changing the patterns of the global economy and trade relations?

Indicators that are crucial for this research include trends from the global economy such as economic growth indicators and factors, financial liberalization, (re)locations of manufacturing, as well as international trade patterns in regard of export, balance of payments, strengthening of the international financial system, exchange rates, multilateral and bilateral agreements and ongoing disputes, as well as various trade theories (free trade and new trade theory) that help us to answer the research question: "***How the economic and trade relations***

[2]Rodrigue, J. P (n.d) "Transportation, Globalization and International Trade" Available at: http://people.hofstra.edu/geotrans/eng/ch5en/conc5en/ch5c2en.html

between China and the United States influence each other`s economies and what is the effect of such relations on the economic performance of both countries?".

Implication and structure of thesis

The constantly changing global economic landscape in terms of international trade, economic and financial policies is affecting the global economy, as well as all the countries involved in the global economic system. One of the challenges of the contemporary economy is managing and sustaining the outcomes and the benefits from the ongoing economic relations, especially in an environment of increased competition and struggle for gaining competitive advantage, the greater chances for consolidation of the financial markets, the changing nature of the government regulations on the economies, as well as the role of the multilateral agreements and organizations in terms of trade development. The contemporary global economy is facing lot of challenges in terms of measuring the effects of the economic relations between the countries, especially if we analyze the relationships between the developing and developed nations. The effects of financial and trade liberalization vary from country to country, and the case of China and the United States has been one of the most interesting cases for analysis ever since the start of their economic cooperation. At the same time, both countries are affected by many domestic and international factors. For example, China is still in the process of reform implementation, while the US is facing serious economic challenges elaborated later on in the analysis. Therefore it is interesting to analyze such relationship through the lenses of one of the most famous economic and trade theories. They will help to determine what kind of policies are implemented separately in both countries, and to what extent these economic policies and regulations are affecting each other`s interconnected economies. In one word, given the fact that the developing countries continue to grow faster than advanced economies, it is likely that the multinational corporations of the developed countries need to rely increasingly on the former – the progress of the developing countries. Therefore, the role of the economic relations and the trade agreements between countries is from great importance for both players and both sides in the global economy.

The research is structured in three chapters. In seeking answers to fundamental questions, the conducted research will allow a better understanding of the role of economic, trade and financial liberalization on the evolution of the economic relations and consequences between China and the United States. Chapter 1, "*Overview of country`s economies: China and United States*" emphasizes key economic indicators that represent the economic situation of each of the countries. It gives a general overview of the economic performance and the contemporary challenges of both countries. Chapter 2 "*Theoretical Framework*" deals with key theories applicable to the case study: 1) the economic liberalization through the lenses of financial liberalization, 2) balance of payments theory, 3) free trade theory and 4) new trade theory. The aim of this chapter is to outline key characteristics and components of the theories that will determine the structure of the empirical part. In fact, through the lenses of the economic theories, the cases of China and the US will be elaborated. Finally, Chapter 3 "*Empirical analysis: economic relations between China and United States*" represents the empirical part of the research, with the focus on the effects from the economic relations between China and the US. The goal is to show to what extent the economic and trade relations between China and the United States influence each other`s economies and what is the effect of such relations on the economic performance of both countries. Key focus is put on the balance of payments between the countries including their current accounts analysis, the extent and contribution of FDIs, the role of the exchange rates, as well as their existing issues and upcoming challenges.

1. OVERVIEW OF COUNTRY`S ECONOMIES: CHINA AND UNITED STATES

1.1 Chinese Economy

Ever since the market reforms, initiated back in 1978[3], China had been facing transformation from centrally planned to a market based economy. During the past decades the country had been entitled to very fast economic, political and social development.

[3] Chow, C, Gregory (2004) "Economic Reform and Growth in China. Department of Economics" in *Annals of economics and finance* 5, 127–152 (2004), Princeton University, USA.

According to World Bank[4], "*GDP growth averaging about 10 percent a year has lifted more than 500 million people out of poverty*", while the Millennium Development Goals assigned to China have been already reached or they are still in the process of accomplishing. In terms of China`s role in the global economy, it must be noted that a country that has a population of 1.3 billion[5], is a very important player on a global scale, especially if we consider the fact that it is the second largest economy. At the same time, China is gaining outstanding role in the global economy and the thesis will show to what extent this has been affecting the global economic trends and all of the countries that cooperate with China.

On the other hand however, before we start the empirical analysis of the both case studies, the United States and China, what must be noted is that even despite the rapid economic growth of the country, China still remains to be among the list of the developing countries. The market reforms are still not fully completed in order to satisfy the criteria for removing this country from the list. The reason why it is still considered as a developing country is first and foremost the fact that many Chinese citizens still live in poverty. Consequently, based on the number of people living in poverty, the living standards in China are the worst ones on a global level, after India[6]. Thus, reducing poverty still remains one of the greatest challenges for China. Other than this challenge, the rapid economic growth had brought many additional challenges such as very high inequality between people, internal migration of labor, demographic challenges, environmental issues, as well as external trade imbalances. All of these figures, including many others such as improving access to education and healthcare, are important barrier preventing the sustainable economic growth, especially when talking about a country that has to shift from low and/or middle-income to high-income status. For example, the social dissatisfaction between the people is associated with numerous protests by worker unions, where they urge for finding solution for the corruptive authorities that negatively affect the status of the worker class, as well as other low and middle income classes in the Chinese society.

[4] The World Bank (2014) *China Overview*. Available at http://www.worldbank.org/en/country/china/overview
[5] Ibid
[6] The New York Times: "Why India trails China" in OP-ED Contributor. Available at http://www.nytimes.com/2013/06/20/opinion/why-india-trails-china.html?_r=0

Speaking of the economic progress of the country, after the long economic stagnation under Mao`s communist rule[7], nowadays the country is considered as one of the world's fastest-growing economy, many times associated with the term industrial revolution. One of the crucial steps for the country are related to the shift from the Maoist radicalism[8] that had focused on a tight hold on the state itself, while the economic situation had been depressing. The Communist vision of society, as well as the state control over various fields such as agriculture, economic progress and rapid industrialization, had led to chaos in the Chinese economy and the society in general. Mao's death in 1976[9] had brought many prospects for new leadership and new economic reform. Therefore, as it has been already mentioned, the economic reform had gradually transformed the previous socialism system with a capitalist system that gave China potential for rapid growth towards being one of the world's largest economies, economic partners and players on the global economic stage.

Furthermore, China is one of the world's top exporters, while at the same time the country is attracting huge number of foreign investments that boost the Chinese economy. This also allows the country to invest abroad. On the other hand however, such patterns and trends had led the country to enormous dependency on the global economic system, especially on the trade with the US. Such consequences can be seen from the impact that China had faced during the global financial crisis in 2009[10]. The crisis hit China to large extent, where later on in 2010-11, China had faced high inflation due to its credit-fueled stimulus program. As a response, there have been specific measures to control the inflation. Even despite this, the GDP growth had slowed to fewer than 8% for 2012[11]. Moreover, another factor that influenced China is the European economic slowdown. The relationship will be additionally

[7] Coase, Ronald and Wang, Ning (2013): "How China Became Capitalist*"* CATO Institute
[8] Ford, Hal. (2007): "The Failure of Maoist Ideology in Foreign Policy". In *Directorate Of Intelligence.* No. 0053171
[9] Ibid
[10] Morrison, Wayne, M (2009) "China and the Global Financial Crisis: Implications for the United States" in *CRS Report for Congress.*
[11] Bob Davis and William Kazer (2012) "China's Economic Growth Slows to 7.7%" in *The Wall Street Journal*, online edition. Available at http://online.wsj.com/news/articles/SB10001424052702304757004579331422321628250

elaborated in the further empirical analysis and below is a table representing the Chinese GDP in billions of US dollars as of 2012:

Figure 1: China GDP

Source: Trading Economics

According to the information above, the GDP value of China represents 13.27 percent of the world economy[12]. Additionally, China is a member of the World Trade Organization and this gives the country many prospects for accessing foreign markets and gaining new trading partners. During all of these activities, the greatest economic challenge for China is the fact that in most cases it has been entitled to unstable trading relations with its partners due to its enormous trade surplus, as well as the piracy of various goods. Therefore, there have been demands for China to raise the value of its currency, which is definitely very important indicator for explaining the relations between China and the United States later on in the master thesis. For China, such decision would mean offering more expensive Chinese goods to foreign buyers, which at the same time might hold back Chinese exports and slow down the rapid economic progress. Another challenge for such fast-growing economy as China is the need for energy in order to support its rapid economic growth. For example, China is the

[12] Bob Davis and William Kazer (2012) "China's Economic Growth Slows to 7.7%" in *The Wall Street Journal*, online edition. Available at http://online.wsj.com/news/articles/SB10001424052702304757004579331422321628250

largest oil consumer after the US[13], as well as world's biggest producer and consumer of coal. Therefore the country spends lot of financial resources into allocating foreign energy supplies.

Finally, speaking of the general overview of the Chinese economy, it can be concluded that the economic reforms had helped the country to move towards market economy and opening the Chinese towards the rest of the world. Here we can include the gradual liberalization of prices, fiscal decentralization, increased autonomy for state enterprises, creation of a diversified banking system, development of stock markets, rapid growth of the private sector, and opening to foreign trade and investment[14]. The country is making efforts to gain competitiveness on the global markets, while on the other hand it is keeping its currency tightly linked to the US dollar for years. For example, the dollar values of China's agricultural and industrial output each exceed those of the US (Ibid). This has been one of the major sources for conflict with the US and the constant demands for moving the exchange rate system that references a basket of currencies. Additionally, even despite the extensive economic growth, China is still a country that faces per capita income that is way below the global average standards. Therefore, China is entitled into reducing its high domestic savings rate and stimulating the low domestic demand that significantly slow down the economic growth. Thus, the government adopted the 12th Five-Year Plan, back in March 2011[15], which is entitled into the emphasize of continuous economic reforms, as well as the effort for increasing domestic consumption so that the domestic economy is less dependent on exports in the following years.

a) Economic freedom index: Open Markets

Below is a table that represents Chinese status in 2013 in terms of the extent of openness of the Chinese market, analyzing indicators such as the average tariff rate, non-tariff barriers, FDI and financial freedom. China's average tariff rate is 4.1 percent and one of the greatest limitations is the prevalence of state-owned enterprises and government subsidies that

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[13] The Associated press (2013) "China overtakes U.S. to become world's biggest oil importer" in *CBC News*. Available at http://www.cbc.ca/news/business/china-overtakes-u-s-to-become-world-s-biggest-oil-importer-1.1958511
[14] Index Mundi (2013) "China Economy – overview".
[15] Roach, S. Stephen (2011) "China's 12th Five-Year Plan: Strategy vs. Tactics".

continue to distort the economy[16]. Regarding the control on the financial system, China is still implementing tight controls for the purpose of managing its economy. Even despite the above mentioned reforms, the country still needs to work on decreasing the number of government owned financial institutions that mostly favor large state enterprises.

Figure 2: China: Status of Open Markets

Trade Freedom	71.8
Investment Freedom	30.0
Financial Freedom	30.0

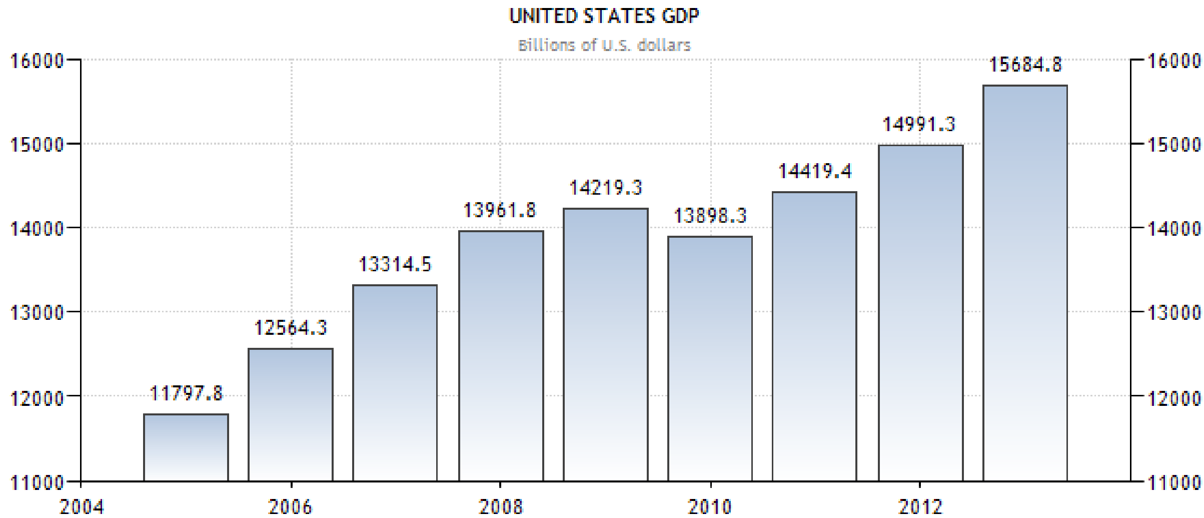
Source: Index of Economic Freedom

1.2 United State Economy

In order to give an overview of the economic situation in the US, one of the most relevant indicators is the per capita GDP for the largest and most technologically powerful economy in the world. According to Index Mundi, the US market-oriented economy has per capita GDP of $49,800[17], whereas the economic decisions are mostly made by the private individuals and business firms, while on the other hand, the government buys the goods and services from the private sector. Below is a table representing the US GDP in billions of US dollars as of 2012 and we can clearly see that the US GDP output is almost twice bigger than the Chinese one represented above:

Figure 3: United States GDP

[16] 2014 Index of Economic Freedom (2014) "China" in Country Rankings Available at http://www.heritage.org/index/country/china
[17] Index Mundi, (2013) "United States Economy – overview"



Source: Trading Economics: "USA GDP" Available at *http://www.tradingeconomics.com/united-states/gdp*

One of the most convenient marks for the US economy is the fact that the US companies enjoy greater flexibility compared to China, as well as other developed economies like Japan or economies in Western Europe. This can be seen from the flexible decisions in terms of expanding the capital plant, the potential for developing new products and similar. The technological advancement plays huge role in this regard, while at the same time it demands skilled labor force with various professional and technical skills. From one hand this is an advantage in terms of economic and technological development of the country, but on the other hand such discourse creates great gap between the high and low skilled labor. For example, the latter are in most cases not entitled for health insurance or they are paid significantly lower than the former. Additionally, the statistics show that "*since 1975 all the gains in household income have gone to the top 20% of households and since 1996, dividends and capital gains have grown faster than wages or any other category of after-tax income*" (Ibid).

The same as the Chinese case, the US economy is also dependent on exports, especially if we consider the fact that imported oil accounts for nearly 55% of the US consumption and crude oil prices had doubled between 2001 and 2006[18]. Such trends, along with the crisis of the housing market, the mortgage crisis, the investment bank failures and many others; had affected the value of the dollar, which reached significant drop in the fact years before and after the global economic crises. This also led the country to a deep recession, similar to the one from the Great Depression. In order to cope with the situation, the US government had established a $700 billion Troubled Asset Relief Program (TARP)[19], in order to stabilize the situation. This had been done through purchasing equity in the US banks and the industrial corporations, but regardless of these efforts, the federal budget deficit in 2010 and 2011 reached nearly 9% of the GDP[20]. The situation today is still facing great challenges such as inequality and stagnation of wages for the lower-income families, demographic issues with the aging population and the need for increased medical and pension costs, as well current budget deficits.

b) Economic freedom index: Open Markets

In terms of economic freedom, the United States is rated with an economic freedom score of 75.5 and it is the 12th freest economy in the 2014 Index[21]. Some of the recent limitations that have decreased the index are resulting from the policy of the US in regard of property rights, business and fiscal freedom. In fact, the US is the only country to have recorded a loss of economic freedom, where the U.S. score decline from 1995 to 2014 is 1.2 points, the fourth worst drop among advanced economies (Ibid). One of the reasons for such decline is closely related to the government interference in the proposal of new regulations on the above mentioned - finances and health care, as well as many other fields. For example, there have been various government regulatory agencies that tend to control the energy sectors in addition to the health care and finances. One of the greatest concerns in this regard is the increased possibility of corruption die to such regulations. Additionally, the government spending, the public debt, as well as the overall tax burden is another indicator for diminishing

[18] Ibid
[19] Corner, Gary. (2013) "The Troubled Asset Relief Program—Five Years Later" in *Federal Reserve Bank*.
[20] CIA, The World fact book, 2013. "*North America: United States".*
[21] Heritage.org. *2014 index of Economic Freedom: United States.* Available at http://www.heritage.org/index/country/unitedstates

the economic freedom index of the country. For example, many businesses have been greatly affected by the new regulations and requirements imposed by the government. The government interventions had also led to various price deformations, which will later on be described into more details.

Below is a table that represents US status in 2013 in terms of the extent of openness of the US market, analyzing indicators such as the average tariff rate, non-tariff barriers, FDI and financial freedom. In fact, the average tariff rate is 1.3 percent and the relatively new non-tariff barriers include restrictions on tomatoes imported from Mexico[22].

Figure 4: United States: Status of Open Markets

Trade Freedom	86.8
Investment Freedom	70.0
Financial Freedom	70.0

Source: Heritage.org. 2014 index of Economic Freedom: United States. Available at http://www.heritage.org/index/country/unitedstates

2. THEORETICAL FRAMEWORK

The theoretical part elaborated below represents the most convenient economic theories suitable for the case study analysis of the economic relationship between China and the United States. Four theories are emphasized below: the economic liberalization theory, the balance of payments, the free trade theory and the new trade theory; each one of them accompanied by its components. Through the lenses of all of these, along with their basic principles, divisions, ideas and doctrines, the empirical part conducted and the ongoing economic relationship between China and the United States will be in details elaborated. The purpose is to determine how the effects and results of these theories work in the practical and

[22] Ibid

every day economic relations between one of the most developed countries in the world, and one of the fastest growing developing ones.

2.1 Theory of Economic Liberalization

The concept of economic liberalization includes various stages on package of reforms in regard of trade openness, reduction in government expenditure, the extent of FDIs, managing and adjusting the exchange rate, removal of any potential or existing barriers on entry and/or exit and many other that are related to the macroeconomic stabilization or to the microeconomic changes of certain country. If such structural changes are successfully implemented, the country can be more prepared for gaining internal and external competitive advantage, as well as technical and scale efficiency. In one word, such trend includes various government policies that promote free trade, include deregulation, elimination of subsidies, and price control, as well as reducing the number of public services or their privatization[23]. Such policies, including laissez-faire approach or relying on market forces for the allocation of resources, began to be more intensive in the period during the 70s[24]; especially among the developing counties in the process of initiating adjustment policies as a result of the conditions imposed in order to gain financial help from the international institutions.

Literature overview

According to (McKinnon, 1973; Shaw, 1973), cross-country capital flows as well as the progressive development of domestic financial activities contributes to better availability of savings for investment purposes[25]. In more details, the greater the extent of advanced financial market transactions, the greater economic opportunities and faster output growth. Such trends are often resulting from the already mentioned economically and politically-led interventions for promotion of financial liberalization across the globe, including both developing and developed countries. According to (Edison et al., 2004; Chinn and Ito, 2006),

[23] Bhalotra Sonia (2002) "The Impact Of Economic Liberalization On Employment And Wages In India" in *International Policy Group*, International Labour Office, University of Bristol, UK, Geneva. 31 January 2002
[24] Ibid
[25] Agnieszka Gehringer (2013) "Financial Liberalization, Financial Development and Productivity Growth – An Overview" in *Economics, The Top Access, Open Assessment E-Journal*. Discussion Paper No. 2013-46 | August 27, 2013

there are various benefits in terms of better opportunities of risk diversification, which is directly resulting from the financial integration[26]. This should help promoting financial development.

On the other hand, there has been a great criticism on the reasons for indicting that the assumption above is correct. For example, Demirgüç-Kunt and Detragiache (1998)[27], claim that even despite the regularly oriented financial liberalization, there still might be a situation of increased interest rates, especially if the financial integration process is too fast. Such approach can be highly selective and might not apply to each case study. It also has the potential to marginalize the role of the smaller businesses within the economy. In the macroeconomic environment, small or underdeveloped economies might not have the enough capability for accessing financial resources. This is directly linked to the concept and conditions of conducting the analysis under unrealistic assumption of perfect information and perfect competition.

Finally, the economic sector is interconnected with the financial sector in terms of creating conditions for economic development thanks to the development of the latter. According to Goldsmith, „*the more complex is the financial system in a country, the greater will be the level of development in that country*"; while according to Schumpeter's "*the banking system impulses growth because innovations can be financed*"[28]. This is one of the justifications why the liberal economics is in the favor of financial liberalization and why the developing countries should end the financial repression in terms of still having low interest rates for savers for example. The greatest danger comes with the situation when no monetary assets are present in the existing economy instead of improving the situation by depositing such assets in the bank. This is a serious threat especially in the case of China and its problem with the domestic savings and economic growth. Such limitation in the financial savings imposes reduced funds that can potentially be lent to the economy, as well as less productive investments due to the self-financing, high inflation rate and limited amount of banks having

[26] Ibid
[27] Ibid
[28] The OverBlog (2010) Understanding Financial Markets How finance impacts the economy, and vice-versa "Financial liberalization in developing countries: the theoretical foundations"

specialized credit activities. The financial liberalization therefore is one of the best approaches to decrease the trends above and urges for unification of the financial markets where the interest rates can freely fluctuate, the funds markets will be centralized and the role of the authorities will be reduced. Additionally, speaking of the fixed exchange rate regimes, which is the case with China, there is a danger that such trend leads to greater inflation that can cancel the positive impact of the increase in the nominal interest rate. In order to avoid such indications, the final remark on the financial liberalization is that if carefully managed, it can offer various advantages such as higher degree of competition on the domestic financial markets, improved productivity, well developed financial system that would attract investment from foreign and local investors, gaining technological knowledge. Moreover, the consolidated financial and economic liberalization gives the potential for generating positive growth outcomes and high returns in the sphere of the economic relations between the countries. The extent of such trends and predictions will be furthermore elaborated in the analysis in the empirical part between China and the United States. One of the goals in this regard is to show to what extent the activities mentioned above are facilitating future resources for contemporary development of the economic performance in the countries.

2.1.1 Trade liberalization

One of the key reforms from the list above is the internal deregulation in terms of the process of opening the trade via relaxation of the existing trade restrictions. According to Rodrik 1992[29], the imperfectly competitive economy can affect welfare in several ways such as 1) increase in imports due to import price falls, 2) expansion in sectorial output in sectors with super-normal profits, 3) expansion in firm output in sectors with unexploited scale economies and 4) through increase in productivity and technical efficiency. Nevertheless, opponents of such theory emphasize the fact that the link between trade liberalization and economic growth is still not empirically proven to be fully accurate. For example, one of the barriers might be related to other sources influencing the trade openness, such as poor

[29] Yanikkaya Halit (2002) "Trade openness and economic growth: a cross-country empirical investigation" in *Journal of Development Economics 72 (2003) 57 – 89*. College of Business and Administrative Sciences, Celal Bayar University, Uncubozkoy Kampusu, Manisa 45030, Turkey

economic performance of the country. On the other hand however, the positive indicators that trade openness is to some extent related to higher growth cannot be ignored. Accompanied by a set of appropriate complementary policies such as financial and macroeconomic policies, trade openness and economic liberalization offer access to better information and newer technologies that can foster growth. Here we can firstly start with the link between trade openness (liberalization) and the reduction of poverty in most of the developing countries. Such empirical data will be later on elaborated in the empirical part of the thesis.

2.1.2 Financial Liberalization

The financial liberalization, as part of the economic liberalization is not a new occurrence, since the developed Western economies had been operating in the conditions of free economy for long time in the past several decades. The initial measures back in the 70s were related to the reduction of regulating different markets capital or the regulation of the role and freedom of financial intermediaries. Therefore, financial liberalization includes several sets of reducing regulations in the following segments:

- Capital account;
- Banking sector;
- Stock market liberalization.

In more details, the theory of financial liberalization refers to measures directed at weakening or disassembling regulatory control over the institutional structures, instruments and activities of agents in different segments of the financial sector, where such measures can relate to internal or external regulations[30]. It must be noted that there are two scopes of the financial liberalization: 1) the deregulation of the domestic financial sector and 2) opening the capital account of the country. The former is initiated by McKinnon (1973) and Shaw (1973)[31], where they claim that "*one of the reasons for the poor growth performance of many developing countries had been administratively determined very low (in some cases, negative)*

[30] Jayati Ghosh (2005) "The Economic and Social Effects of Financial Liberalization: A Primer for Developing Countries" in *Economic and Social Affairs* DESA Working Paper No. 4 ST/ESA/2005/DWP/4
[31] Kendall Patrick., (2000): "*Interest Rates, Savings and Growth In Guyana*".

real interest rates which discouraged savings and encouraged inefficient use of capital". As a result such practices include deregulation of interest rates that would potentially increase the domestic savings within the country that is implementing these reforms. This increases the real interest rates, which is stimulation for upcoming economic growth and further investments. On the other hand, such deregulation is a result by second scope of the financial liberalization process - opening the capital account of the balance of payments (a theory elaborated later in this chapter). This allows more foreign capital to the country, resulting from higher domestic real interest rates. Nevertheless, one of the limitations in such approach might be the effect of '*over-borrowing*'[32]', where domestic liberalization is coupled with capital account liberalization. In a potential case of increasing the debt denominated in a foreign currency, the country might face serious influences and instability from any kind of exchange-rate fluctuations (banking crises for instance).

Furthermore, a difference must be made between developing and the developed countries. In the latter, the financial liberalization had increased the flexibility of creating credit and making investments, due to the low extent of regulations. Additionally, instruments such as capital flows in the form of stocks and bonds, rather than loans; as well as derivatives such as swaps, options and futures that have been autonomously created by the financial system, introduced the conditions for taking greater risks. Also, such conditions allowed greater competition on the financial markets, where there have been an urge for finding new recipients for loans and investments in risky regions[33]. Such trends might be positive but at the same time negative due to the low regulation levels and high risk taking (the global financial crises few years ago is one of the examples, especially the real estate bubble that occurred in 2008).

In one word, the internal financial liberalization is usually related to several key measures such as:

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[32] Javier Bianchi, Enrique G. Mendoza (2010) "Over-borrowing, Financial Crises and 'Macro-prudential' Taxes" in *NBER Working Paper No. 16091.* The National Bureau of Economic Research

[33] Jayati Ghosh (2005) "The Economic and Social Effects of Financial Liberalization: A Primer for Developing Countries" in *Economic and Social Affairs* DESA Working Paper No. 4 ST/ESA/2005/DWP/4

- Privatization of the publicly owned banking system so that they do not dominate the market in regard of allocation of capital;
- The reduction or removal of controls on the interest rates or rates of return charged by financial agents. This does not mean that the central bank stops influencing the rate structure through various adjustments. The purpose of such measures is encouraging competition and offering better financial services on the market;
- Creating easing conditions for the participation of firms and investors in the stock market. This is done by permitting greater freedoms to intermediaries, such as brokers, and by relaxing conditions with regard to borrowing against shares and investing borrowed funds in the market[34].

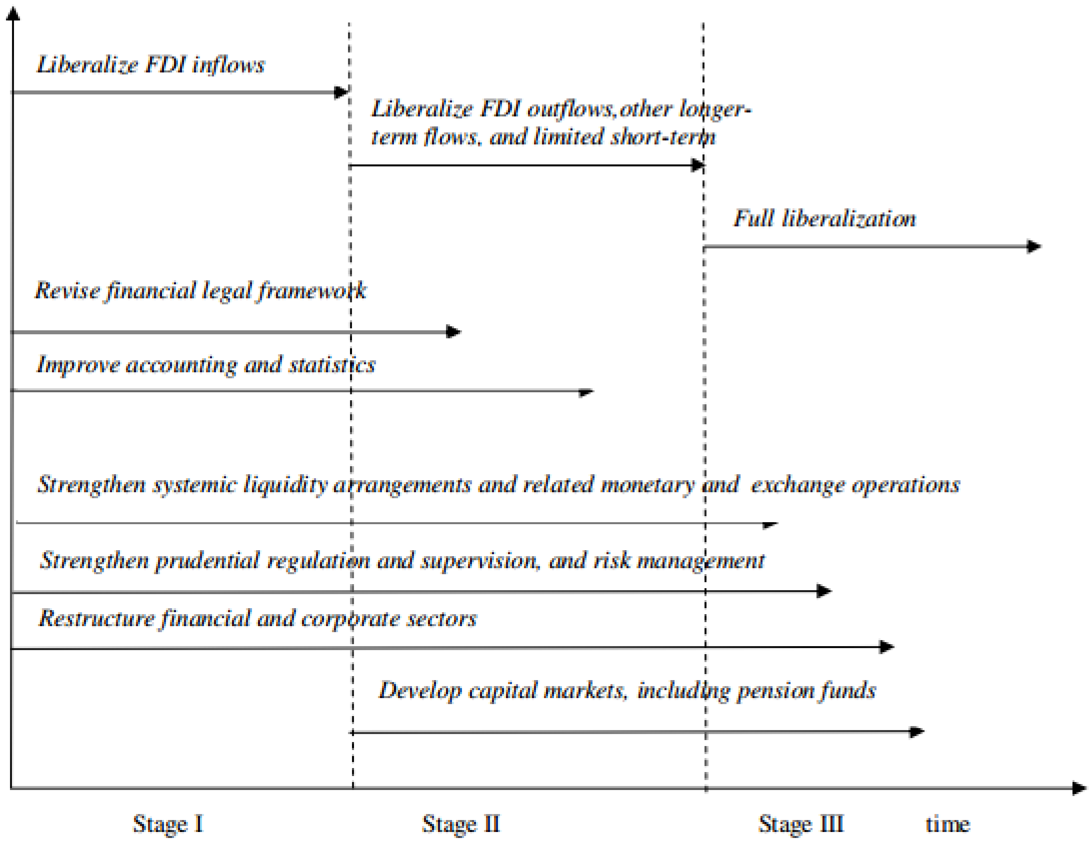
2.1.3 Capital Flow Liberalization

By definition, "*capital account liberalization is a decision by a country's government to move from a closed capital account regime, where capital may not move freely in and out of the country, to an open capital account system in which capital can enter and leave at will*"[35]. The sequence of capital flows proposed by the IMF economists is presented below:

Figure 5: Sequence of capital flows

[34] Ibid

[35] Blair Henry Peter (2006) "Capital Account Liberalization: Theory, Evidence, and Speculation" in *National Bureau Of Economic Research*. NBER Working Paper Series



Source: Ishii and Habermaier (2002)

Source: Ibid

In practice, it the representation above shows that the country firstly must gain effective control over monetary and foreign exchange operations, so that later on it can proceed with the second step of the financial liberalization. It is very ambiguous whether the stage of full liberalization can be actually achieved prior to these policy`s changes. Therefore, it is agreed that unless developing countries do not meet specific criteria prior to the not liberalization of capital flows, the success is very questionable. Therefore, the key steps are the following, prior to full capital liberalization:

- Controlling inflation;
- Stabilization of the exchange rate and to obtain sufficient foreign economic credibility;
- Reasonable limits of budget deficit;
- Sufficient implementation of rules in the financial market;

- ❖ Competition policy improvement.

Measuring the extent of financial liberalization

The process of financial liberalization is not a single event, but it is structured from a series of events that are interconnected. Nevertheless, the measurement process is very important, especially for the upcoming investing decisions. For example, such measures can give indications to the extent of which the market is open, especially in the developing economies. However, it must be noted that the intensity of liberalization is not the same for every developing economy, as ach one is classified based on various extent of the liberalization of the capital markets. For this purpose, one of the most convenient measurement methods is proposed by Bekaert (1995)[36], and this method deals with the intensity of liberalization. The construction of the indicator is based on eligible indices of the International Finance Corporation (IFC) and therefore for each emerging market, the indicator (investment rate = IRit) is constructed by dividing the market capitalization of S&P / IFC Investable Index to S&P. The IFC Global index is the following:

Figure 6: The IFC Global index

$$IR_{it} = \frac{MC_{it}^{IFCI}}{MC_{it}^{IFCG}};$$

where:

MC = market capitalization at the time t of the considered two indices for each emerging market;

S&P / IFCG = total domestic market capitalization;

S&P / IFCI = percentage of the national market, which is legally available to foreign investors.

Source: Ibid

[36] Nistor Ioan (2012) "Financial Liberalization And The Impact On Financial Market"

The equation above shows that if the investment rate is equal to 1, this indicates that emerging markets are fully liberalized; whereas if the rate is 0, this means that the market is completely closed to foreign investors. This rate in fact represents the progress of the above mentioned deregulation reforms because it is based on the theoretical level of foreign equity[37]. Additionally, in order to measure the intensity of controls on capital flows, Edison and Warnock (2003) deduct the investment rate of the formula above from value one[38] and the results show that as long as this value is within the range of 0 and 1: "*the zero reflects an open market with a low capital control and the value of one indicates a high degree of capital controls"*.

2.2 Balance of Payments Theory

The balance of payments is a statistical representation and summary of the economic transactions of certain economy with the rest of the world, under specific period of time (see appendix 1). Therefore, the transactions involved in this balance are conducted between domestic residents and foreign parties and in most cases these transactions involve goods, services, income, various financial claims, liabilities and transactions. It must be noted that under transaction there is a process of "*economic flow that reflects the creation, transformation, exchange, transfer, or extinction of economic value and involves changes in ownership of goods and/or financial assets, the provision of services, or the provision of labor and capital*[39]". In the prefect situation, it is expected that the totals of payments and receipts are equal; but the reality shows different situation. In fact, most of the countries either face excesses of payments or receipts that are known as deficits, or the opposite situation called surpluses. There can be deficits and surpluses on various trade goods, services, foreign investment income, foreign aids, private investments and any other forms of international transactions such as flow of money between treasuries for example.

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[37] *Ibid*
[38] *Marcel Fratzscher., (2012): "Capital Controls And Foreign Exchange Policy" in European Central Bank. working paper series, No 1415*
[39] The International Monetary Fund (n.d): "Balance of Payments Manual". Page 5.

Before explaining the key elements of a balance of payments of specific country, the concepts of export, import and balance of trade must be defined. As for the exports, they represent the sale of goods and/or service into a foreign country that have been previously produced in the exporting country. One of the negative effects of the extensive flow of exports is the fact that the prices of such products/services tend to rise on the global markets (which is good for the producers), but on the other hand they might negatively influence the domestic consumers. In terms of the imports, they represent the goods and/or services produced by the foreign sector and purchased by the domestic economy[40]. Together with the exports, they represent the conditions for global trade patterns. Finally, the balance of trade represents the difference between the value of goods and services exported out of a country and the value of goods and services imported into the country[41], and this is from crucial meaning for the analysis of the balance of payments theory. Under such conditions, the balance of trade can be a surplus – a situation when exports exceed imports or deficit – when imports exceed exports. It is believed that the former favors the domestic producers, although it is still ambiguous how it does affect the domestic consumers; while the latter represents unfavorable situation for the domestic producers, but it benefits the domestic consumers who pay lower prices.

In other words, it can be said that if the economy is facing surplus, it actually is associated with being the net creditor to the rest of the world, as such indicator is representing country`s savings opposed to the investments. The opposite situation is the country being net debtor to the rest of the world, where it is investing more than it is saving. At the same time, this country is actually using the financial resources from the other economies for the purpose of meeting its investment requirements, as well as the domestic consumption. Such economy is usually associated with reduction of its foreign-exchange assets since these kinds of reserves are about to be used for the investment purposes abroad.

[40] The Library of Economics Liberty (n.d): "Balance of Trade and Balance of Payments" in the *National Council on Economic Education (NCEE)*
[41] Stein Herbert., (n.d): "Balance of Payments" in *Encyclopedia of Economics*

2.1.1 Current Account

According to definitions, the current account records the movement of all goods and services into and out of a specific country and basically the balance of the current account tells us if a country runs a deficit or a surplus[42]. In order to determine whether the economy of the country is healthy or not, we must look at the components of the current account: 1) goods – that are actually movable and represent the transaction in ownership change from the local to foreign country and vice versa; 2) services – represent the intangible actions such as consulting services, tourism, business activities etc.; 3) income – represents the flow of money going in (referred as a credit) or out (referred as a debit). These transactions include salaries, dividends or any kinds of investments; 4) - current transfers are basically the transfers that offer nothing in return, including grants, donations, remittances, pensions etc. For such reasons, these are not defined as determinants of the economic production. In other to represent the mathematical approach and calculations of the components above, below is the equation with the corresponding variables that calculates the current account balance (CAB[43]):

X = Exports of goods and services

M = Imports of goods and services

NY = Net income abroad

NCT = Net current transfers

The formula is:

$$CAB = X - M + NY + NCT$$

2.1.2 Capital Account

The capital account includes inflows and outflows relating to investments and this is why it is closely linked mostly to the investment activities carried by the companies, governments or the individuals in the economy. More precisely, it deals with the monetary transactions between specific country and the rest of the world, such as debts, transfer of

[42] Ibid

[43] The Free Forex Encyclopedia: "*Current Account Balance*". Available at http://www.babypips.com/forexpedia/Current_Account_Balance

ownership on fixed assets, transfer of funds based on fixed assets, patents, royalties, copyrights and similar. The reason why the investing activities are recorded in the capital account is the fact that it is actually the debit because the money is leaving the economy. Nevertheless, this should not be perceived as a debit on single terms, but it is a potential of becoming a credit as long as the investment implies return at certain period of time. The return, whether a capital gain from portfolio investment, which goes under a debit of the financial account or a return made from direct investment, which goes under debit of the capital account, is recorded as a credit in the current account[44]. Credit in the current account represents income investment in the BOP. Overall, if the capital and financial accounts are negative, the current account is recording a surplus at this stage, which shows that the economy is providing funds to rest the world and vice versa.

Capital Account Balance: Change in Reserves

Under the balance of payments theory, the foreign exchange reserves represents the reserves that are held in form of foreign currencies and these usually include currencies such as dollar, pound or gold. In order to understand the concept of how this approach work, it must be noted that when a country enjoys a net surplus in current account & capital account, it increases foreign exchange reserves, while when the current account deficit exceeds the inflow in capital account, foreign exchange from the reserve accounts is used to meet the deficit[45]. As long as country's foreign exchange reserve is constantly rising, that transaction is shown as minus in the country's balance of payments accounts. This is because money has been transferred to the foreign exchange reserves in order to meet the deficit in the balance of payments. On the other hand, the plus sign shows the borrowing of foreign exchange from the forex account for the purpose of meeting the deficit.

The balance of payments for the demand and supply theory of exchange rate theory is one of the most convenient theories that strengthen the significance of the exchange rates on a global level. According to this theory, "*the rate of exchange in the foreign exchange market is*

[44] Dammon, Robert M.; Spatt, Chester S.; and Zhang, Harold H., (2003): "Capital Gains Taxes and Portfolio Rebalancing" (2003). Tepper School of Business.Paper 107.
[45] Akrani Gaurav., (2010): "Concept Definition and Structure of BOP".

determined by the balance of payments in the sense of demand and supply of foreign exchange in the market"[46], whereas the balance of payments term is used in the sense of a market balance. A deficit in the balance of payments of certain country occurs when the demand for a country's currency falls at a given rate of exchange; while when the demand for the same currency rises at a given rate of exchange, we can then talk about surplus of balance of payments. The latter situation leads to greater appreciation in the external value of the country's currency; while the former indicates depreciation in the external value of the country's currency. As long as the exchange rate responds to the changing nature of the supply and demand conditions, the tendency is that the county`s balance of payments determines the value of its currency compared to the currencies of the other nations in the global economy. Therefore: "*If market forces are allowed to work unimpeded, the demand and supply of foreign exchange establish a rate of exchange that automatically clears the market so that no actual or exposit payments deficit or surplus can appear*[47]".

Under the conditions above, we can see that there is intensive relation between the balance of payments of a certain country and the demand and supply of the foreign exchange. A country keeps a track of its balance of payments through noting down various financial transactions, imports and exports, investments and other international transactions. In short, this theory emphasizes the payments made by the foreigners to the nationals and vice versa; where the debit side represents the outgoing payments, while the credit side represents the incoming payments. The items that have been exported from a certain country to another actually create the supply of foreign exchange by the exporting countries, while the items that are exported actually represent the demand for foreign exchange by the importing countries. The balance of payments doctrine works under the following criteria: "*When there is deficit in the balance of payments the debits (or the demand for foreign exchange) will exceed the*

[46] Simranjot (2011) "What is Balance of Payments Theory?"
[47] Eatwell, John., (2011): "The Fall and Rise of Keynesian Economics".

credits (or the demand for foreign exchange) and as a result, the rate of exchange will rise (or the exchange value of domestic currency in terms of foreign currency will fall)[48]".

2.1.3 Trade Account Balance

The trade account balance represents the difference between exports and imports usually of goods, since they are taking a dominant part of the international trade[49]. This balance actually tells whether country enjoys a surplus or deficit on the account. If we for example take the status of the developing countries, it can be noted that they run deficit in their balance of payments since they are extensively focused on exporting and vice versa.

Export Led Growth

The export growth is closely linked to the trade liberalization as the latter one gives potential for improving efficiency and stimulating exports of a certain country. This can later on lead to positive effects on the supply and demand within an economy. Nevertheless the practical analysis indicates that there are various measures how the link between the trade liberalization and the exports can be determined, and whether liberalization has positive effect on economic performance. Back in 1987, when the developing countries had been implementing their trade reforms, the World Bank classified a group of 41 developing countries according to their trade orientation and several categories have been determined[50]:

- **Strongly outward oriented** countries with only few trade or foreign exchange controls, whereas the trade and industrial policies are not separated between the production for the home market and exports or the purchases of domestic vs. foreign goods.
- **Moderately outward oriented** countries, which favors purchase of domestic goods and the incentive structure is reasonably biased towards the production of goods for the home market rather than for export.

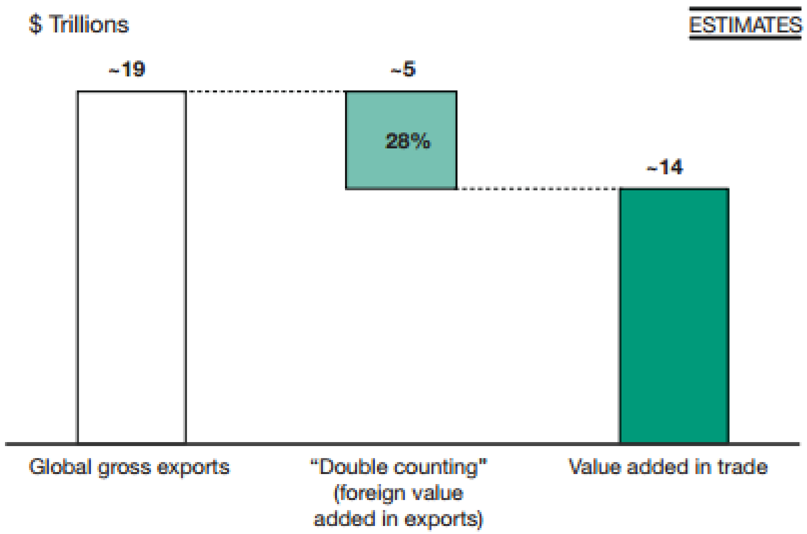
[48] Grieve Roy., (2006): "Open Economy Macroeconomics" in *Department Of Economics*, 31220/06/18-20/17A[1]
[49] trade account balance
[50] Thirlwall P. Anthony (2000) "Trade, Trade Liberalization and Economic Growth: Theory and Evidence" in *Economic Research Papers*, No. 63 University of Kent at Canterbury

- **Moderately inward oriented** countries where there is a more positive prejudice against exports.
- **Strongly inward oriented** countries with huge trade controls and incentives that strongly favor production for the domestic market, while being against any kind of imports.

The argument whether trade liberalization and exports lead to growth will be supported by the analysis of the balance of payments theory that is from great importance for in the process of determining whether the differences between the open and developing economies in terms of growth rate are actually resulting from the level economic performance due to the shortage of foreign exchange or not. Prior to this analysis however, what must be also mentioned are the various stages of the production process of both, goods and services, aimed for final consumption on global level. Such division of the production processes had incorporated huge global production systems that consist of complex networks labeled as global value chains (GVCs)[51]. The reason why such figure is important is because it may lead to double counting in trade, as the in-betweens of the production process are counted several times in world exports. This is why such process should be counted only once as "value added in trade"[52] because it is actually consisted from value added that is firstly imported by the producer countries for the purpose of incorporating in the upcoming products and/or services that are tended to be exported by the second time. According to the table below, 28% of the gross exports consist of value added and circa $5 trillion of the $19 trillion in global gross exports is double counted:

Figure 7: Value Added in Global Exports

[51] The United Nations (2013) "Global Value Chains: Investment And Trade For Development" in *World Investment Report* http://unctad.org/en/publicationslibrary/wir2013_en.pdf
[52] Ibid



Source: The United Nations

Overall, the importance of the patterns of value added trade in GVCs is one of the crucial factors determining the distribution of actual economic gains from trade to the individual economies. This is why most of the developing countries are taking great share in the GVCs.

Growth Models of Balance of Payments

In terms of long term and short term growth in regard of the balance of payments, it can be said that in practice, one country cannot grow more rapidly than the rate which is dependable with balance of payments equilibrium on country`s current account. Therefore, in case of comparing the deficits to GDP, if the rates are greater than 3%, the situation is becoming intense in the international financial markets. The correlation between the country's balance of payments equilibrium and the growth rate can be elaborated through "*specifying multiplicative (constant elasticity) import and export demand functions, where imports and exports are function of domestic and foreign income, respectively, and of relative prices, and substituting these functions in the equilibrium condition*[53]". As long as imports are function of

[53] Thirlwall P. Anthony (2000) "Trade, Trade Liberalization and Economic Growth: Theory and Evidence" in *Economic Research Papers*, No. 63 University of Kent at Canterbury

domestic income, the model below is representing the growth of income consistent with balance of payments equilibrium:

$$\mathbf{yB = [(1 + \Psi + n)\ (pd\ - pf - e) + \in (z)]/\pi}$$ [54]

*pd is the growth of domestic prices

*pf is the growth of foreign prices

*e is the rate of change of the exchange rate measured as the domestic price of foreign currency

*z is the growth of world income

Ψ (<0) and η (<0) are the price elasticity of demand for imports and exports

*$\in$ (>0) and π (> 0) are the income elasticity of demand for exports and imports

In a situation when real exchange rate or relative prices do not change very much in the long run, the condition above is just satisfied (y + h = 1), equation (3) reduces to:

$$\mathbf{yB = \in(z)/\pi\ (4)\ or\ yB = x/\pi}$$

In case where if relative prices do not change at all and **x** is the growth of exports determined by the growth of world income alone. Such equation is a dynamic version of the so-called Harrod trade multiplier result where, on various assumptions (including constancy of the real terms of trade), the level of income **Y** is shown to be a linear multiple (**1/m**) of the level of exports (**X**), where m is the propensity to import[55]. Such indicators represent correlation between a country's long run sustainable growth rate and the growth of exports. One of the strongest correlations is depending on the differences in the income elasticity of demand for imports (**π),** where the **x/p** is a very good predictor of a country's long run growth performance. In one word, income growth and export growth are highly correlated and the

[54] Ibid
[55]Andrew Trigg and Araujo Ricardo (2014) "A Multi-sectorial Assessment of the Static Harrod Foreign Trade Multiplier" in *Munich Personal RePEc Archive*. MPRA Paper No. 53242 (*The entire explanation for the equation is taken from Harrod`s explanation)*

export growth raises the output growth by the process of relaxing the balance of payments constraint on demand, regardless of any supply-side effects.

2.3 Free Trade Theory

The most convenient definition for free trade theory is the following: "*It represents the unrestricted purchase and sale of goods and services between countries without the imposition of constraints such as tariffs, duties and quotas. Free trade is a win-win proposition because it enables nations to focus on their core competitive advantage(s), thereby maximizing economic output and fostering income growth for their citizens*"[56].

As long as international mobility of factors of production is available, we can then talk for the patterns of the free trade theory. Some of the components are including opportunity for lower costs, gaining stronger competitive advantage, imposing capabilities of the domestic labor by introducing know-how techniques and many others. What must not be mixed with the expected benefits of the free trade in terms of trading based on comparative advantage is the world factors of production related purely to cheap labor, especially in the developing Asian countries. Instead, the free trade theory focuses on the concept of comparative advantage, efficiency and productivity, as well as opportunity costs of the countries included in the global economy and trading system, along with the win-win approach for the participating countries.

Historical Origins

Prior to the origin of the Smith`s theory about the free trade back in 18th century, a brief overview must be given reflecting the mercantilism approach across Europe back in the 17th century[57]. The latter was oriented towards the doctrine that for the purpose of increasing wealth of a nation, government regulations had to influence the economic situation of the country in terms of attaining more quantities of gold and silver into its accounts. In fact, the goal of the government had been to develop the home industries by restraining the portions of imports and exports. Such approach is completely different than the free trade theory,

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[56] Investopedia (n.d): "Definition of Free Trade" Available at http://www.investopedia.com/terms/f/free-trade.asp
[57] Business Dictionary: "Merchandising". Available at http://www.businessdictionary.com/definition/merchandising.html

especially in regard of the notion that in the competition for greater amounts of gold/silver, countries had been facing long lasting military conflicts, and all of the financial gains from any taxes went to the military. This shows that the key benefit of foreign trade was the importation of gold and silver, where there have been no net gains from trade.

In his Wealth of Nations, Adam Smith[58] challenged this approach and introduced the idea of free trade, competition and economies of scale for the purpose of improving productivity and growth, as well as economic welfare not only for the country, but for the entire nation as well. Therefore, the main idea according to Smith was that the concept of free trade changes the nature of the international commerce from the above mentioned source of conflict into ground for prosperity, peaceful relations, wealth and mutual benefit among nations. Key concepts of this theory are described below:

Efficiency (productivity)

The reason why efficiency is important is the fact that one of the most important things is the level of output we get from a given quantity of inputs, regardless these inputs include hours of labor, pounds of flour, kilowatts of electricity, or any other output[59]. Such approach also refers to the capital, technology, land and any other resources used during the production process of goods. One of the most critical segments in the efficiency process is determining the factors of production in regard of the costs related. For example, if the economy is giving up producing something in order to produce something else, then there is the opportunity cost and this process refers to the cost of the alternative that has been chosen.

Opportunity cost

In order to represent the most representation of the concept of opportunity cost, there must be a difference made between the concepts of a *direct cost* – refereeing only to the simple matter of effect vs. the above mentioned, *opportunity cost*. The latter purely depends

[58] The Adam Smith Institute: "The Wealth of Nations". Available at http://www.adamsmith.org/wealth-of-nations
[59] Fletcher Ian.,(2011): "The Free Trade Theory of Comparative Advantage" in *Economics, Economic Theory*. The Market Oracle

on the other opportunities available in the production system/process and the extent to which ti can be actually minimized. This process is from crucial meaning so that we later on explain the reasons why the US relocating some of its production processes in China for example. Here we can see the basic benefits of the concept of free trade, which enables imports and exports for the purpose of maintaining the opportunity cost of the minimum level and becoming as productive as possible by expanding the most valuable industries abroad.

Comparative advantage

The absolute advantages represent the case where a certain nation is able to produce more effectively in an economic sector while using fewer resources (e.g. capital, labor). It can be said that such cases have an absolute advantage over its competitors. On global levels, such efficiency can be improved when the nation is focusing on its absolute advantages, where it trades its surplus and imports what it lacks. The disadvantage of such assumption is that the theoretical framework of the absolute advantage suggests that nations having no absolute advantages should not be involved in trade. Despite the above mention absolute advantage in certain economic sectors, some countries might focus on the sectors it has the highest comparative advantage - the difference of its production costs and those of its competitors[60]. On one hand, it may import goods and services in sectors that are keen on less comparative advantages. On the other, the comparative productivity increases the total production level since that even if a nation has no absolute advantages, it can focus on sectors where the total productivity gains are the most significant[61].

In regard of the comparative advantage, it must be noted that such concept explains factors of production relocating from economic sectors with weak comparative advantage to sectors with high comparative advantage. One of the negative effects of such approach is the unemployment possibility due to mismatched skills of the labor that potentially has to be transferred from declining industries towards the ones of improvement. This is why one of the greatest limitations of such approach is the assumption that growing industries can always

[60] Seyoum, B. (2009): "Export-Import Theory, Practices, and Procedures". Second Edition. Taylor & Francis e-Library.
[61] Ibid

employ the workers and their perfectly *compatible* skills. This approach does not work in such perfect manner in practice and this is why such patterns will be elaborated in the empirical analysis below.

2.4 New Trade Theory

In the free trade theory it has been shown how the comparative advantage affects the performance of one country compared to any other, in terms of reducing the opportunity costs, maximizing productivity, specializing in producing goods and/or services at lowest cost, gaining comparative advantage and similar. In one word, it has been shown how trade can make the countries better off in the global economic and trade system. Nevertheless, one of the missing points in the above mentioned regards is the factors that determine the patterns of comparative advantage, such as geography or factor proportions. The founder of the new trade theory is Paul Krugman[62], as he emphasizes the determinants and trade patterns of comparative advantage into this model and he had provided reasoning why trade can be core and significant driving force into the globalization process. For example, when people and capital are allowed to move, the factors initiating such changes are the ones to be explained and this is why Krugman`s model focuses on the patterns of economic geography and international trade. For instance, in order to decrease transportation costs, one company might want to relocate near the consumers. The ability for spreading the production network is one of the initial grounds for the benefit of the new trade theory.

Additionally, he analyzes two countries and he takes consumers preference for diversity as a driving force for trade. As long as there is balance between diversity and cost, "*consumers want variety but since there are economies of scale – a firm's unit costs fall as it produces more – more variety means higher prices*[63]". Thus, preferences for variety push in the direction of more variety, while the economies of scale push the direction of less variety. If we assume that without trade country **a** produces varieties 1,2,3 and country **b**

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[62] Raphael Bergoeing and Timothy J. Kehoe (2003) "Trade Theory and Trade Facts" *in Federal Reserve Bank of Minneapolis*, Research Department Staff Report 284
[63] Tejvan Pettinger (2013) "New Trade Theory" in *Economics Help*. Available at http://www.economicshelp.org/blog/6957/trade/new-trade-theory/

produces varieties 4,5,6, we can say that these countries are identical and there are no traditional comparative advantage reasons for trade. However, the welfare is increasing thanks to the opportunities for trade and greater choice for the customers, which additionally increases scale of production, while at the same time decreases costs and prices.

In one word, the NTT suggests that critical factor in determining international patterns of trade are the very substantial economies of scale and network effects that can occur in key industries[64]. It might be the case that some countries might have the same opportunity cost at a certain point in time, but thanks to the industry specialization both can gain economies of scale and other networks from the specialization process. Additionally, being an early entrant gives the company opportunity for gaining competitive advantage and dominant position on the market. Speaking of the developing countries, they are facing great difficulties because their economies are far away from the economies of scale that are present in the developed world. The developed companies in the economies of scale are having the competitive advantage over the developing ones. Also, another important factor is the role of the government in in promoting and supporting the growth of the new and key domestic industries. At the beginning however, the theory suggests that it might be useful that the developing countries need some type of tariff protection and domestic subsidies so that the capital intensive industries are developed and strengthened. By such measures, it is expected that the industry will grow and at certain period of time it will be able to exploit economies of scale by being competitive without government support.

Nevertheless, it must be noted that such approach might be subject of issues and lot of controversies in regard of the extent of the government intervention. For instance, the government might have very limited information about which industry should be supported and what are the methods of dealing with such help. This increases the danger of spreading the number of business interests which rely on state support, rather than real benefit to the key industries. Therefore, it must be noted that the new trade theory is not advocating government intervention in various industries, but it is focused on emphasizing the effect of economies of

[64] Ibid

scale in the process of trade development. Sometimes, even free trade or laissez faire government interventions might bring negative consequences to the underdeveloped industries while competing with well-established multi-national corporations. Finally, one of the criticisms and limitations of the NTT, according to Bhattacharjea 2004[65], is the fact that such theory does not provide empirical data on the real implications of trade opening in regard of economic growth and development of the trading nations, especially to the economic benefit for the developing countries. In order to address the limitations above, the role of the FDI and the technology must be elaborated for the purpose of briefly framing the gains of the NTT. The practical analysis below will later on show how the FDIs affect the economic relations between China and the US, and whether such patterns improve the economic situation in the developing China.

FDI, Technology and Trade

One of the conditions for trade and for gaining benefits within the NTT is the level of foreign direct investments in a country. Together with the technology flow, this is one of the conditions for trade flows and patterns between the countries participating in the global economic system. Crucial pattern to be explained is the '*product-life-cycle'* (PLC) of technology-driven foreign investment and trade flows (Vernon 1970; Posner 1961; Hufbauer 1966)[66]. The process of adoption of new technology had led to various types of innovations in terms of new products and know-how of specific industries, products produced as well as exported across the globe. As long as the country is facing the mature stage of the product innovation, we can say that it is gaining benefits from the technology and the capital moved from the developed countries to the developing ones. This however imposes another limitation in regard of intellectual properties, protecting patents and preventing copying the initial products developed by the developed countries.

[65] Bhattacharjea, A. 2004. "Increasing Returns, Trade and Development." in A. Bhattacharjea and S. Marjit (eds.), Globalization and the Developing Countries. Delhi: Manohar.
[66] Sunanda Sen (2010) "International Trade Theory and Policy: A Review of the Literature" in *Levy Economics Institute* Working Paper No. 635 International

The process actually starts with the import of the goods from the advanced to the developing economies. During the initial stages of production the know-how is gained and the gradual process of production leads to the final stage of standardization of the products. Here we can say that the PLC had been transferred from the most advanced nations to other advanced nations, and the final stage includes transfer to the least developed countries that can later on export the product to the advanced nations. Under such trade patterns, it can be concluded that product specification is one of the most visible elements of the NTT, since the technology-driven trade incorporates market imperfections and product differentiation[67].

3. EMPIRICAL ANALYSIS: ECONOMIC RELATIONS BETWEEN CHINA AND UNITED STATES

As already mentioned, one of the goals in the empirical part is to show to what extent the set of economic activities elaborated in the theoretical part are actually influencing the economies of China and the US and to what extent they facilitate future resources for advancement of the economic performance in both countries. The empirical analysis tends to answer the following question, by using the theoretical framework above: *To what extent the economic and trade relations between China and the United States influence each other`s economies and what is the effect of such relations on the economic performance of both countries*?". In order to answer the question, below is the list of key economic activities covered in the following empirical analysis:

- The link between trade liberalization vs. economic growth & trade openness
- To what extent the financial liberalization and the deregulation of interest rates foster domestic savings and economic growth?
- How the "*over-borrowing*" status affects economic relations?
- Management of the exchange rate regime
- To what extent export led growth is visible in the case studies?
- Export/import relations between China and the US (trade deficit vs. trade surplus)

[67] Michael Posner (1961) "Technology Gap Theorem" in *International Trade and Technical Change*.

- ❖ How free trade affects country's efficiency, managing the opportunity costs and the unemployment statistics.
- ❖ How NTT and the role of the government foster domestic industry growth
- ❖ Role of FDIs in economic growth, development or potential issues?

3.1 Export-Import and Trade Relations

Ranked as the two largest economies on a global level, China and the US represent the need for ongoing economic relations and the future development of the international economy. On one hand, China is a large country large that is rapidly growing, but it is still in the process of implementing fundamental economic reforms, as well as attempting to work according to the principles of the WTO. This urges the need for increased bilateral negotiations and cooperation between these two countries. The US on the other hand is perceived to have the leverage in regard of economic reforms and practices, but still, the unbreakable relationship with China, along with the mutual dependence of these two economies represents the need for ongoing and improved cooperation. Both economies to large extent influence the international economy.

The intensive economic relations between China and the US have been subject to various discussions, whether these countries are mutually dependent, to what extent and which country is more dependent than the other. In fact, China and the US had been both facing external imbalances. The former is experiencing large trade surpluses, while the latter is prone to trade deficits. Such economic trend indicate the need for revised policies used by both countries, which at the same time very much affect the global economic system. Nevertheless, the impact from the economic cooperation between these countries will be discussed later on in the thesis. By implementing adjusted policies and structural reforms, both countries can lead to greater conditions for economic growth going forward. For example, China might reconsider its exchange rate policy, along with the improvement of the low saving rates on a national level in order to reduce the trade imbalance with the US. The US on the other hand might reconsider adjusting its deep investment policies compared to the low saving rate across the nation. If such initial measures are successful, the countries may benefit from the reduction of their unbalanced trade.

Exports vs. Imports

In this paragraph, brief representation of the primarily exports and imports of each country will be presented. The purpose of this is to show which product and/or services categories are traded between these countries and how they can potentially influence the competitive advantage of the respective countries. As for China, its primary exports include commodities such as electrical and other machinery, including data processing equipment, apparel, radio telephone handsets, textiles, integrated circuits; while its primary exports partner is the United States[68]. On the other hand, its primary imports include commodities such as electrical and other machinery, oil and mineral fuels, optical and medical equipment, metal ores, motor vehicles, and its primary imports partner is Japan[69]. The US is third on the list.

As for the status of the US, the list of major U.S. Exports to China in the period between 2009-2013 is presented below:

[68] EW World Economy Team (2013): "China Trade, Imports and Exports". Available at http://www.economywatch.com/world_economy/china/export-import.html
[69] Ibid

Figure 8: U.S. Exports to China in the period between 2009-2013

($ millions and percent change)

NAIC Commodity	2009	2010	2011	2012	2013	2012-2013 % change
Total Exports to China	69,576	91,878	103,879	110,590	122,016	10.3%
Oilseeds and grains	9,376	11,208	11,500	16,546	16,092	-2.7%
Aerospace products and parts	5,344	5,766	6,392	8,367	12,620	50.8%
Waste and scrap	7,142	8,561	11,540	9,526	8,765	-8.0%
Motor vehicles	1,134	3,515	5,369	5,788	8,614	48.8%
Navigational, measuring, electro-medical, and controlling instruments	2,917	3,782	4,275	5,153	5,732	11.2%
Semiconductors and other electronic components	6,041	7,555	5,668	4,859	5,724	17.8%
Basic chemicals	3,433	4,202	4,658	4,716	4,934	4.6%
Resin, synthetic rubber, & artificial & synthetic fibers & filament	4,036	4,336	4,476	4,278	4,237	-1.0%
Other general purpose machinery	1,890	2,445	3,113	3,021	3,166	4.8%
Meat products and meat packaging products	1,438	1,319	2,020	2,409	2,759	14.5%

Source: USITC Data Web

In terms of imports, the situation is the following:

Figure 9: Major U.S. Merchandise Imports From China: 2009-2013

($ millions and percent change)

NAIC Commodity	2009	2010	2011	2012	2013	Percent Change 2012 - 2013
Total imports from China	**296,402**	**364,944**	**399,335**	**425,644**	**440,434**	**3.5%**
Computer equipment	44,818	59,800	68,276	68,815	68,123	-0.1%
Communications equipment	26,362	33,464	39,806	51,857	58,839	13.5%
Miscellaneous manufactured commodities	30,668	34,168	32,672	32,644	32,440	-0.6%
Apparel	22,669	26,603	27,554	26,926	27,410	1.8%
Semiconductors and other electronic components	12,363	18,263	19,835	19,012	19,363	1.8%
Footwear	13,119	15,673	16,482	16,870	16,761	-0.6%
Audio and video equipment	18,253	19,493	15,853	15,894	13,830	-13.0%
Household and institutional furniture and kitchen cabinets	9,128	11,123	11,398	12,235	13,225	8.1%
Household appliances and miscellaneous machines	7,724	9,090	9,569	10,298	11,670	13.3%
Motor vehicle parts	4,710	6,966	8,277	9,447	10,441	10.5%

Source: U.S. International Trade Commission Data Web

From the data above we can see the division of Chinese vs. US product and service specialization in terms of imports and exports. For example, the US is more focused on exporting high tech equipment and technology led products, while China is more into specific technical equipment, textiles and other manufactured goods. As for the imports, both countries are heavily dependent on the oil and mineral fuel imports. Another figure that is crucial in the analysis is the actual size of the value of the trade in goods between these two countries. Even despite the fact that China is competitive in terms of exports and trade structure, the real situation indicates that it is way much behind the US. This is because, as already mentioned, US exports are specialized in technology, quality and significant product value added. On the other hand, the nature of the Chinese products is enjoying an image of much cheaper goods. This means that even though China is believed to catch up in the trade in global goods, the actual value of Chinese services remains poorly developed.

According to the statistics in 2012, American exports and imports (in goods, excluding services) were worth US$3.82 trillion, while China's total trade volume reached US$3.87 trillion and this is a point when for the first time China actually has exceeded the United States status as the world's largest trading nation[70]. Such data represent the openness of both economies and their dedication to liberalized trade relations, especially in the case of China, which is currently undergoing significant economic reforms. Moreover, back in 2010, China had become the world's second-largest economy, but such statistics do not endanger the status of the US, simply because the difference in the GDP representation of both countries in global level represents the double difference in numbers (*see figures 1 and 3*). In order to explain to what extent trade relations between these countries affect their economic performance, it must be noted that such patterns lead to 1) China's trade surplus with the US and 2) US trade deficit with China. These figures are later on elaborated into more details. On the top of this, China is the largest foreign holder of the US treasuries and the way how this affects the US is by being able successfully to maintain its huge budgetary deficit – a trend later on explained in details as well.

Balance of payments of the US and China: Comparative Statistics

From the current account data for 2013 of China and the US (see appendix 2 & 4), we can see a drastic difference between the current account deficits vs. current account surplus between the countries. As for the US, concluding the year 2913, the Current Account deficit was 81118 USD Million, while the Chinese surplus was 439.91. The information is taken from different sources: U.S. Bureau of Economic Analysis and the Chinese State Administration of Foreign Exchange. Such data are confirming the above analyzed situation between the exports and the imports of both countries. If we look at the historical data of the current accounts of the countries, we again see enormous difference in positive vs. negative representations. As for 2013, Chinese current account surplus has been increasing between the second and the fourth quarter, while the US current account deficit had remained on the same level in 2013. Compared to 2012 it has continued to decline, so that the country reached the

[70] Zhong Shan (2013): "Deepen Win-win Trade and Economic Cooperation, Share the Dream for Prosperity and Developmen" in *2013 World Peace Forum: Peace Development Innovation*

lowest peak in the 2013. The Chinese status is representing balance of slight increase and decrease between the second and the fourth quarter in 2013.

Based on the theory of balance of payments, we can see that such radical changes and differences between the countries are not actually benefiting their economies to the extent to which they would mark an economic growth. For example, if we analyze the Chinese Net Investment Income back in 2012 (see appendix 7), we can see that this indicator is deeply negative and on the top of that, it is constantly decreasing (apart from year 2011 to 2012, and back in year 2008). Actually, the country ran such net investment-income balances in the past years as well, and this is cannot be ignored even despite the fact that Chinese position in the global economy is known as being amongst world's largest creditors. The Chinese foreign assets through purchasing US government securities and other investments was $4.7 trillion back in 2012[71], while the foreign liabilities (FDIs) were $2.9 trillion[72]. If we deduct these numbers we will get the portion of the Chinese net foreign assets. This is not a good indicator for China, simply because the country is not benefiting from the passive holdings of the US government securities as they only stand in Chinese foreign assets; while the US is gaining high returns on its foreign direct investments. This is one of the reasons why the massive current account surplus is not always a good indicator for economic growth, especially if we look at the situation on the negative net investment income.

Additionally, another limitation is the fact that the Chinese foreign assets are denominated almost fully to the US dollars, and whenever there is a decline of the US dollar, Chinese investment-income balance falls consequently. This is accompanied with the decrease of the Chinese net international-investment position.

a) US Trade Deficit

Based on the Appendix 6 (see below) that represents the United States Balance of Payments with China, we can see that the US exports to China in past 3 years had not

[71] Financial Stability Oversight Council: "2012 Annual Report"
[72] Yu Yongding., (2013): "Mercantilism, Accumulation of Foreign Exchange Reserves, and RMB Internationalization" in InterEconomics org.

increased more than circa 10,000 million of USD, while the exports are very high and constant, especially in year 2013. Such data is resulting from the ongoing current economic relations between China and the US, but at the same time they deeply relay upon the US historical patterns of managing its budget deficit vs. the trade deficit. Therefore, it is not accurate analyzing purely US-Chinese economic relations in order to determine the reasons for the US trade deficit. Prior to this, it must be noted that until the period prior to the 70s (see appendix 9), the US balance between the government spending and taxes, and the imports and exports balance have been on a 'normal' level. After this period, the country had started facing slow budget deficits, low saving rates and negative lines in the foreign trade balance. Under such conditions, the need for borrowing was getting higher and higher, but one of the greatest concerns has been the extent to which these borrowing can potentially affect the economic growth, the investments trends, as well as the foreign trade deficits. It was not clear whether the budget deficit actually led to foreign trade deficit, or these variables were not connected. In both cases, it is about to be said that the status of the federal budget deficit, along with the trade deficit have become one of the greatest concerns for the US economy.

Such patterns affect the economic relations between China and the US even today, and this is visible from the recent statistical data represented in the appendices for 2013, 2012 and backwards. Various reasons have been outlined as a possibility for such trend, one of which the role of the Chinese regulations in terms of US foreign investments to China, barriers to the market-access. Moreover, the low cost of Chinese goods and services had been pointed out as another reason for the trade deficit, along with the illogical destruction of the value of the Chinese currency, the issue with the intellectual property rights and many others. However, what has to be carefully determined is whether the analysis of the US trade deficit is conducted only between the US and China or between the US trade with the rest of the world in general. For the purpose of the research, the former will be analyzed. From such perspective, if we take in consideration the balance of payments theory, the trade deficit might not be such a negative indicator as the graphs show from the first sight. In other words, it has been already stated that the trade deficit in regard of bilateral relationship actually represents the country`s comparative advantage and consumer`s ability to purchase the goods imported from abroad. In fact, on one hand, there has been an assumption that regardless of Chinese rapid development and participation in the global trade, the China's participation in the US global trade deficit remains pretty much static compared to the other trading partners of the US. The appendix 9 however represents completely different situation, where the top country for the US trade deficit is China, with a deficit 4 times higher than the second US trade partner, Japan. This shows that for the past years, the US trade deficit with China has been significantly larger compared to other trading partners of the country.

Another reason for such increase in the trade deficit is the new shift for manufacturing destinations towards the Asian economies, especially China. The US had accomplished variety of FDI projects in China, and these companies are one of the primary sources for exports coming from China. In other words, US capital based companies located in China are completing their export arrangements from that region towards the rest of the world. Such trends can be directly related to the theoretical part of the research, that actually emphasized Krugman`s model in regard of patterns of economic geography in the international trade.

To summarize, the analysis conducted above represented the current accounts of China and the US, and focused precisely on the US trade deficit, as one of the indicators that represents the ongoing economic relationship between China and the US; and at the same time it outlined several reasons why such trends are happening in the scope of the economic relations between the two countries. One might say that the US trade deficit to large extent represents unbalanced and unfair conditions to the US economy, but counter argument for such assumption was the fact that such trade deficit is purely a reflection from the global supply chains (in China) in which there is a significant portion of the US foreign investments. The decisions for such measures and investments are based on the lower costs that the US companies face if relocating their production process in China. Therefore, according to the Organization for Economic Cooperation and Development (OECD) and the WTO, "*the U.S trade deficit in China would have been reduced by 25% (back in 2009) if bilateral trade flows were measured according to the value-added that occurred in each country before it was* *exported*[73]. Such assumption is directly related to the theoretical part referring to the GVC, which emphasizes the production processes that has incorporated huge global production systems consisting of complex networks labeled as global value chains (US vs China).

Finally, Chinese competitive pricing (on certain goods) over the US is related to the fact that China is facing lower standards of living, which leads to lower wages for the workers, and second, Chinese exchange rate that is partially set to be priced lower compared to the USD. In case the US trade deficit decreases, this would potentially mean shifting the production into the US, which on the other hand, according to the theory, would impose greater prices for the so called '*made in the US*' goods.

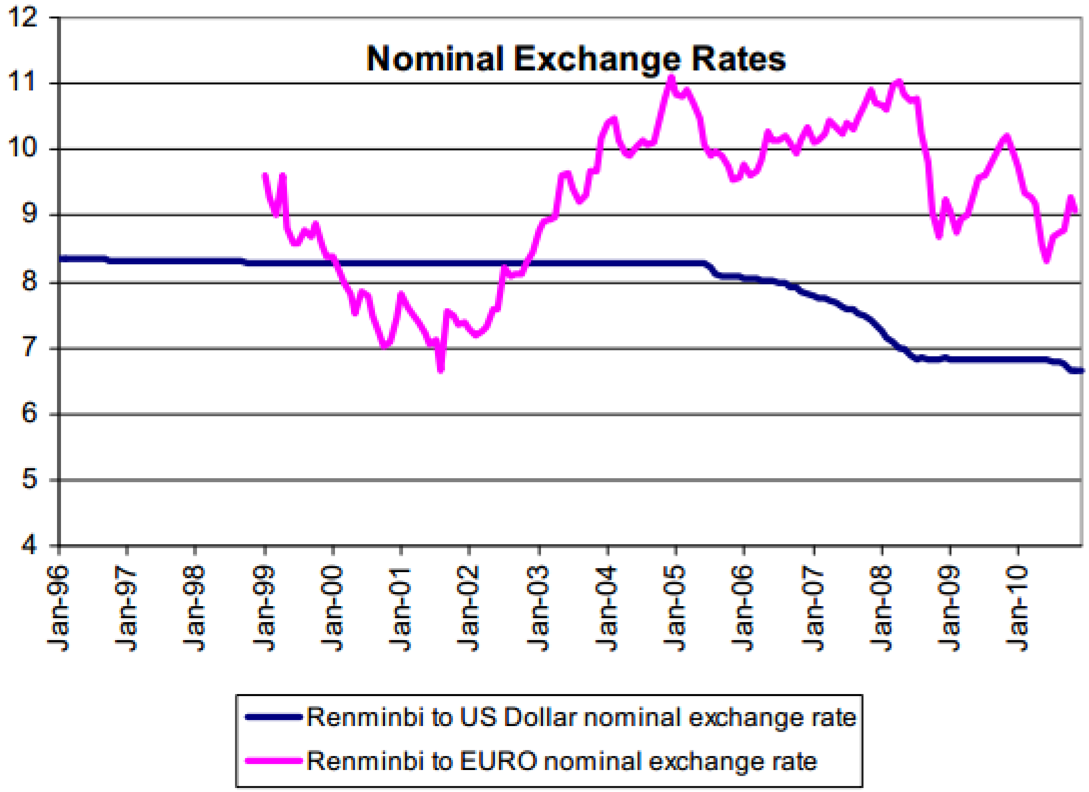
3.2 Exchange Rate Regime

In terms of the exchange rate regime, China sets the value of its currency, the Yuan, to always equal a set amount of a basket of currencies which includes the dollar, and this is how China pegs its currency to the dollar by using a fixed exchange rate[74]. In the case when the USD drops in value, China proceeds with buying the U.S. Treasuries for the purpose of supporting the strength of the currency. This is how at the same time China is protecting its domestic currency, the Yuan, by adjusting it according to the wanted targets. The purpose is to keep the value of the Yuan lower than the dollar, so that Chinese goods are cheaper.

According to the figure below, there has been a modest degree of flexibility in 2005, but in the following three years the currency appreciated by 21 percent relative to the dollar. When the economic crisis hit, Chinese once more had chosen stable currency versus the dollar up to 2010. Chinese inflation rate has been higher compared to the US and this shows that the currency has appreciated additionally.

Figure 10: Exchange Rates

[73] Amaedo Kimberly (n.d): "US Trade Deficit with China" in US Economy, How it Works.
[74] Eswar Prasad and Weishi (Grace) Gu., (2011): "Rebalancing the U.S.-China Relationship".



Source: CEIC

China's Holdings of U.S. Public and Private Securities

It has been considered that the US is heavily dependent on China in order to finance its budget deficits, as China is perceived to be the largest foreign holder of U.S. government securities[75]. This is why China has been often referred as a customer for U.S. debt. On the other hand however, such financial and economic relationship cannot be considered as a complete US dependency on Chinese financing the US budget deficits. For instance, the mutual relationship can be easily broke down in case China quits buying U.S. Treasuries. In fact, the US can find other buyers being part of the public and private sector. Such trend is indicated with the trend of willingness to by the US securities on a global level. One important consequence for the US however is the possibility of paying higher interest rates in order to stimulate the new investors to buy Treasuries in a hypothetical case when China would back

[75] China Global Trade (2011): "*China Owns a Lot of U.S. Debt. Why?*". Available at http://www.chinaglobaltrade.com/article/why-chinese-holdings-us-government-debt-so-large

off and reduce its purchase. Nevertheless, analysis indicate that such patterns will lead to slight increase in interest rates, but not too much affecting the US economy.

The ongoing relationship in terms of the US securities bought from China is closely linked to the management of the Chinese exchange rate and the possibility of allowing greater flexibility of the Chinese currency's movements. For example, if China decides to change its policy in terms of the above mentioned fields, it might rebalance its economy and be able to face sustainable and rapid growth. On the other hand, in case it decides to manage its exchange rate more heavily, it will continue with the intensive increase of greater amounts of official reserves. However, if it decides to hold less of such reserves, China might be able to increase its purchases of assets denominated in other currencies[76]. Here we can for example mention the euro-denominated securities. By such decision, China will still have the influence on the intervention in the exchange market with the potential of selling dollars for euro in order to acquire European assets[77]. The global effect from such step first of all will be the appreciation of the euro. This is not only the case with the euro, but also with any other currencies that China will potentially decide to buy for its reserve assets. Some of the negative consequences for the US will be the potential of financial market disruptions, where it is expected that the US Federal Reserve will interfere and it will put certain limit to the U.S. interest rates. This would potentially create certain level of liquidity, which will consequently reduce the potential for market disruptions mentioned above.

From the mutual financial interdependence between China and the US, it can be seen that both countries can choose another option in dealing with the current issues and the current policies, but at the same time, both countries lose and gain something at the same time with such a radical step. It has been shown that shifting towards another currency, or selling the securities to other country can significantly change the economic patterns, create additional market disruptions and also affect the global economy. Not having adequate liquidity is bad for the US, but also, deciding to drop off US Treasuries means negative effect on the Chinese economy itself.

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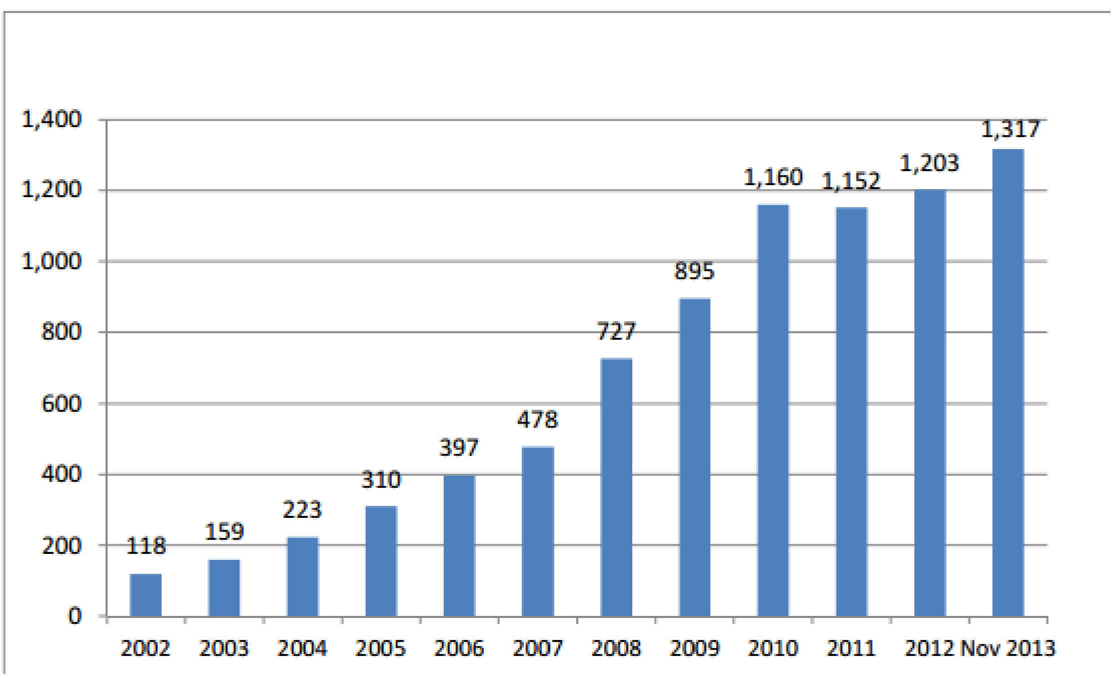
[76] Conerly, B. (2013): “Future Of The Dollar As World Reserve Currency”. Forbes
[77] Ibid

To summarize, there is a great significance in the Chinese holdings of the US public and private securities, including stocks, corporate securities equities etc. As it has been shown, such trend is closely related to the Chinese policy in intervention in the exchange rate markets for the purpose of limiting the Yuan appreciation to the USD. This is because China wants to foster its exports, which in 99% of the cases are paid in USD, but at the same time it does not want to lose value by converting the USD in the Chinese currency. Therefore, we can determine the reason why the Chinese government has chosen to invest many of the USD into buying U.S. Treasury securities. It is perceived that such investment is safe to some extent, but one of the negative indicators represented above is related to the negative net investment income in the Chinese current account. Below is a graph that represents the extent of Chinese investment in public and private U.S. securities, as of 2012:

Figure 11: Chinese investment in public and private U.S. securities



Source: US Deportment of the treasury

Based on the analysis above several economic relations affect both economies, as well as their current accounts in terms of foreign exchange reserves and Security holdings. Potential outcomes out of such relationship are the following:

- There has been a great concern that Chinese holdings of the US securities could potentially give China leverage position over the US trade policy in case China tries to sell large amount of the US debt securities. This might happen due to some of the disputes that both countries currently have. This can definitely have a negative impact on the US economy
- Nevertheless, such threat will also damage Chinese economy, because in fact, it does not have such great leverage as many think. For example, based on the analysis above, we have seen that China is economically dependent on the status of the US economy. It is also from Chinese benefit that the US economy is stable and healthy. Selling the securities might lead to sharp depreciation of the US dollar compared to the other currencies. The domino effect for China comes when it faces reduced value of its remaining holdings (after the potential sell, of some of the securities). Being the largest foreign owner of U.S. Treasury Securities, China also pegs its currency to the USD, and such trend is definitely going to harm the Chinese currency, as well as the Chinese exports.
- Finally, the US is benefiting from the Chinese purchase of its holdings by keeping the U.S. interest rates low. In other words, as long as China decides to stop buying the holdings, there is a danger that the interest rates would rise. Under such conditions, the US economy would slow down and this will reflect the portion of the Chinese exports towards the US, along with it current trade surplus.

3.3 Inflow of FDIs

The commercial ties between China and the US are represented thorough the extent of the inflow of FDIs in both of the countries. On one hand, the Chinese investments, as already stated can be visible in the level of US securities held by China, and on the other hand, the US investments in China can be determined based on the level of FDIs in the country. According to the Treasury Department[78], foreign holdings of U.S. securities are defined as "*securities owned by foreign residents (including banks and other institutions) except where the owner has a direct investment relationship with the U.S. issuer of the securities*". In terms of the definition of FDI, the US statute[79] gives the following definition: "*the ownership or control, directly or indirectly, by one foreign resident of 10% or more of the voting securities of an incorporated U.S. business enterprise or the equivalent interest in an unincorporated U.S. business enterprise, including a branch.*"

Bilateral Foreign Direct Investment Flows

The extent to which FDIs flow between China and the US is not satisfying the criteria based on the sizes of both economies. This means that the levels of FDIs at this point are very low and not too much significant for impacting both economies. The US Bureau of Economic Analysis (BEA) represents the following data, out of which we can see the portion of the US balance of payments and direct investment in millions of dollars in China and in Asia and Pacific in general:

Figure 12: Balance of Payments and Direct Investment Position Data (May 19 2014)

	All Industries Total
Asia and Pacific	651,305
China	51,363

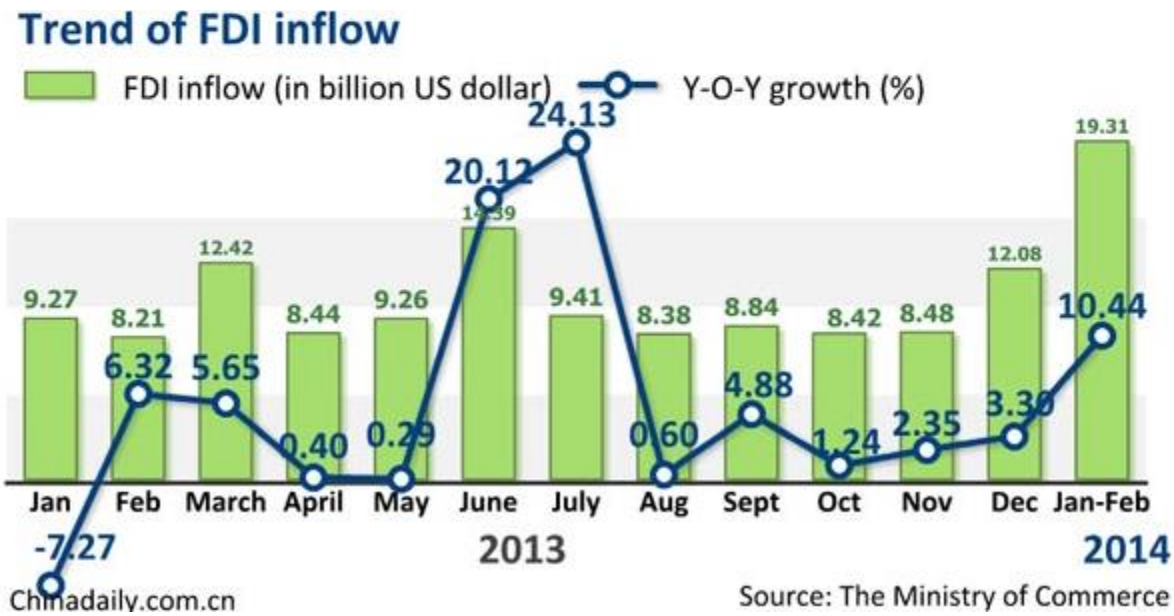
Source: US Bureau of Economic Analysis

The Chinese official data from China's balance of payments show only modest inflows of foreign direct investments from the U.S. Nevertheless, the figure below indicates that

[78] Federal Reserve Bank of New York, Board of Governors of the Federal Reserve System (2010): "Report on U.S. Portfolio Holdings of Foreign Securities".
[79] Ibid

Chinese FDI inflow had raised 10.44% in first two months of 2014, which compared to the last year is slightly higher.

Figure 13: Trend of FDI Inflow from China to US



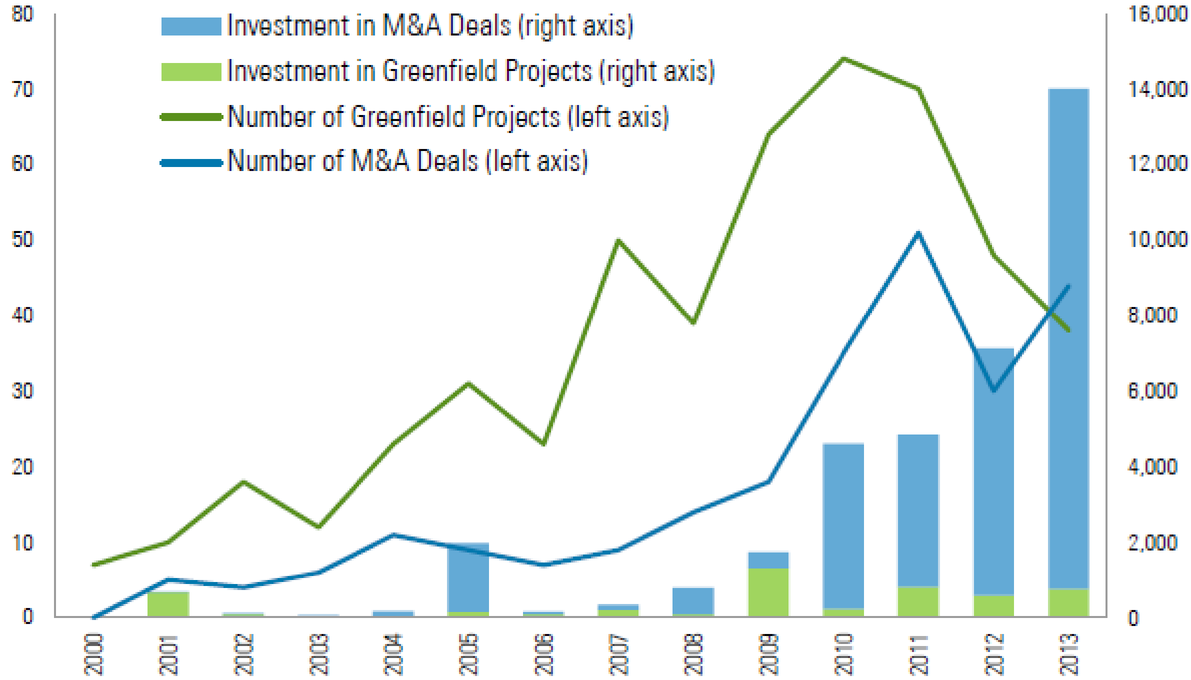
Source: The Ministry of Commerce [*http://rhg.com/notes/chinese-fdi-in-the-us-2013-recap-and-2014-outlook*](http://rhg.com/notes/chinese-fdi-in-the-us-2013-recap-and-2014-outlook)

On the other hand, the Chinese reform agenda had been driven by changing patterns in the Chinese marketplace, along with the extensive reform package that had let the Chinese market to allocate its resources and to become competitive in the global markets. The figure below represents the Chinese FDIs in the US in the past 13 years. We can see that they are constantly increasing.

Figure 14: Chinese FDIs in the US

Figure I: Chinese FDI Transactions in the United States, 2000-2013

Number of transactions and value in USD million



Source: Rhodum Group

3.4 The extent of economic liberalization: China

Other than the fact that the Chinese economic reforms had impacted the Chinese economy and the economic growth of the country, they have also impacted the US economy, as well as the global one. We have already seen that ever since the economic reforms took place, back in 1978, the Chinese economy has been entitled to diminishing role of the state sector, the Chinese integration into the global economic system (including the accession at WTO) and the growing number of foreign investments in the country. All of these trends have directly and indirectly affected the global economy and the US one as well. For example, speaking of the decreased role of the Chinese government and the state sector, it can be said that this is a practice that has been conducted by many open market economies, including the US. Thus, such reforms influence US as well in terms of decisions for further interments or establishing the conditions for performing export activities in China. Some of the Chinese reforms include separating the role of the government from the social functions such as schools, housing, hospitals etc. In addition, China had implemented relaxed restriction in terms of state-holding enterprises. Previously they had to hold more than 50 percent of the shares, and nowadays this is not the case, therefore, such reform is easing the conditions for foreign investments in China.

Furthermore, the integration of China into the global economy is a large step forward for a country that has been entitled into closed economy. This largely affects the global export market, which had significantly increased with the Chinese opening in the past few decades. By such trends, China is becoming influential player in the global economy. Along with the US they both influence the global governance agenda though various multilateral agreements, organization like the WTO, various frameworks and similar. By intensifying the mutual trade and the ongoing investments, China and the US are benefiting from the opportunities and capabilities for greater specialization, know-how techniques and various ideas shared by the ongoing trade and economic cooperation. However, not only these two countries are the dominant players in the global economy. They are also entitled to specific agreements and frameworks of various multilateral organizations like the WTO and here we can see the reciprocal influence on the global economy and from the global economy. For example, the Doha multilateral trade negotiations had assigned to China several pro-active steps in regard of enforcing open regionalism, support of the multilateral agreement on investment flows and similar.

Chinese economic growth and development

Many economists and scholars predict that there is a possibility that China takes the first place instead of the US, as the world's largest economy. Nevertheless, such predictions very much depend on key factors that influence the Chinese economy, as well as the reforms that the Chinese government is taking in order to boost economic growth and improve domestic consumption. The need for implementation of comprehensive economic reforms is much more needed for China, rather than purely focusing on exports and foreign investments. Preferably, China should boost economic growth through increased productivity and qualified labor, as well as through intensive reforms for reducing the income inequalities between its citizens. Such successful reforms will not only impact Chinese economy, but also the global one in terms of China being more competitive and being able to benefit from the outcomes that the WTO is offering to its member states. For such purpose, back in 2013, the Communist Party of China held the Third Plenum of its 18th Party Congress, where a document was issued containing number of policy statements related to the reforms that should be finalized 2020. Such policies might foster economic growth for China, and make it more competitive, but on the other hand they might significantly affect the relationship between the US and China.

We have seen that China is amongst the top export markets for the US. Additionally, speaking of the US companies, China is their preferable destination for assembling their final goods for the global supply chain networks. Here we can see the dependency between the two countries in terms of production and exports. On the top of this, significant link can be established through the U.S. Treasury securities that are largely held by China and can help the federal government to finance the budget deficits. Bearing in mind situation like this, to some extent China is abusing its role in the relations between these two countries, and in the global economy as well, if we take in consideration the various distortive economic policies imposed by China. These include protectionist policies and the policy on the undervalued currency. Such practices seriously affect the economic relationship and economic interests of both countries, especially the US. Chinese efforts to make its economy more competitive through distortive measures have the potential to impose serious implications to the US economic rise and cooperation with China. As long as China is facing greater economic instability, this will consequently affect the rest of the world, including the US.

Other scenarios and predictions about the economic relationship between these two countries, as well as the impact on the global level are focusing on the extent to which economic instability in China is basically affecting the economic policy changes in the country. The income and growth inequality of China are one of the key factors that drive the country towards creating incentives for improving the economic performance and adjusting the old policies to comply with the globalized economic growth. Improving the living conditions, as well as the opportunities of the majority of the population in China is a key challenge for the country. This at the same time is a driving force for increase of the Chinese economic growth, which at the same time affects the global economic order. Even though China holds significant share of the world`s GDP growth, at this point however it cannot be claimed that Chinese growth has huge effect on the economic activity on global level. The argument behind this is Chinese large trade and current account surpluses, which focuses on trade and export the most; rather than generating high demands. Of course, this does not mean that countries will not benefit from Chinese economic growth. On the contrary, they benefit but the extent to which they benefit is very vague due to the reasons indicated above. Chinese slow growth therefore has the tendency not to affect the global economy to a very large and significant extent.

What is important for the future of the Chinese development and the role of the US in this is the ongoing cooperation within the borders of the multilateral organizations, for the purpose of sounder relationship between China and the US. Such efforts guided by the organizations such as the WTO will have the tendency to pursue harder economic reforms in China that might rebalance the Chinese economy and impact the global one. The G-20 process is another useful tool for ongoing improvement while establishing the grounds for joined economic policies of the two greatest economies in the word. Unless both countries cooperate on bilateral and multilateral basis, the effect will be visible in the global economy as well. For example, if China is unable to get away from its hard reliance on investment and exports, it will significantly affect its economic growth and development because the country will be unable to foster domestic consumption. Being unable to do so, Chinese situation cannot bring benefits to the global economy and use all of its capabilities by being one of the largest economies on global level.

If the Chinese economy is able to foster domestic spending and if it is allowing its currency to appreciate, that would mean more imports for China. As a result, this is expected to bring faster economic recovery in other countries, which at the same time will be affected if China reduces the protectionist pressures for some countries across the globe. If the Chinese trade barriers on imports are lower, they are expected to boost competition in China, offer lower costs for consumers, and increase the above mentioned domestic spending.

On the other hand, the US might be affected from these patterns simply because of the mechanisms that China might use in the process of maintaining its economic reforms. For instance, trade relationships and economic cooperation between China and US can be significantly affected if China enforces greater state intervention for the purpose of boosting domestic spending. Such steps might include government subsidies or various discriminatory policies towards foreign companies. Therefore, rebalancing domestic economy might seriously create tensions with the trading partners, especially with the US – which as already analyzed, is the exporting to China to very large extents.

The relations between the US and China, as well as the effect on the global economy, can be also affected from China's current account surplus. The percent of the GDP has declined from a historical high of 10.1% in 2007 to 2.5% in 2013[80]. The danger is that such reduction in China's current account surplus might le0ad to slow global demand for the Chinese products.

[80] International Monetary Fund: *Current Account Balances as a Percent of GDP for China and the United States: 2000-2013*.

CONCLUSION

The research conducted above tended to answer the following research question: "*How the economic and trade relations between China and the United States influence each other`s economies and what is the effect of such relations on the economic performance of both countries?*". In order to answer the question, the research focused on some of the key implications from the theoretical framework established in the second part of the thesis, including the following:

- The link between trade liberalization vs. economic growth & trade openness
- To what extent the financial liberalization and the deregulation of interest rates foster domestic savings and economic growth?
- How the "*over-borrowing*" status affects economic relations?
- Management of the exchange rate regime
- Export/import relations between China and the US (trade deficit vs. trade surplus)
- How free trade affects country's efficiency and managing their opportunity costs
- How NTT and the role of the government foster domestic industry growth
- Role of FDIs in economic growth, development or potential issues

It has been shown that the extent to which the Chinese economy had implemented the trade and economic liberalization policies had positively affected the economic relations between the two countries, and had led to greater trade openness of China, which at the same time stimulates its economic growth. Therefore, trade liberalization and export growth seem to be positively correlated in the case study above. These patterns very much depend on the nature and the size of the exports and the imports of both countries and these figures affect the status of their current trade surplus/deficit. It has been also shown that both countries have completely different production patterns and demand characteristics of the goods produced and exported/imported. Their interdependence is represented through the need of the US for the Chinese supply and production chains, as well as its export products. On the other hand, China is also dependent from the US in terms of placing its exports to one of the largest consuming nation in the world. Nevertheless, it has been shown that the current situation indicates that China is way much behind the US in regard of economic growth, economic liberalization and sustainability of FDI inflows. One of the reasons for this, as already mentioned, US exports are specialized in technology, quality and significant product value added. On the other hand, the nature of the Chinese products is enjoying an image of much cheaper goods. This means that even though China is believed to catch up in the trade in global goods, the actual value of Chinese services remains poorly developed.

Another reason is the fact that China is still under the process of government economic reforms, which tends to improve the situation in regard of trade, foreign exchange rate, its balance of payments and gains from net investments. In the analysis above, it has been shown that the balance of payments between these two countries represents radical difference, in terms of trade deficit of the US and trade surplus of China. Additionally, the Chinese holdings of U.S. public and private securities had indicated certain extent of leveraged position of China, but on the other hand, such threat has the potential to damage the Chinese economy, because in fact, we have seen that China is economically dependent on the status of the US economy. In terms of FDI, both countries face low amount of FDI, and the Chinese Net Investment Income is facing negative trend.

The current situation suggests that China is very much dependent on its exports, although as already mentioned, this is a not indicator of Chinese economic growth. Stimulating the domestic growth based on various government actions is part of the Chinese struggle to foster economic growth. This shows us that other than the intense economic relationship with the US in terms of exports, China`s goal is to meet the level of domestic demand in order to gain economic prosperity and constant growth. Its second goal in terms of exports and imports is to reduce the large trade surplus. The policies used by both countries in order to cope with the situation are emphasized below.

Finally, it can be concluded that these two nations hold a pivotal role in the global economic systems because they represent the shift and the capability of two very different economic powers to engage into new and ongoing economic ties. Other than the mutual benefit, they influence the global economy to the extent that they set an example on how such economic relations can work in the future and what might be the potential outcome of successfully maintained economic relations. On the other hand, they have also represented what kind of issues and concerns might appear between developing and developed economy, and how such issues might be resolved. A consolidated and cooperative partnership therefore, influences the entire global economic order.

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List of appendices

Appendix 1: Balance of Payments:

	Mar-2012	Jun-2012	Sep-2012	Dec-2012	Mar-2013
Current account	**-3.1**	**-8.0**	**-5.3**	**-7.6**	**-5.3**
(as % of GDP)	**-1.4**	**-3.6**	**-2.4**	**-3.5**	**-2.4**
Exports	48.4	47.5	45.5	47.1	45.5
Non-oil and gas	38.6	38.4	37.4	38.5	37.0
Oil and gas	9.8	9.1	8.1	8.6	8.5
Imports	-44.5	-46.7	-42.4	-46.3	-43.8
Non-oil and gas	-33.9	-36.5	-33.5	-35.3	-32.4
Oil and gas	-10.7	-10.3	-8.9	-11.0	-11.5
Merchandise trade balance	3.8	0.8	3.2	0.8	1.6
Non-oil and gas	4.7	2.0	4.0	3.2	4.6
Oil and gas	-0.9	-1.2	-0.8	-2.4	-3.0
Services	-2.1	-2.9	-2.5	-3.3	-2.3
Income	-5.9	-6.8	-6.9	-6.3	-5.7
Current transfers	1.1	0.9	0.9	1.2	1.1
Capital and financial accounts	**2.1**	**5.1**	**5.9**	**11.8**	**-1.4**
Capital account	0.0	0.0	0.0	0.0	0.0
Financial account	2.1	5.1	5.9	11.8	-1.4
Direct investment	1.6	3.8	4.5	4.5	3.4
Portfolio investment	2.6	3.9	2.5	0.2	2.9
Other investment	-2.1	-2.5	-1.2	7.2	-7.7
Total external debt	**228.8**	**238.9**	**243.6**	**252.4**	**253.2**
Short-term debt	36.9	39.8	39.5	44.2	45.2
Long-term debt	191.9	199.1	204.2	208.1	207.9
Short-term debt to foreign reserves (%)	33.4	37.3	35.8	39.2	43.2
Total external debt to GDP (%)	27.2	28.2	28.7	29.5	29.2
Debt service as share of exports of goods & services	75.8	79.7	81.5	83.0	73.9
Errors & omissions	**0.0**	**0.1**	**0.3**	**-1.0**	**0.0**
Overall balance (change in reserves)	**-1.0**	**-2.8**	**0.8**	**3.2**	**-6.6**
Foreign reserves	**110.5**	**106.5**	**110.2**	**112.8**	**104.8**

Source: BI.

Appendix 2: China Current Account 2013:

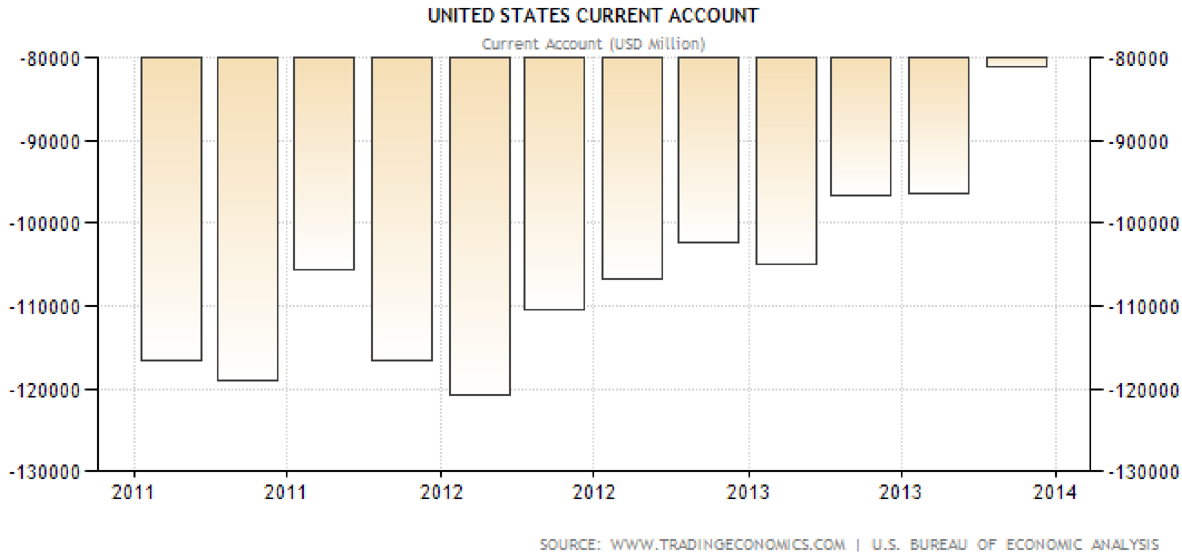
Trade	Last	Previous	Highest	Lowest	Unit	
Current Account	72.00	439.91	1330.85	-8.96	USD Hundred Million	[+]
Capital Flows	1183.00	1270.42	1320.80	-517.00	USD HML	[+]
Crude Oil Production	4215.00	4205.00	4281.00	1012.00	BBL/D/1K	[+]
External Debt	8631.67	7369.86	8631.67	158.28	USD HML	[+]
Foreign Direct Investment	403.00	315.49	1175.86	18.32	USD Hundred Million	[+]
Gold Reserves	1054.09	1054.09	1054.09	395.01	Tonnes	[+]
Terms Of Trade	106.44	101.33	118.33	81.75	Index Points	[+]
Tourist Arrivals	173.30	139.20	216.60	21.70	Tens of Thousands	[+]
Current Account to GDP	2.00	2.60	10.10	-3.70	Percent	[+]
Balance of Trade	184.55	77.06	404.00	-319.71	USD Hundred Million	[+]
Exports	1885.41	1701.10	2077.42	13.00	USD Hundred Million	[+]
Imports	1700.86	1624.05	1830.94	16.60	USD Hundred Million	[+]

Source: State Administration of Foreign Exchange, China

Appendix 3: China Current Account: Historical Overview:

Source: US Bureau of Economic Analysis

Appendix 4: United States Current Account: 2013:



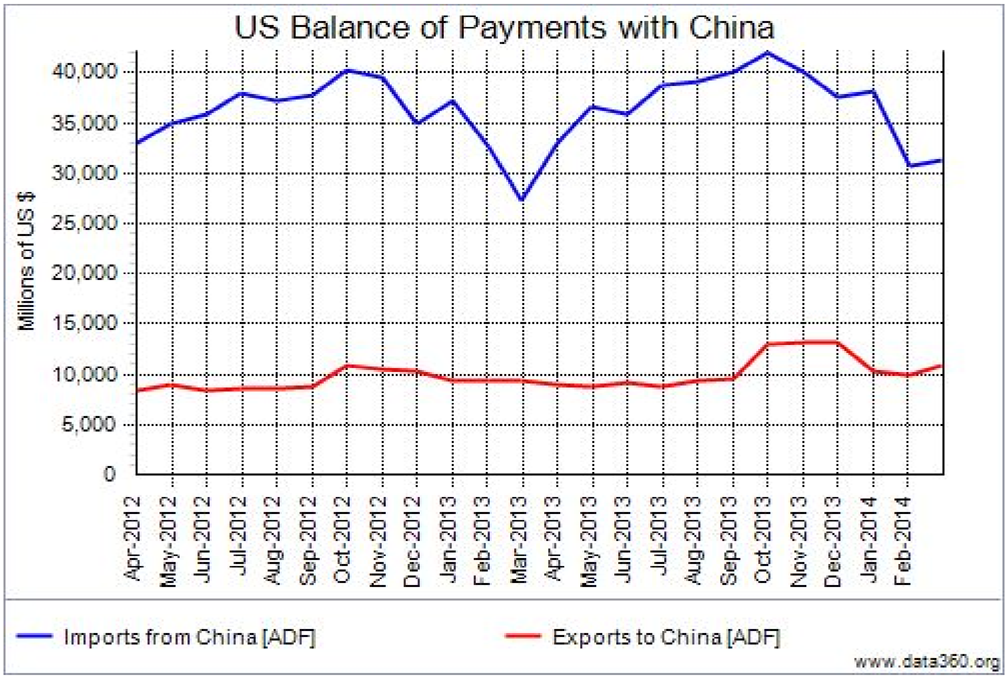
Source: Trading Economics, US Bureau of Economic Analysis

Appendix 5: United States Current Account: Historical Overview:

Trade	Last	Previous	Highest	Lowest	Unit
Exports	193910.00	189963.00	194644.00	772.00	USD Million
Imports	234288.00	231837.00	234295.00	577.00	USD Million
Capital Flows	-126107.00	175900.00	272938.00	-153025.00	USD Million
Crude Oil Production	8033.00	7939.00	10044.00	3983.00	BBL/D/1K
External Debt	-4577504.00	-4165583.00	360347.00	-4577504.00	USD Million
Foreign Direct Investment	68145.00	54321.00	140759.00	-9004.00	USD Million
Gold Reserves	8133.46	8133.46	8149.05	8133.46	Tonnes
Net Long-term Tic Flows	4022.00	90300.00	139697.00	-72882.00	USD Million
Terms of Trade	98.06	98.14	167.10	91.05	Index Points
Current Account to GDP	-2.30	-2.70	0.20	-6.00	Percent
Current Account	-81118.00	-96365.00	9957.00	-214501.00	USD Million
Balance of Trade	-40378.00	-41874.00	1946.00	-67235.00	USD Million

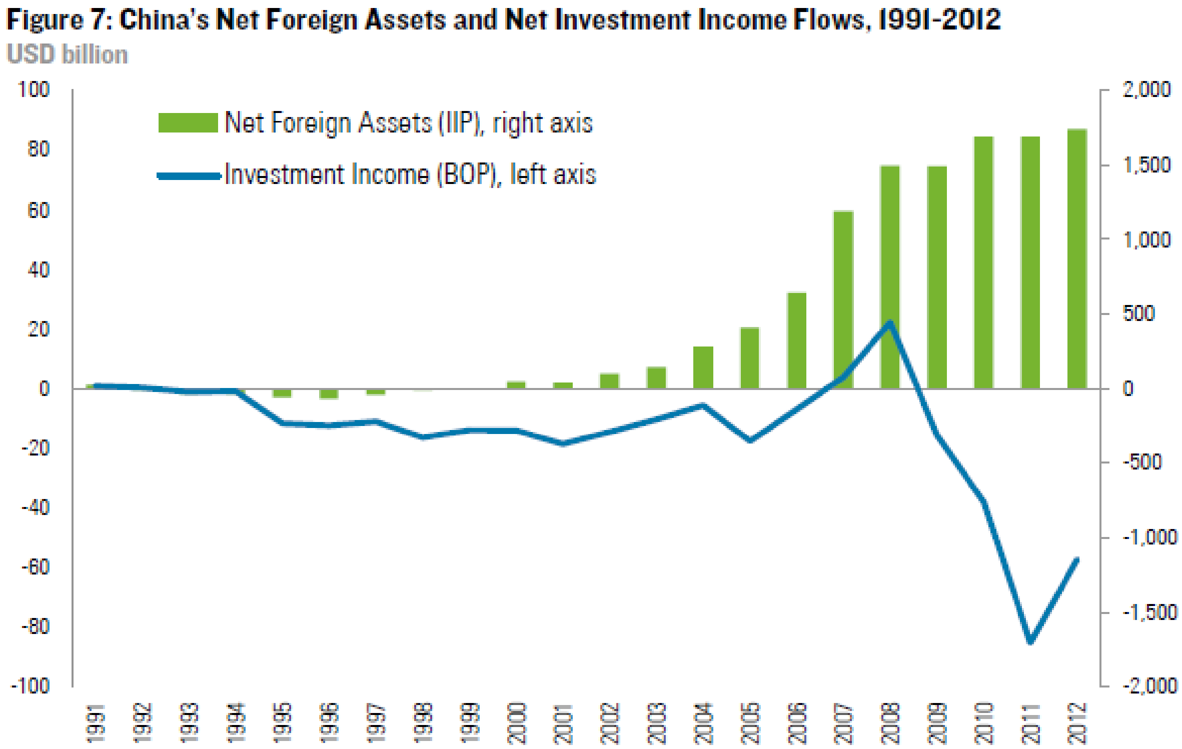
Source: Trading Economics, US Bureau of Economic Analysis

Appendix 6: United States Balance of Payments with China:



Source: Data 360

Appendix 7: China: Net Investment Income:



Source: PBOC, SAFE, RHG; historical data based on the Global Wealth of Nations

Appendix 8: Top Ten Countries with which the U.S. has a Trade Deficit:

For the month of April 2013

Country Name	Deficit in Millions of U.S. $	Year To Date Deficit in Millions of U.S. $
China	-24,109.91	-93,195.98
Japan	-6,942.02	-25,519.82
Germany	-6,094.19	-19,936.31
Mexico	-4,432.91	-17,551.10
Saudi Arabia	-2,562.61	-8,340.83
Canada	-2,432.24	-12,193.03
India	-2,419.99	-6,916.67
Ireland	-2,398.66	-8,622.51
Korea, South	-2,380.30	-6,981.92
Italy	-2,028.53	-6,861.59

Source: Census Bureau, Foreign Trade Division

Appendix 9: U.S. Trade in Goods and Services - Balance of Payments (BOP) Basis

U.S. Trade in Goods and Services - Balance of Payments (BOP) Basis

Value in millions of dollars
1960 through 2013

Period	Balance			Exports			Imports		
	Total	Goods BOP	Services	Total	Goods BOP	Services	Total	Goods BOP	Services
1960	3,508	4,892	-1,384	25,940	19,650	6,290	22,432	14,758	7,674
1961	4,195	5,571	-1,376	26,403	20,108	6,295	22,208	14,537	7,671
1962	3,370	4,521	-1,151	27,722	20,781	6,941	24,352	16,260	8,092
1963	4,210	5,224	-1,014	29,620	22,272	7,348	25,410	17,048	8,362
1964	6,022	6,801	-779	33,341	25,501	7,840	27,319	18,700	8,619
1965	4,664	4,951	-287	35,285	26,461	8,824	30,621	21,510	9,111
1966	2,939	3,817	-878	38,926	29,310	9,616	35,987	25,493	10,494
1967	2,604	3,800	-1,196	41,333	30,666	10,667	38,729	26,866	11,863
1968	250	635	-385	45,543	33,626	11,917	45,293	32,991	12,302
1969	91	607	-516	49,220	36,414	12,806	49,129	35,807	13,322
1970	2,254	2,603	-349	56,640	42,469	14,171	54,386	39,866	14,520
1971	-1,302	-2,260	958	59,677	43,319	16,358	60,979	45,579	15,400
1972	-5,443	-6,416	973	67,222	49,381	17,841	72,665	55,797	16,868
1973	1,900	911	989	91,242	71,410	19,832	89,342	70,499	18,843
1974	-4,293	-5,505	1,212	120,897	98,306	22,591	125,190	103,811	21,379
1975	12,404	8,903	3,501	132,585	107,088	25,497	120,181	98,185	21,996
1976	-6,082	-9,483	3,401	142,716	114,745	27,971	148,798	124,228	24,570
1977	-27,246	-31,091	3,845	152,301	120,816	31,485	179,547	151,907	27,640
1978	-29,763	-33,927	4,164	178,428	142,075	36,353	208,191	176,002	32,189
1979	-24,565	-27,568	3,003	224,131	184,439	39,692	248,696	212,007	36,689
1980	-19,407	-25,500	6,093	271,834	224,250	47,584	291,241	249,750	41,491
1981	-16,172	-28,023	11,851	294,398	237,044	57,354	310,570	265,067	45,503
1982	-24,156	-36,485	12,329	275,236	211,157	64,079	299,391	247,642	51,749
1983	-57,767	-67,102	9,335	266,106	201,799	64,307	323,874	268,901	54,973
1984	-109,072	-112,492	3,420	291,094	219,926	71,168	400,166	332,418	67,748
1985	-121,880	-122,173	294	289,070	215,915	73,155	410,950	338,088	72,862
1986	-138,538	-145,081	6,543	310,033	223,344	86,689	448,572	368,425	80,147
1987	-151,684	-159,557	7,874	348,869	250,208	98,661	500,552	409,765	90,787
1988	-114,566	-126,959	12,393	431,149	320,230	110,919	545,715	447,189	98,526
1989	-93,141	-117,749	24,607	487,003	359,916	127,087	580,144	477,665	102,479
1990	-80,864	-111,037	30,173	535,233	387,401	147,832	616,097	498,438	117,659
1991	-31,135	-76,937	45,802	578,344	414,083	164,261	609,479	491,020	118,459

1992	-39,212	-96,897	57,685	616,882	439,631	177,251	656,094	536,528	119,566
1993	-70,311	-132,451	62,141	642,863	456,943	185,920	713,174	589,394	123,780
1994	-98,493	-165,831	67,338	703,254	502,859	200,395	801,747	668,690	133,057
1995	-96,384	-174,170	77,786	794,387	575,204	219,183	890,771	749,374	141,397
1996	-104,065	-191,000	86,935	851,602	612,113	239,489	955,667	803,113	152,554
1997	-108,273	-198,428	90,155	934,453	678,366	256,087	1,042,726	876,794	165,932
1998	-166,140	-248,221	82,081	933,174	670,416	262,758	1,099,314	918,637	180,677
1999	-263,755	-337,374	73,618	967,008	698,218	268,790	1,230,764	1,035,592	195,172
2000	-377,337	-446,942	69,605	1,072,782	784,781	288,002	1,450,119	1,231,722	218,397
2001	-362,339	-422,512	60,173	1,007,725	731,189	276,537	1,370,065	1,153,701	216,364
2002	-418,165	-475,842	57,678	980,879	697,439	283,440	1,399,044	1,173,281	225,762
2003	-490,545	-542,273	51,728	1,023,937	729,816	294,121	1,514,482	1,272,089	242,393
2004	-604,897	-666,364	61,466	1,163,724	821,986	341,739	1,768,622	1,488,349	280,272
2005	-707,914	-784,133	76,219	1,288,257	911,686	376,571	1,996,171	1,695,820	300,352
2006	-752,399	-838,788	86,389	1,460,792	1,039,406	421,386	2,213,191	1,878,194	334,998
2007	-699,065	-822,743	123,677	1,652,859	1,163,605	489,255	2,351,925	1,986,347	365,577
2008	-702,302	-833,957	131,655	1,840,332	1,307,329	533,003	2,542,634	2,141,287	401,348
2009	-383,657	-510,550	126,893	1,578,187	1,069,475	508,712	1,961,844	1,580,025	381,819
2010	-499,379	-650,156	150,777	1,844,468	1,288,795	555,674	2,343,847	1,938,950	404,897
2011	-556,838	-744,139	187,301	2,112,825	1,495,853	616,973	2,669,663	2,239,991	429,672
2012	-534,656	-741,475	206,819	2,210,585	1,561,239	649,346	2,745,240	2,302,714	442,527
2013	-474,864	-703,910	229,046	2,271,385	1,589,664	681,721	2,746,249	2,293,574	452,675

U.S. Census Bureau, Foreign Trade Division.

Source: Census Bureau, Foreign Trade Division