

The Role and Impact of the New Global Protectionism in  
Recent U.S.- CHINA Trade Relations with Illustrations  
from China's Toy and Tire Industries

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## Table of Contents

<b>List of Figures and Tables .....</b>	<b>iii</b>
<b>Attestation of Authorship .....</b>	<b>iv</b>
<b>Acknowledgements .....</b>	<b>v</b>
<b>Abstract.....</b>	<b>vi</b>
<b>1. Introduction.....</b>	<b>1</b>
1.1 China and the U.S. Trade Relations .....	1
1.2 Significance of the Research Topic .....	3
1.3 Objective and Structure of the Dissertation.....	4
<b>2. Literature Review .....</b>	<b>4</b>
2.1 Trading Problems between China and the U.S.....	4
2.1.1 Imbalance of Trade .....	5
2.1.2 Safety and Quality Concerns .....	6
2.1.3 Currency Revaluation .....	7
2.2 Global Recession Impact on Trade.....	9
2.3 Protectionism.....	12
2.3.1 Development of Trade Protectionism .....	12
2.3.2 Global Protectionism .....	14
2.4 Global Protectionism Impact on Chinese Industries .....	17
2.4.1 Impacts on Chinese Industries .....	17
2.4.2 Impacts on Two Major Chinese Industries: Toys and Tires.....	20

<b>3. Research Methodology .....</b>	<b>26</b>
<b>4. Data Analysis and Findings.....</b>	<b>30</b>
4.1 Chinese Toy Industry.....	30
4.11 Data from Toy Industry .....	30
4.12 Analysis and Findings .....	32
4.2 Chinese Tire Industry .....	34
4.21 Data from Tire Industry .....	34
4.22 Analysis and Findings .....	37
<b>5. Discussion.....</b>	<b>39</b>
5.1 Chinese Toy Industry.....	39
5.11 Impacts on Toy Industry.....	39
5.12 Implications for Toy Industry and Policies .....	41
5.2 Chinese Tire Industry .....	44
5.21 Impacts on Tire Industry .....	44
5.2.2. Implications for Tire Industry and Policies.....	46
<b>6. Conclusions.....</b>	<b>48</b>
<b>7. Limitations and Further Investigations .....</b>	<b>50</b>
<b>References.....</b>	<b>52</b>

# List of Figures and Tables

Figure 1: U.S. Toy Recalls as percentage of U.S. Toy Importers (trend lines).....	22
Figure 2: China’s Total Toy Exports to the U.S. and Japan 2005-2009.....	32
Figure 3: China’s Total Tire Exports to the U.S. and Japan 2005-2009 .....	35
Figure 4: Compound Annual Growth Rate of Tire Exports to the U.S. and Japan 2006-2009 .....	35
Figure 5: Numbers of Japanese and American Passenger Car Production 2004-2009 (trend lines) .....	36
Table 1: China’s Toy Exports to the World, the U.S. and Japan in 2005-2009.....	31
Table 2: Compound Annual Growth Rate of China’s Toy Export to the World, the U.S. and Japan 2006-2009 .....	31
Table 3: China’s Tire Exports to the World, the U.S. and Japan 2005-2009 .....	34
Table 4: Compound Annual Growth Rate of Tire Exports to the World, the U.S. and Japan 2006-2009 .....	35
Table 5: Japanese and American Passenger Car Production 2004-2009 .....	36
Table 6: Compound Annual Growth Rate of Japanese and American Passenger Car Productions 2005-2009 .....	36

## **Attestation of Authorship**

“I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor material which to a substantial degree has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.”

Jie Zhou

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# Abstract

During the recent global recession world trade fell sharply and greater competition has been accompanied by an increase in global protectionism. Global protectionism threatens to restrict the development of trade relations between China and the U.S. The existing literature reveals several sources of trade friction between the two countries. China experienced impacts from the recent global recession as well as from global protectionism. Chinese industries suffered various protectionist measures or safeguard measures imposed by other foreign nations especially the U.S. This research study focuses on an empirical investigation of the impacts of global protectionism on recent trade relations between the two countries with the illustration of impact of these measures on two Chinese industries toys and tires. Based on two hypotheses, the research suggests that U.S. protectionist measures negatively impacted on the toy industry. However, the protectionist impacts on the tire industry appeared to be outweighed by recessionary impacts. Recommendations for strategies that could help avoid or minimize the negative impacts from the global protectionism are made.

# 1. Introduction

## 1.1 China and the U.S. Trade Relations

‘Trade tension’, ‘trade dispute’ and ‘trade friction’ are the prevailing phrases to describe the commercial relationship between the U.S. and China (Morrison, 2009a; 2009b). China and the U.S. first built their cooperative relationship when both governments signed a bilateral trade agreement in July 1979 (Morrison, 2009b). Meanwhile, in the early 1980s the Chinese government initiated a series of economic reforms and policies including opening markets and establishing special economic zones (Morrison, 2009a). During the period 1978 to 2008, the total trade volume (exports and imports) between the two countries increased from \$1 billion USD to \$409 billion. China is recognized as ‘*the fastest growing U.S. export markets*’ (Morrison, 2009b, p. 1).

Over the last three decades, China enjoyed rapid economic growth and benefited from exporting low labour cost merchandise to developed countries including the U.S. and European markets. At the same time, China built many commercial ties with other countries including New Zealand, Southeast Asia and European countries and signed Free Trade Agreements (FTAs) with Chile and New Zealand (Morrison, 2009b). Nowadays China is an export-orientated nation and a major trading partner of the U.S. It is recognised as the fastest growing economy in the world, especially after joining the World Trade Organisation (WTO) in 2001 (Morrison, 2009b). On the other hand, many U.S. large firms see the opportunities to undertake foreign direct investment (FDI) to China as China possesses lower cost labour and raw materials. The U.S. is ranked as one of the top seven<sup>1</sup> investors in China (Morrison, 2009a).

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<sup>1</sup> Top Seven investors are Hong Kong, British, Japan, U.S., Taiwan, South Korea, Singapore (Morrison, 2009a).

However, trade friction between China and the U.S. has intensified. Since China plays a crucial role in global trade and has become a major supplier to world markets, a number of nations, including America, have initiated various new forms of protectionist measures against China in order to protect their own economic wellbeing. The new protectionist measures include subsidies, health and safety measures and interventionist industrial policy. These new forms of protectionist measures reflect the term 'global protectionism' which appeared since the early 1980s. The new global protectionism differs from the traditional trade protectionism which was based on the trade restrictions, primarily in the forms of tariffs and quotas (Enderwick, 2011). Moreover, the recent global recession and financial crisis in 2008 have become catalysts to the further development of global protectionism (Baldwin & Evenett, 2009).

China was recognised as a victim of the recent global protectionism by the 'Group of Twenty (G20) Pittsburg Summit' held in the U.S. at September 2009. This Summit reports that over 47 protectionist measures (out of total 105) were used against China (Pittsburgh-Summit-2009, 2009). Also the 3<sup>rd</sup> and 4<sup>th</sup> Global Trade Alert<sup>2</sup> (GTA) reports both reveal that the most severe protectionist measures were imposed on China (Evenett, 2009). The fact is that China as a large emerging market, and its rapid expansion of exports, threatens other countries' because Chinese-made products are often more price competitive. Among all new protectionist measures (trade or trade related), 'safety and quality concerns on toys and tires' and 'imposing tariffs on tires' are the most significant measures that the U.S. has imposed on Chinese industries. In the meantime, President Obama announced the 'buy American' provision and an economic stimulus package worth \$787 billion USD. One of the purposes was to protect domestic industries and to enable a number to survive (Soesastro, 2009). The Chinese government retaliated by initiating restrictions on the exporting of nine raw materials to U.S. manufacturers. Consequently, the U.S. complained that this action

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<sup>2</sup> GTA was established in 2009, the purpose is to investigate protectionist measures imposed by different nations (Evenett, 2009).

violated rules and regulations of the WTO (Wei, 2009).

## **1.2 Significance of the Research Topic**

The research topic of this dissertation is '*the role and impact of the new global protectionism in recent China and the U.S. trade relations with the illustration of Chinese toy and tire industries*'. The author is interested in this topic for several reasons. Firstly, this topic is about a prevailing issue 'global protectionism' which is of interest to the author. There are many recent debates referring to this research topic. Many scholars state that global protectionism threatens the international trade of China (Bapuji & Beamish, 2008; Miller, 2009; Morrison, 2009b). On the other hand, some scholars believe that the impact of global protectionism is not that strong as expected (Gamberoni & Newfarmer, 2009). Therefore, the author is interested in carrying out empirical research to investigate the likely impacts from the global protectionism imposed by the U.S. on China.

Furthermore, this research study focuses on the in-depth research of two typical industries as representative: toys and vehicle tires. The inclusion of two cases offers several advantages. Firstly, different protectionist measures adopted by the U.S. are employed in different circumstances, which have affected or are affecting different industries in China, such as food, toys, cars and tires. Most existing empirical studies discuss the impact of global protectionism on China as a whole, not from the perspective of a particular industrial sector. This is a limitation of recent research. Secondly, due to the global recession, global protectionism affects China's foreign demand as exports including toys and tires made in China decrease. Importantly, both Chinese toy and tire industries are the two cases that currently suffer from the most stringent protective trading barriers such as the safety and quality concerns. Thus, it is significant to discuss the likely impacts on these two industries.

## **1.3 Objective and Structure of the Dissertation**

The objective of this research is to investigate the impacts of the new global protectionism imposed by the U.S. on China in terms of the U.S.-China trade relations. The contribution of this research study is to examine the likely impacts of new forms of protectionist measures on Chinese toy and tire industries. This dissertation will also consider different types of strategies that firms in these industries could adopt to minimize the protectionist impacts.

This dissertation is divided into five sections. The first part provides a review of existing literature including the topics of trading relations between China and the U.S., impacts of the recent financial crisis on trade, development of protectionism and impacts of the global protectionism on Chinese industries. The second section considers research methodology to answer the research question. The third section provides an in-depth data analysis. Based on the data, the fourth section offers a discussion of the findings and implications for relevant policies by referring to the literature reviewed earlier. This section also proposes different strategies that firms in the toy and tire industries could adopt to minimize the protectionist impacts. The last two sections provide conclusions and limitations while also suggesting possible future research needs.

## **2. Literature Review**

### **2.1 Trading Problems between China and the U.S.**

In the last thirty years, the trade relations between China and the U.S. have changed substantially, becoming an interdependent relationship. Meanwhile, more trade frictions and trading problems have occurred: the increasing Chinese trade surplus to the U.S., health, safety and quality concerns from the U.S. about Chinese-made

products, the U.S. complaints about devaluation of Chinese Yuan (RMB). These trading problems have accelerated amid the 2007 financial crisis and global recession (Morrison, 2009b). Since America imposed more severe discriminatory trade policies and non-tariffs trade barriers (NTBs) towards China in 2007, trade frictions between the two countries have intensified. Many scholars believe that global protectionism is rising and has been triggered by the recent global recession (Dumbaugh, 2008; Eaton, Kortum, Neiman, & Romalis, 2009).

### **2.1.1 Imbalance of Trade**

Many empirical studies have drawn attention to the growing size of the trade imbalance between China and the U.S. The Customs Statistics of China indicated that China has experienced a trade surplus with the U.S. since 1993, whereas the United States figures show that the U.S. started to experience a trade deficit with China after 1983 (only a small trade surplus with China in 1987) (Fung & Lau, 1998; Kligaard & Schiele, 1997; Liu & Ling, 2006). Even if the statistical data from two countries are different, it is undeniable that the U.S. trade deficit with China has increased. Until 2004, among all the U.S. trading partners, China held the first place as the largest U.S. trade deficit, in front of other partners like EU, Japan, Canada and Mexico (Liu & Ling, 2006). The merchandise trade between China and the U.S. in the last three decades reflects their interrelated trading relationship: as U.S. exports increased gradually from \$3.8 billion USD to \$59.2 billion during the period 1980 to 2008, U.S. imports went up more rapidly from \$1.1 billion USD to \$337.8 billion. The increasing volume of U.S. imports from China caused the dramatic change in the trade balance (Morrison, 2009b).

The bilateral trade imbalance between the two countries was enlarged by the effects of the global recession because China recovered faster than the U.S. Chinese purchases of U.S. Treasury bills which the U.S. uses to pay for the substantial value of goods

made or assembled in China experienced a fivefold increase between 2000 and 2008. China holds around 25% of all the U.S. Treasury bills (Garrett, 2010).

Fung and Lau (2003) indicated that a negative trade imbalance can reflect the imbalance of domestic savings-investment and governmental fiscal deficits. There are several reasons behind the trade imbalance between the two countries. The first main reason is the differences in national savings rates in China and the U.S. Saving minus Investment is equivalent to net exports. In the case of the U.S., investments are relatively larger than national saving and imports are far beyond exports. Thus the trade deficit was formed in the U.S. According to the Chinese figures, national saving remains at a higher value than investments, hence China is experiencing a trade surplus (Liu & Ling, 2006). The second reason is that the growth rate of labour productivity in China increased faster than in the U.S. The third reason is the lower deposit rates in the U.S. encourage more spending than saving and contribute to the imbalance of trade. This implies that U.S. consumers would have a greater demand on Chinese-made products by importation. Therefore, U.S. imports of Chinese goods are more than its exports to China (Liu & Ling, 2006).

In fact, the U.S.-China bilateral trade deficits only accounts for approximately 22% of the total trade deficit of the U.S. (Garnaut & Song, 2007; Garrett, 2010). Garnaut and Song (2007) point out that if the U.S. deficit with China declined to zero, total trade deficits of the U.S. with other foreign countries would remain large.

### **2.1.2 Safety and Quality Concerns**

Safety and quality issues over Chinese-made products are raising concerns in international markets especially among American consumers. Berman and Swani (2010) indicate that the high-profile recalls of Chinese-made products are “*due to the deliberate substitution of fake or substandard ingredients by Chinese firms in an effort*

*to lower their costs*”, and that the U.S. importers may find out that their Chinese suppliers are ‘unreliable subcontractors’ (Berman & Swani, 2010, p. 40). The prevailing cases about ‘Chinese-made toys and tires recalls’ and ‘poor safety and quality of Chinese food and drugs’ have strongly affected American consumers’ confidence on goods that are made in China (Morrison, 2009c).

From the U.S. perspective, the Chinese regulatory system is ineffective and corrupt. Some U.S. firms claim that some imported goods from China cannot even meet the safety and quality standards in China. Responding to these concerns, the Chinese government has announced numerous initiatives since 2007 including enhancing levels of supervision and inspection and issuing safety certificates for products. For example, the government has allocated \$1 billion RMB (equivalent to \$147 million USD) to improve health and safety of food and drugs by 2010. Besides these initiatives, it is clear that some local officials and supervisors tried to shield the ‘scandals’. From the perspective of the Chinese government, health, safety and quality concerns by the U.S. are seen as an excuse to impose special ‘safeguards’ and limit Chinese exports to the U.S. Therefore, the trade friction from both sides looks likely to continue (Morrison, 2009c).

### **2.1.3 Currency Revaluation**

Another area of contention between the U.S. and China is about the revaluation of the RMB. This has been disputed for almost one decade (Liu & Ling, 2006). China has pegged its currency value to the U.S. dollar since 1994, and the rate remained steady at approximately 8.28 since early 1998 with the rate increasing to 6.8 in 2005 (Lu, 2005). Many economists commented that the large trade deficit of the U.S. to China is largely due to the undervaluation of the RMB, and the U.S. would be the biggest beneficiary if the RMB was revalued (Chang & Shao, 2004; Throbecke, 2006). In this case, Chinese goods and services would become more expensive against the U.S.

dollar. This would reduce Chinese exports and lower the U.S. trade deficit with China (Hale & Hale, 2008). Thus, the U.S. Congress is still seeking to reevaluate the RMB and is blaming the Chinese government for manipulating the value of RMB (Hale & Hale, 2008; Wei, 2009).

Nevertheless, there was no significant sign that the revaluation of the RMB in 2005 reduced the U.S. trade deficit with China, because the value of the U.S. trade deficit increased continuously before the 2008 global recession (Morrison, 2009b). Hale and Hale (2008) argue that appreciation of the RMB is not the only appropriate strategy to solve the problem of the trade imbalance and lift employment rates in the U.S. The U.S. has gained the benefits when China uses its trade surplus to purchase the U.S. debts (Groenewold & He, 2007). Moreover, many U.S. firms still enjoy the huge profits gained from lower costs of labour and material in China (Hale & Hale, 2008; Throbecke, 2006). If the RMB appreciates these firms have to shift their manufacturing from China to other lower labour costs Asian counties, like Indonesia and Vietnam. Foreign importers would import more goods from other Asian countries as well. Hence, some analysts argue that a large appreciation of the RMB will “*only hurt China and not save the world*” (Garnaut & Song, 2007, p. 62).

Despite the recent complaint from the U.S., the Chinese government decided to maintain the current value of the RMB. The appreciation of the RMB would push up labour and raw material costs (against foreign currencies) in China. This would negatively impact on local manufacturers categorized as intensive labour, low value-added and highly dependent on export, such as textile and light industries. The latest investigation shows that every 1% appreciation of the RMB could lead to the net profit rate of textile industries falling 2% to 6%, especially impacting on apparel industries which are highly dependent on exports (People's-Daily-Online, 2010).

## 2.2 Global Recession Impact on Trade

Following the collapse of the U.S. housing and financing markets in 2008, the financial crisis quickly spread to the rest of the world. Global trade fell sharply. The recent crisis has dragged down the world economy to recession and impacted on the output and trade and the balance of trade in the world market. More deeply, the global economic recession can be seen as a sign of compelling bilateral trade frictions and dependency between the U.S. and China becoming more intensive (Eichengreen & Irwin, 2009; Oatley, 2010).

The decline in global trade saw a 12.2% contraction of the volume of trade in 2009 which reached its lowest level in the last 70 years (International-Trade-Statistics, 2010). Due to the lower level of world economic activity in the downturn, merchandise exports of a number of countries plummeted severely and the numbers of world unemployed increased from 14 million to 38 million in 2009 (Nanto, 2009). According to the percentage changes of merchandise exports from February 2008 to February 2009 exhibited by the Congressional Research Service (Nanto, 2009, p. 6), world merchandise exports declined by 26.8% in 2009, overall exports of all advanced economies dropped by 24.7%, developing countries dropped by 34.3% and emerging markets including China fell by 29.6% in 2009 relative to 2008 (Nanto, 2009). It is worth noting that in the period 2008-2009 U.S. merchandise exports went down by 13.9%, Japan's exports declined by 24.4% and China's exports decreased by 10.5% (International-Trade-Statistics, 2010). In addition, most OECD countries are facing the problem of poor inventory cycle which represents another significant effect of the global recession. The crisis has led to the dramatic drop in global sales, consequently the stocks to sales ratio for countries like Japan and UK have increased. For example, the manufacturing stocks to sales ratio of Japan went up sharply from 0.85 in 2008 to 1.3 in 2009 (McKibbin & Stoeckel, 2009).

A number of empirical studies have examined the impact of the global recession on

global trade. The sequential impacts seem to be the chain reactions. McKibbin and Stoeckel (2009)'s research study discusses several channels that have impacted on trade. Firstly, as wealth of households and business sectors shrink, they reduce their consumption on goods and services, especially durable goods. As demand shrinks, the volume of merchandise imports declines. Consequently, foreign countries' exporting business declines. For example, as building and housing construction slumped in countries like the U.S., the demand for iron and steel lessened. Iron and steel is a large market share of all world trade, thus the impact of these products would have a greater effect on trade than on GDP (International-Trade-Statistics, 2010; McKibbin & Stoeckel, 2009). Also a recent WTO report mentions that falling demand is the main reason causing the sharp decline of global trade (International-Trade-Statistics, 2010).

Secondly, banks start to reappraise lending funds to households and business sectors, as they seek to minimize uncertainty and risks. Likewise, countries are not willing to lend money to other countries (like purchase other countries' debts), hence capital flows lessen and net exports are affected. Meanwhile, both risk premiums and costs of capital increase. Another effect is that net exports go down due to the cost of trade credit going up. From the perspective of policymakers, import volumes decrease because many countries impose protectionist actions against other exporting countries (McKibbin & Stoeckel, 2009). The 'Buy American' Provision is a good example here.

Thirdly, 'synchronised nature' is an important factor that reinforced the collapse of world trade. Nowadays the world is integrated and trade is globalised, and even more countries are interrelated. Many regions and countries around the world were affected by falling exports and imports. For example, the declining demand of building construction in the U.S. affected the export of iron and steel from China (International-Trade-Statistics, 2010).

Fourthly, another channel is that governments stimulate internal demand by

distributing 'stimulus packages' to enhance the global trading activities (McKibbin & Stoeckel, 2009). Many G20 countries have provided fiscal stimulus and financial bailouts when facing challenges in the global financial crisis, especially Japan, China, France and the U.S. For example, the Japanese government directly supplied fiscal stimulus of 4.2% of its GDP, 5.8% of GDP provided by the Chinese government and the U.S. provided 3.8% of its GDP as a fiscal injection (Garrett, 2010). Garrett (2010) suggests that an increase in the domestic demand of the U.S. indicates more imports from China, even if the Obama Administration provided various forms of economic stimulus to revive local demand.

Wen Jianbao, the Prime Minister of China, announced at the 2009 World Economic Forum "Summer Davos" that the Chinese government will encourage domestic consumption and explore potential in local markets (Mathuros, 2009). Many economists highlight that China has recovered from the global financial crisis earlier than the rest of the world, and the Chinese government's successful economic stimulus plans and policies have largely contributed to that. A stimulus package worth approximately \$589 billion USD (equivalent to 4 trillion Chinese Yuan) was injected in order to "*shift the fiscal policy from 'prudent' to 'proactive' and shift monetary policy from 'tight' to 'moderately loose'*" (Xinhua-News, 2010). For example, many cities in China have issued consumption coupons to citizens for encouraging purchasing power and increasing households' consumption, equivalent to \$200 million RMB coupons (around \$29 million USD) which were distributed by the city of Hangzhou (Hangzhou.govt.cn., 2009). Furthermore, economists also believe that the Chinese recovery can also assist the economic recovery of the rest of the world. Tanaka (2010) points out that China's recovery can help other Asian countries commencing recovery. Since China begun to recover, some export-oriented countries like Malaysia and Thailand have shifted their export focus to China which shows more business potential and stronger purchasing power. Countries like Japan and EU also see this as an opportunity to enlarge their exports to China and to benefit from

that (Tanaka, 2010).

## **2.3 Protectionism**

The effects of the global economic downturn have been significant: trade relations between China and the U.S. have deteriorated, because the U.S. government put more protectionist pressure on China and sought to control China's growing trade surplus (Hale & Hale, 2008). Existing literature emphasises that traditional trade protectionism has risen and transformed to the new global protectionism; and more protectionist measures emerged as the volume of world trade fell in the recent recession period (Baldwin & Evenett, 2009).

### **2.3.1 Development of Trade Protectionism**

Traditionally trade protectionism happens when countries encounter economic difficulties, they impose higher import tariffs or quotas on foreign goods and services to enhance competitive advantages of their local firms and industries as well as to maintain their current account and avoid and minimize trade deficits (Abboushi, 2008). In the Great Depression of the 1930s, U.S. policymakers increased tariffs from an average of 13.5% to 19.8%. Other governments retaliated with policies of raising quotas, controlling exchange rates to restrict foreign merchandise and protect local industries. Hence the world trade wars started and the volume of world trade declined by 66% from 1929 to 1934 (Eichengreen & Irwin, 2009; Oatley, 2010).

Along with the development of world markets and increasing competition in world trade, traditional trade protectionism has evolved to new trade protectionism in the 1980s (McKibbin & Stoeckel, 2009). Enderwick (2011) emphasizes that '*compared with trade protectionism, global protectionism has a broader scope in terms of geography, application, concerns and measures applied*' (p.334). The scope of global

protectionism includes Foreign Direct Investment (FDI), immigration, offshore outsourcing and restriction on capital mobility rather than simply trade. The changes in a country's macroeconomic performance reinforce the appearance of the new protectionist measures (Mikic, 2009).

There are four motives that trigger the development of the traditional trade protectionism and impel the creation of new global protectionism. First, 'market competition' is rising in the era of globalization. To achieve national and enterprises' economic benefits, some government attempt to manipulate competition between domestic and foreign enterprises. For example, a country may impose 'import tariffs' on foreign exporters and offer 'export subsidies' to its domestic producers (Enderwick, 2011). Meanwhile, the traditional trade protectionism mainly focuses on protecting infant industries. However, nowadays governments have devised new protectionist measures for protecting 'national champions' and employment and avoiding foreigners' hostile attack or takeovers (Enderwick, 2011).

Second, large trade imbalances may trigger a nation to apply new protectionist measures (McKibbin & Stoeckel, 2009). The reputation of many large emerging markets like China and India has increased. Developed countries concern about the rapid economic development of those countries threatens their own economic growth, and the huge trade surpluses of a number of developing countries with the U.S. and E.U. has resulted in significant imbalances of global trade. Hence, the structure of world markets has systematically changed. New protectionist measures were promoted by many governments to minimize large trade deficits. For example, as mentioned earlier, the value of China's exports to the U.S. far exceeds its imports from the U.S. The American government tried to implement several new protectionist measures towards China in order to restrict Chinese exports as well as reducing the U.S. huge trade deficit with China (McKibbin & Stoeckel, 2009; Morrison, 2009b).

Third, many countries have gained benefits after signing FTAs as well as complying with the provisions of FTAs. However, some countries seek other protective strategies without breaking the regulations of FTAs, especially in the recession period. The French case illustrates the ways in which a government can protect its domestic so-called 'strategic' industries through the use of protectionist industrial policy without breaching EU rules and conventions (Baldwin, 2000; McKibbin & Stoeckel, 2009; Oatley, 2010).

Lastly, *'economic nationalism focuses on the use of economic policy instruments to increase national power and unity'* (Enderwick, 2011, p326). A rise in economic nationalism and rapid changes in global businesses can be seen as catalysts that have accelerated an expansion of global protectionism since 2008 (Baldwin, 2000; Enderwick, 2011).

### **2.3.2 Global Protectionism**

Protectionism operates on a global stage and several new protectionist measures appear to have become more of a concern after the 2008 global economic downturn. Evenett (2009) points out that many advanced industrialized nations and large emerging nations impose discriminatory trading policies against 'foreign commercial interests'. The recent World Bank Monitoring List shows that 78 new protectionist measures (including trade and trade-related measures) emerged at the beginning of the global recession. Sixty-six of the 78 new measures are related to trade restrictions (Gamberoni & Newfarmer, 2009). The World Bank's Global Antidumping Database indicates over 19% of new restrictive activities appeared in 2009 compared to 2008 (Bown, 2009). By the end of 2008, 17 G20 Members had adopted 47 protectionist measures to restrict other countries' trade (Baldwin & Evenett, 2009). Furthermore, the GTA distinguished the protectionist measures into two distinctive categories: trade distortive measures and potential trade distortive measures (Hufbauer, Kirkegaard,

Wong, & Woollacott, 2010). The 3<sup>rd</sup> GTA Report revealed the most prevailing discriminatory measures imposed by different countries against foreign interests: 101 cases related to bailout / state aid, 44 cases of tariff measures, 62 of trade defend measures, 14 of export subsidies (Evenett, 2009). In summary, the most common forms of new protectionist measures are the creation of national champions, subsidies to domestic industries, health and safety concerns, interventionist industrial policy, protection of intellectual property rights (IPR), hostile takeover, mergers and acquisitions (MAs) and green protectionism (Abboushi, 2008). These new protectionist measures can be illustrated in different countries' cases.

- Subsidies to domestic industries: Some countries provide state subsidies to local firms for the purpose of protecting domestic industries and minimize the negative impacts from foreign auto industries, such as Germany, U.K., Canada and Russia. Russia provided state subsidies to local automobile industries and imposed higher import tariffs on automobiles (Baldwin & Evenett, 2009). The U.S. also directly provided \$17.4 billion USD to three national auto manufacturers (Gamberoni & Newfarmer, 2009).
- Financial interference: Pressures for pushing Chinese currency appreciation can be recognized as a sort of financial protective action undertaken by the U.S. government. It is aimed at increasing the cost prices of Chinese goods and services compared to the prices for U.S. merchandise (Hale & Hale, 2008).
- Export subsidies: Export subsidies can be provided to exporters, such as the E.U. which announced subsidies to butter, cheese and milk powder exporters (Gamberoni & Newfarmer, 2009).
- Safety and quality concerns: India banned Chinese-made toys with a six-month injunction due to health and safety concerns (Gamberoni & Newfarmer, 2009).
- Many countries also restrict the employment of foreign workers to maintain a low unemployment rate, such as Malaysia which refused to hire foreign workers in manufacturing, restaurant and other major services industries at the beginning of 2009 (Gamberoni & Newfarmer, 2009).

- Creation of national champion: To avoid foreign takeovers and to create national champions, China rejected Coca-Cola's bid to take over the Huiyuan Juice Company (Bachrack, Huang, & Mordrall, 2009).

A great number of studies talk about the far-reaching impacts of the global protectionism on the world economy and trade (Gregory, Henn, McDonald, & Saito, 2010; Rodrik, 2009). The International Monetary Fund (2010) reports that global protectionism has caused a fall in trade and a rise in unemployment as well as slowing down the global recovery. Some alternative policies for creating jobs for domestic labour markets emerged in 2010, which can be seen as an excuse against foreign commercial interests, such as the dismissal of foreign workers in Malaysia (Evenett, 2010). The World Bank economists estimated that protective actions have resulted in a decline of \$43 billion USD in trade during the period of July 2008 – September 2009 (Lynn, 2010). According to the 3<sup>rd</sup> GTA Report (Evenett, 2009) and global protectionism in the Asian-Pacific area, China is facing 141 'red'<sup>3</sup> discriminatory measures imposed by foreign countries to satisfy their commercial interests, 94 are faced by Japan, 77 by Korea, 62 by Australia, 58 by India and 55 by Russia. Measures related to state intervention (such as state aid/subsidy and creating national champion) and tariff measures are expected to be the most prevailing protective barriers within the Asia-Pacific region (Mikic, 2009); nevertheless Mikic (2009) emphasises that tariff barriers can be easy to monitor, but bailouts by states are difficult to deal with.

Evenett (2010, p. 18) comments that “*governments keep closing borders despite macroeconomic stabilization*”. According to the 4<sup>th</sup> GTA Report (Evenett, 2010), the total numbers of discriminatory measures recorded is slightly higher than the last Report at 103, which comprises 71 'red' measures. Since late 2008 protective measures of bailouts, export subsidies and 'buy local' provisions have affected more than 100 nations. For example, the numbers of bailout measures imposed by states

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<sup>3</sup> Red measure is one that has been implemented to against foreign commercial interests (Evenett, 2009).

increased by 40 cases by January 2010 in comparison with the numbers reported in the 3<sup>rd</sup> GTA Report (Evenett, 2010).

Gamberoni and Newfarmer (2009) point out that the effects of the global protectionism are not as bad as expected, because *'trade integration and strong rules have so far muted protectionism'* (Gamberoni & Newfarmer, 2009, p. 52). The worldwide associations and agreements like WTO, G20, GAAT and FTAs can provide strong stability of trading relations among countries (Gamberoni & Newfarmer, 2009). WTO has provided a platform for reinforcing the expansion of trade as well as the multilateral trading system when facing difficulties in world markets (International-Trade-Statistics, 2010).

## **2.4 Global Protectionism Impact on Chinese Industries**

### **2.4.1 Impacts on Chinese Industries**

*"China remains the most frequent target of crisis-era protectionism"* (Evenett, 2009, p. 21). China is facing increasing foreign trade barriers from both developed and developing countries since the financial crisis. Fifty-five countries have agreed or have imposed protectionist measures on China's exports (Miller, 2009). WTO statistics show that of a total of 208 antidumping investigations and 14 anti-subsidy investigations, China faced respectively 73 (out of 208) and 10 (out of 14) investigations in 2008 (International-Centre-for-Trade-and-Sustainable-Development, 2009). A number of scholars believe that China is the biggest victim of the global protectionism; for example, Yue (2009) suggests that 'special-safeguard measures' are especially designed against China which received overall 360 discriminatory measures from its trading partners during the recent recession period (Baldwin, 2000; Dumbaugh, 2008; Mikic, 2009; Morrison, 2009b). Evenett (2009) underlines that China is ranked in first place of the top 10 biggest targets of protectionist measures.

The main purpose for those foreign nations' protective actions is to limit Chinese exporters' access to foreign protected markets and reduce trade volume of demanded Chinese products. For instance, the 'Buy American' provision and the boycott of Chinese-made products are used to protect U.S. local industries, enhance employment, and maintain their competitiveness towards similar foreign industries in China (Carbaugh & Prante, 2010; Lincicome, 2009). Also in the case of India's prohibition of Chinese-made toys, the Chinese government perceived that India imposed this regulation as means to protect Indian domestic toy producers (Kazmin, 2009).

As one of the largest business partners of the U.S., China faces significant protectionist measures from the American government. The U.S. Consumer Production Safety Commission (CPSC) and the U.S. Food and Drug Administration (FDA) have addressed their concerns about the quality, health and safety of merchandise that are made in China (Busch, Raciborski, & Reinhardt, 2008; Chan, 2010; Morrison, 2009b). In 2007, around 150 brands of pet food from China were recalled because the ingredients of rice protein concentration and wheat gluten resulted in the death and sickness of pets in the U.S. In the same year, the FDA revealed that toothpaste products imported from China were found to contain poisonous chemicals. In 2008, the 'scandal' about Chinese milk powder incident sent a new alert to the world. There were six babies killed and 294,000 got sick from the poisonous milk powder; because the ingredients contained melamine which can cause kidney problems. As a result, the FDA decided to delay further imports from China and requested evidence to prove no melamine contamination of Chinese products. Later, the European Commission started to test milk powder products from China (Berman & Swani, 2010; Dumbaugh, 2008; Haller, 2008; Morrison, 2009b). Baxter<sup>4</sup> of the U.S. recalled heparin which caused 19 deaths. The tested result revealed that the raw material of this product contained a counterfeit ingredient which was

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<sup>4</sup> Baxter is a healthcare professionalism, its supplier is a U.S.-based company and raw materials come from China. See [http://www.baxter.com/about\\_baxter/company\\_profile/index.html](http://www.baxter.com/about_baxter/company_profile/index.html).

produced in China (Berman & Swani, 2010; Haller, 2008).

The far-reaching impacts of the global protectionism have broadened to a great number of labour intensive industries in China, because the competitive pricing advantages of Chinese-made products have threatened their foreign competitors. Along with the rapid development of exports from China, non-tariff barriers (NTBs) such as import quotas, anti-dumping and special safeguards initiated by the U.S. emerged to limit the imports of Chinese-made textile and apparel products, (Ma, 2010). Even though America has profited from importing Chinese textile products at a lower price than can be produced in domestic industries, the fast growing textile and apparel industries in China has resulted in a 50% loss of employment in the U.S. by 2000 (Ma, 2010). Therefore, disputes about imposing safeguards on textiles and apparel products imported from China to the U.S. have existed for a numbers of years. The U.S. and other WTO members were allowed to impose import quotas on Chinese-made textile and apparel products until the end of 2008 following the WTO provision in the accession agreement. This provision has increased these products' selling prices in overseas markets, in what the Chinese officials considered a 'threat-based safeguard' (Jones, 2005). Yet, the U.S. imposed extra quotas on imports of 22 catalogs of Chinese-made textile and apparel products since 2006.

Furthermore, another form of the NTBs is the 'Green Trade Barrier', which requires textile and apparel companies to have 'green mark' authentications to gain export authority. Firms allowed to export must pass the test of ISO9000 (Quality Management Certificate) and ISO14000 (Environment Management Certificate). This provision has put more restrictions on Chinese firms because some of them could not get the 'green mark'. Different forms of NTBs imposed by the U.S. government have restricted China's international trade and damaged the trade relations between China and the U.S. (Ma, 2010; Morrison, 2009b).

## **2.4.2 Impacts on Two Major Chinese Industries: Toys and Tires**

Since the recent global recession both China and the U.S. have attempted to carry out more economic dialogue; sign more bilateral agreements to enhance their corporations and communication regarding health and safety concerns (Morrison, 2009b). Nevertheless, it seems not apply in the case of China-U.S. bilateral trade, because protectionist barriers and economic nationalism continue to be big problems affecting China-U.S. trade relations (Garrett, 2010). The widely creeping global protectionism has impacted significantly on two major Chinese industries: toys and tires.

### ***Impacts on China's Toy Industry***

The trade disputes between China and the U.S. regarding safety and quality issues of Chinese-made toys are intense. China is a major toy supplier to the U.S. and accounts of 90% of total toy imports of the U.S. (Teagarden, 2009). Chinese toy producers were shaken by the U.S. 'toy recalls' events especially amid the global recession, so that American consumers reconsidered the ethical issues of Chinese toy exporters. Many American consumers boycotted made-in-China toys and criticized the safety standards of Chinese-made toys. The result of a 2007 Gallup Panel Survey<sup>5</sup> showed that most American adult consumers prefer to purchase U.S.-made products rather than paying for less expensive Chinese-made goods. According to this survey, 94% respondents preferred to pay for American-made food and 82% preferred to purchase American-made children's toys even at a higher price than the ones made in China (Saad, 2007).

The U.S. CPSC announced in 2007 that 94% of total recalled toys<sup>6</sup> were made in China in contrast to the 50% in 2002. For instance, Mattel Inc., a major world toy

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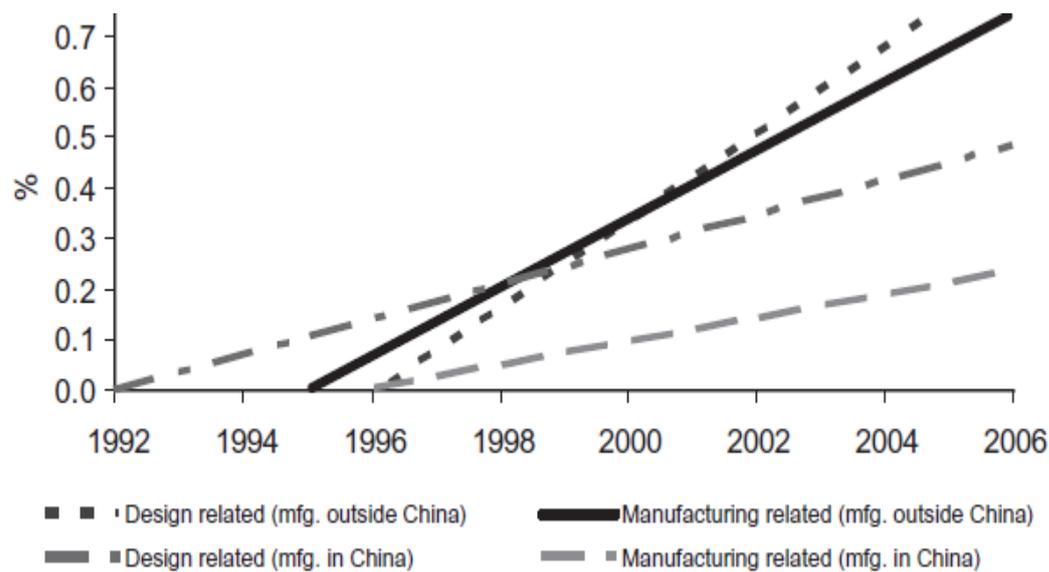
<sup>5</sup> The survey is to investigate 1,006 American adults' preference on purchasing Chinese-made or the U.S.-made products (Saad, 2007).

<sup>6</sup> The total toy recalls also include 2% from the U.S., 2% from India, 1% from Mexico, 1% from Taiwan and Vietnam (Tucker, Bottari, & Pullen, 2007).

company from the U.S., recalled 21 million toys that were made in China (worth \$110 million) in 2007 due to both manufacturing and design errors. In the same year August 7, 1.5 million toy cars were recalled as they contained dangerous lead-based paint; four days later again Mattel Inc. recalled millions of toys which contained loose magnets. Also around 1 million Chinese-made toys were recalled in 2009 for the same reason (Bapuji & Beamish, 2008; Barboza & Story, 2007; Berman & Swani, 2010). After the investigation, Mattel disclosed that its Chinese subcontractor had subcontracted with an unauthorized supplier who was responsible for the car painting (Berman & Swani, 2010). At the same time of the Mattel's 'toy recalls' in 2007, Toys "R" Us built a safety checking system for testing all toys imported from China and finally 27,000 Chinese toys were recalled (BBC-News, 2007).

The empirical study conducted by Beamish and Bapuji (2008) has revealed the implications of the recent 'toy recalls'. The researchers used the CPSC data of Chinese-made toy recalls from the U.S. to explore the safety issues of imported Chinese toys during the time period 1988-2007. Their research shows that toy recalls were rising dramatically; the number of recalls in 2007 was fifty times bigger than in 1988. Most of the recalls were due to design flaws rather than manufacturing flaws. Their research differentiated the recalls by four categories: (1) toys made in China with design flaws; (2) toys made in China with manufacturing flaws; (3) toys made outside China with design flaws; (4) toys made outside China with manufacturing flaws. The result is illustrated by Figure 1, and it indicates that the number of toys manufactured outside China with recalls on design flaws or manufacturing flaws increased more sharply than the toys made inside China (Bapuji & Beamish, 2007, 2008).

**Figure 1: U.S. Toy Recalls as percentage of U.S. Toy Imports (trend lines)**



(Source: Bapuji & Beamish, 2008, p. 204)

Another recent study by Berman and Swani (2010) illustrates the factors that could lead China to produce poor health and safety merchandise. Firstly, generally speaking importers choose suppliers who offer the lowest price. The strong pricing competition of Chinese-made export products can add more cost-related pressures for each domestic supplier, thus, some Chinese suppliers may choose to reduce the quality of products in order to reduce costs. Secondly, the complexity of supply chains and multiple outsourcing levels enhances difficulties for Chinese suppliers to monitor the quality and safety issues of raw materials and assembling processes. The Beamish and Bapuji (2008)'s research result shows that China is becoming a large supplier for the whole world, but the overall control of the quality assurance for Chinese toy exporters and sub-suppliers is becoming difficult and complicated. Thirdly, many foreign importers claim that some Chinese suppliers are good at avoiding inspections in terms of the health and safety issues. Among the total 8,000 toy factories, only 3,000 have export licenses (Bapuji & Beamish, 2008). Fourthly, the researchers also point out that China has a weak safety-surveillance system for monitoring and testing safety and health problems of products. Barboza (2007) reported that China has even more strict rules than the U.S. in terms of the safety and health standards (Berman & Swani,

2010). This means that China has strict written standards of safety and health issues, but in fact many toy producers cannot enforce or follow the relevant rules and regulations (Bapuji & Beamish, 2008; Bapuji & Laplume, 2010; Berman & Swani, 2010).

In September 2007, Mattel Inc. apologized to China regarding the millions of ‘toy recalls’ because most of the recalled toys suffered design flaws rather than manufacturing faults in China (Casey, Zamiska, & Pasztor, 2007; Teagarden, 2009). From the other perspective, China announced that, Mattel’s ‘toy recalls’ actions are protectionist behaviors to protect its own brand negatively affecting Chinese toy producers and their exporting business (Teagarden, 2009). Other foreign buyers besides the U.S. have also lost confidence in Chinese-made toys; some of them have started to initiate more strict quality and safety testing for toys imported from China. Finally, the overall impact would be a slowing of the pace of exports from China and diminishing employment in the toy industry (Morrison, 2009c). The fact was that, nearly half of Chinese toy factories closed in 2008 because of the financial crisis and ‘toy recalls’ event. As the dramatic slump of overall toy exports, a toy supplier for Mattel and the U.S. Disney closed down in October 2008 and 7,000 employees lost their jobs (Macartney, 2009).

### ***Impact on China’s Tire Industry***

According to U.S. data, Chinese-made tires supplied to the U.S. market are 26% of the total tires imports of the U.S. (Morrison, 2009c). During the period 2004 to 2008, the volume of U.S. imported tires from China rose sharply from \$613 to \$1,975 billion USD and the unit number of imported tires increased from 17.9 million to 48.9 million. Hence, China has consolidated its top place among all U.S. vehicle tires’ foreign suppliers. However, in 2009 the U.S. International Trade Commission (USITC) indicated that the rapid growth of tires imports from China had disrupted the U.S. tire market and affected local employment (Morrison, 2009b).

The sign of the global protectionism against Chinese tire industries could be traced back to the events of ‘tire recalls’ and ‘the U.S. special safeguards imposed on Chinese tires’. Due to the health and safety concerns, there were 255,000 Chinese-made tires recalled in June 2007 by Foreign Tire Sales Inc.<sup>7</sup> that were found to have major safety problems such as the problem of tire separation (Morrison, 2009c). Two years ago, this firm decided to ban the purchase of light-truck tires from a Chinese tire exporter Hangzhou Zhongce (Martin, 2007). Many U.S. firms which produce passenger vehicles and light truck tires reported losses in the year ending 2008. The numbers of workers and related workers of these firms dropped by 14.2% from 2004 to 2008<sup>8</sup> (U.S.-International-Trade-Commission, 2009). The U.S. believed that Chinese-made tires disrupted its domestic tire market. Therefore, the USITC imposed additional tariffs of 55%, 45% and 35% respectively over three years. On the contrary, some local U.S. tire producers disagreed with this proposed plan as they pointed out that the higher tariffs should not be imposed on low-end products like tires. Almost 70% of U.S. tire producers operate plants in China, they believed that this decision not only pushed up the cost prices of the U.S. consumers but also it is ineffective in boosting employment in the tire industry (Chan, 2010; Morrison, 2009b).

Tariffs as a traditional form of trade protectionism still prevail in the recent global financial crisis. McKibbin and Stoeckel (2009) indicated that a rise in tariffs can raise costs, lower demand and lead to a decline in GDP. They estimate that a change in U.S. tariffs could cause a fall in China’s GDP of 0.93%. On the other hand, an equivalent change in China’s tariffs could cause U.S. GDP to fall by 0.04%. This indicates that increasing import tariffs by the U.S. has a far greater effect on China’s economic performance. In the time series of 2004-2008, the capacity of Chinese tire production

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<sup>7</sup> Foreign Tire Sales mainly import tires from foreign countries and resell in the U.S. market (Martin, 2007).

<sup>8</sup> More information or statistical data please See *Certain Passenger Vehicle and Light Truck Tires From China, Investigation No. TA-421-7*. from USITC.

surged by 152%, and China's share of the U.S. tire market increased 255%. This has caused almost 5,000 American workers from the tire industry to lose their jobs, and led to a loss 3,000 more jobs in 2009. To protect the domestic tire industry in the U.S. and sustain employment, in September 2009 President Obama announced additional tariffs on Chinese-made tires for three years, an increase of 35% in the first year, 30% in the following year, and 25% in the last year (Morrison, 2009b; Weisman, 2009). Likewise, in 2009 the U.S. government imposed restrictions on Chinese-made steel-pipes (Back & Ho, 2009; Carbaugh & Prante, 2010). Once the market price of tires increases, demand for imported Chinese-made tires is expected to decline. To react to the U.S. 'special safeguards measures', the Chinese government believed that this action violates the rules of the WTO and G20's summits and adds to trade tensions (Weisman, 2009).

Prime Minister Wen Jiabao declared in the 2009 Summer Davos that China must fight against all types of hidden protectionist activities undertaken by other countries (Mathuros, 2009; Weisman, 2009). While China exports 33 million tires to the U.S., the 35% extra tariffs on Chinese-made tires would be difficult for Chinese tire industries to absorb when entering the U.S. market. Economists predict that the impact of the special safeguards on Chinese tires would cause 10 thousand job losses and the tire industries would lose \$10 billion RMB (equivalent to \$1.47 billion USD) (Zong, 2009). To respond, the Chinese government immediately announced its own 'safeguards' actions by initiating antidumping and anti-subsidy protective measures against imports of American automobile parts and poultry products (Chan, 2010; U.S.-International-Trade-Commission, 2009).

### 3. Research Methodology

The research methodology of this dissertation is preliminary analysis based on the interpretation of significant empirical literature and statistical data from secondary sources. It could be described as the mixed-method research, which combines collecting and analysing both qualitative and quantitative data. Two hypotheses are offered in this dissertation and will be tested by examining the impacts of U.S. protectionism on both the toy and tire industries in China:

*Hypothesis 1: The global protectionist measures implemented by the U.S. negatively affect the Chinese toy industry.*

*Hypothesis 2: The global protectionist measures implemented by the U.S. negatively affect the Chinese tire industry.*

According to the hypotheses, the phrase ‘negative impacts’ here means ‘bad effects’ that should show up as from three perspectives: (1) a decline in China’s exports to the U.S., (2) a possible decline in toys and tires output, (3) an increase in toy and tire exports to non-U.S. markets. The impacts might also take the form of falling employment in both the toy and tire industries. For example, if in the recession period Chinese exports of toys or tires to the U.S. decrease, then the American protectionist actions would have a likely negative effect in terms of declining output, exports and even employment in the two industries. Furthermore, the data will be collected in the time period 2005-2009, because the whole five years can represent two distinct periods of ‘prior to the recession’ and ‘during the recession’.

#### **Direct Method:**

At the initial stage of the research, a direct method was designed to test the hypotheses through data collected from both Chinese toy and tire industries. Eight

sets of data were collected from the China Statistical Yearbooks 2006-2009<sup>9</sup>, and the United Nations Commodity Trade Statistics Database (UN-comtrade)<sup>10</sup> as shown below:

1. Chinese production (output) of toys
2. Chinese total toy exports to the world
3. Chinese exports of toys to the U.S.
4. Chinese domestic sales of toys
5. Chinese production (output) of tires
6. Chinese total tire exports to the world
7. Chinese exports of tires to the U.S.
8. Chinese domestic sales of tires

Data from the toy industry illustrates the process to test the hypotheses. China's total toy production should be the total of total toy exports to the world and Chinese domestic toy sales, thus  $\text{Data 1} = \text{Data 2} + \text{Data 4}$ . Deducting Data 3 from Data 2, the value of toy exports to other foreign markets except America can be worked out as the Data of 'Toy exports to non-U.S. markets'. In the recession period 2007-2009, if Data 2 increases or remains the same and Data 3 decreases, it is likely that China is trying to increase toy exports to third countries rather than the U.S. since it imposed protectionist measures on the Chinese industry.

The research does not apply this method since there were a number of difficulties with the data. The first main reason is the limited data available in China. The available data is only updated to 2008 not 2009. In regard to the literature review, the global recession largely affected Chinese imports and exports from early 2008 and merchandise exports throughout the world experienced a dramatic decline in 2009

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<sup>9</sup> China Statistical Yearbook is a statistical publication issued annually, which includes the data from the year 2005-2008.

<sup>10</sup> UN-comtrade is an organisation authorised by the United Nations provide statistical database over the world. See <http://comtrade.un.org/>

(International-Trade-Statistics, 2010; Morrison, 2009b). Moreover, the data in 2009 is crucial to this research study as this year is supposed to be the period ‘during the recession’. For example, as mentioned earlier in the literature review, the U.S. imposed more and more restrictive trade policies in 2009 like the initiative of a policy of ‘additional tariffs on U.S. imports of Chinese tires in the next three years’ in September 2009 (USA-Today, 2009). This policy might take further effects on some figures in the last season of 2009, such as exports to the U.S. and China’s tires output. The data of 2009 is able to provide more statistical data and information for the data analysis. Hence, insufficient data will impact on the overall research results.

Secondly, in October 2010 the author contacted Weimin Jing who is a Professor of Economics in Nankai University for assistance about gathering more statistical data. He mentioned that there is no such comprehensive data set that can be classified by various industries in the context of the enormous Chinese market. In addition, even the data from some official publications are inadequate like “China Toy Industries Yearbook” and “China Rubber Tire Industries Yearbook” as well as some organizations such as China Toy Association.

Thirdly, while collecting data from the two industries, some constraints occurred. The data collected from the tire production of China is measured in quantities (thousands of numbers), whereas, the tire exports to the U.S. is measured in the value of billion US dollars. Furthermore, the toy and tire outputs in China were measured in Chinese Yuan, whereas the volume of exports to the U.S. was measured as US dollars. Therefore, these two issues would not allow consistency in measuring the data.

Fourthly, part of the data can be collected from some private consultation companies, such as data of toy sales revenue in China used to be collected from the *CEIC Macroeconomic Databases for Emerging and Developed Markets*<sup>11</sup>, however, the

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<sup>11</sup> CEIC is a private institutional investor company which provides range of economic data for

credibility and consistency of the data could be questioned. The data is measured monthly, whereas most of the monthly data in 2007 and 2008 is not available. Therefore, even if the researcher used the average monthly data per year to undertake analysis, the results could be inaccurate and lack credibility.

**Indirect Method:**

As an alternative, an indirect method was designed to test Hypotheses 1 and 2. Japan was chosen as a third country to make a comparison of the protectionism impacts on Chinese toy and tire industries between Japan and the U.S. Japan is appropriate for a number of reasons. Firstly, Japan is one of the major trading partners of China which is a large producer of toys and tires in the world market. To date no 'safeguard' protectionist measures have been imposed by Japan against Chinese-made toys and tires, while more trade protective policies have been implemented by the U.S. as mentioned earlier in the literature review (Morrison, 2009b). Moreover, trade in tires between China and Japan is relatively low, thus there would be little economic benefit if Japan imposed any special safeguards on Chinese tires. Secondly, all relevant data for a comparison can be sourced from the UN-comtrade Database and the Organisation Internationale des Constructeurs d' Automobiles (OICA)<sup>12</sup> over the period 2005-2009. The consistency of the data can enhance the credibility of the research results.

The secondary data for this research method includes three types of data: (1) total Chinese toys and tires exports to the world, (2) Chinese toys and tires exports to the U.S., (3) Chinese toys and tires exports to Japan. Meanwhile, other data can be calculated based on these data in order to provide more findings for the data analysis, such as the annual growth rate of each type of data. All statistical data is presented in U.S. dollars. Trends in these data are described in tables and graphs. The trends will

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developed and emerging markets. See <http://www.ceicdata.com/>

<sup>12</sup> OICA is "an international organization of Motor Vehicle Manufacturers was founded in Paris in 1919", See <http://oica.net/category/about-us/>

enable a test of whether or not there is the expected negative impact on these industries due to the protectionist measures initiative by the U.S. This method will examine whether the results can support Hypotheses 1 and 2. The results could be interpreted around three scenarios to measure negative impacts on China's toy and tire industries.

- Scenario 1: if Chinese toys and tires exports to the U.S. decrease in the recession period while exports to Japan increase/remain the same, this implies that the U.S. trade restrictive policies do have a negative impact on the two industries. Thus, the hypotheses can be supported.
- Scenario 2: if exports to the U.S. increase and exports to Japan increase/remain the same/decrease, this suggests means there is not a negative impact and the hypotheses cannot be supported.
- Scenario 3: if exports to the U.S. and Japan both decrease, the hypotheses cannot be supported without conducting further research. This scenario could be interpreted as suggesting that the recessionary effect is greater than any 'negative effect' from the new protectionism.

## **4. Data Analysis and Findings**

### **4.1 Chinese Toy Industry**

#### **4.1.1 Data from Toy Industry**

Data from Chinese toy industry in the time period of 2005-2009 was collected for this research study as listed below:

- A. Chinese exports of toys to the U.S.
- B. Chinese toy exports to the world
- C. Chinese exports of toys to Japan

Through the three data sets, a number of other data can be calculated:

- D. Chinese toy exports to the U.S. relative to total toy exports to the world<sup>13</sup>
- E. Growth rate of Chinese toy exports to the U.S.
- F. Growth rate of total Chinese toy exports to the world
- G. Growth rate of Chinese toy exports to Japan

**Table 1: China's Toy Exports to the World, the U.S. and Japan in 2005-2009**

	<b>A: TOY Exports to the U.S.</b>	<b>B: Total TOY Exports to the World</b>	<b>C: TOY Exports to Japan</b>	<b>D: Toy Exports to the U.S. as % of Total Exports</b>
	billion (US\$)	billion	billion	
<b>2005</b>	\$7.532	\$19.124	\$1.020	39.39%
<b>2006</b>	\$8.653	\$22.637	\$1.058	38.23%
<b>2007</b>	\$10.614	\$27.152	\$1.752	39.09%
<b>2008</b>	\$12.298	\$32.815	\$2.136	37.48%
<b>2009</b>	\$9.797	\$26.490	\$2.140	36.98%

\*(Toys are reported as the commodity #95 in the UN-comtrade: Toys, games, sports requisites)

Data source: UN-comtrade Database (UN-comtrade, 2010g, 2010h, 2010i)

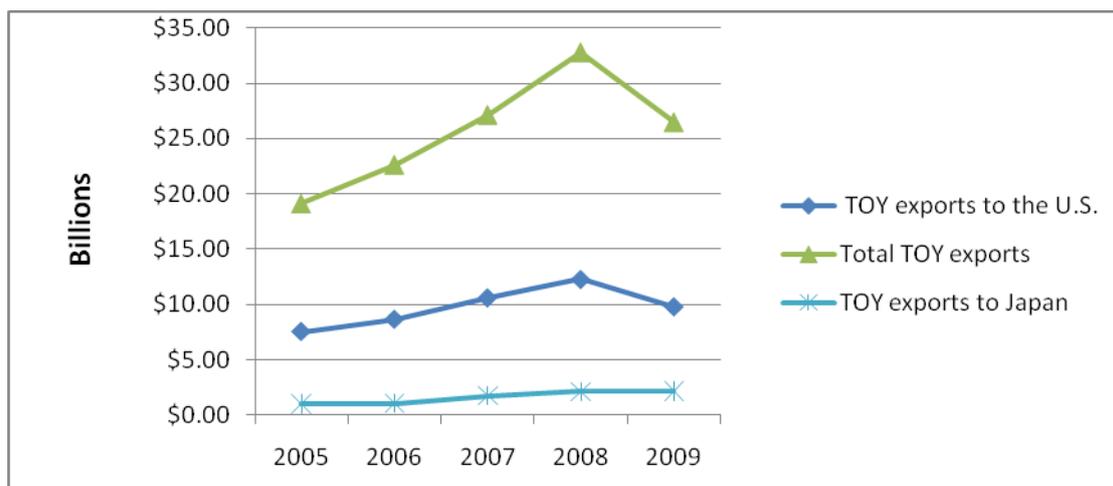
**Table 2: Compound Annual Growth Rate of China's Toy Export to the World, the U.S. and Japan 2006-2009**

	<b>E: Growth Rate of TOY Exports to the U.S. (US dollars) *CAGR</b>	<b>F: Growth Rate of Total TOY Exports to the World</b>	<b>G: Growth Rate of TOY Exports to Japan</b>
<b>2005</b>			
<b>2006</b>	14.88%	18.37%	3.73%
<b>2007</b>	22.66%	19.95%	65.60%
<b>2008</b>	15.87%	20.86%	21.92%
<b>2009</b>	-20.34%	-19.27%	0.19%

\*CAGR = Compound Annual Growth Rate

<sup>13</sup> Calculation method: Data D = Data A / Data B

**Figure 2: China's Total Toy Exports to the U.S. and Japan 2005-2009**



## 4.12 Analysis and Findings

According to Tables 1 and 2, prior to the recession China's toy exports to the world from 2005 to 2007 went up from \$19 billion to \$27 billion at an average annual growth rate of 19%. During the same period, toy exports to America increased from approximately \$7.5 billion in 2005 to \$10 billion in 2007, and reached a peak annual growth rate of 22.7% in 2007. Japanese toy imports from China went up from \$1.02 billion to \$1.75 billion between 2005 and 2007, this figure increasing by 65.6% in 2007.

Along with the collapse of world trade amid the global recession in late 2007 or early 2008, the growth rate of China's total toy exports to the world in 2009 was -19.27%, which reveals a dramatic fall in export volume and weaker demand by foreign consumers for toys. Exports to the U.S. fell from \$12.3 billion in 2008 to \$9.8 billion in 2009 a fall of 20.3%. However, the growth of toy exports to the U.S. started to slow between 2007 and 2008 as the annual growth rate decreased from 22.7% to 15.9%. Similarly, with the commencement of the global recession, Japanese toy imports from China slowed down as the annual growth rate dropped from 65.6% in 2007 to 21.9% in 2008. However, Japanese imports still increased during 2007-2009 in value terms

from \$1.75 billion to \$2.14 billion. Figure 2 represents the trends of Data A, B and C: Japanese toy imports from China showed a slight increase while world trade in 2009 was tumbling, whereas U.S. toy imports showed a sharp decrease.

The U.S. is the largest toy importer from China with toy exports to the U.S. accounting for almost one third of total Chinese toy exports. The U.S. market segment (exports to the U.S. relative to total exports to the world) decreased from 39.4% to 37.0% over the last five years. In contrast, exports to the rest of the world increased slightly from 60.6% to 63.0%. This suggests that China's toy industry have sought out more overseas markets and increased export volume to some emerging markets like Brazil, Russian Federation and the Middle East. For instance, the exports of Chinese-made toys to Brazil went up from \$53 million to \$203 million in the last five years, while the exports to Saudi Arabia increased from \$44 million to \$101 million (UN-comtrade, 2010e, 2010f).

In summary, both American and Japanese demand for Chinese-made toys have been affected by the global recession because the growth rate of the toy exports to the two countries slowed. However, while the volume of toy exports to the U.S. decreased significantly after 2008, exports to Japan experienced a slight increase. This result is consistent with scenario 1. This indicates that the protectionist measures by the U.S. dragged down U.S. toy imports from China, whereas Japan which did not apply any trade protectionist measure against Chinese-made toys continuously increased its toy imports from China in the recession period. As a result, Hypothesis 1 is supported by the research results and the trade protectionist barriers imposed by the U.S. do appear to have negatively impacted on the U.S. demand for Chinese toys. Due to the importance of the U.S. market for Chinese toy exports, both output and employment appeared to have been negatively affected.

## 4.2 Chinese Tire Industry

### 4.21 Data from Tire Industry

Data from Chinese tire industry in the time period 2005-2009 was collected as listed below:

- H. Chinese exports of tires to the U.S.
- I. Chinese tire exports to the world
- J. Chinese exports of tires to Japan

Based on the three data, more data can be worked out for the further analysis

- K. Chinese tire exports to the U.S. relative to total tire exports to the world<sup>14</sup>
- L. Growth rate of tire exports to the U.S.
- M. Growth rate of total tire exports to the world
- N. Growth rate of tire exports to Japan

**Table 3: China's Tire Exports to the World, the U.S. and Japan 2005-2009**

	<b>H: TIRE Exports to the U.S.</b>	<b>I: Total TIRE Exports to the World</b>	<b>J: TIRE Exports to Japan</b>	<b>K: TIRE Exports to the U.S. as % of Total Exports</b>
	billion (US\$)	billion	billion	
<b>2005</b>	\$1.345	\$3.781	\$0.081	35.57%
<b>2006</b>	\$1.905	\$5.128	\$0.124	37.15%
<b>2007</b>	\$2.372	\$7.092	\$0.125	33.45%
<b>2008</b>	\$2.468	\$8.060	\$0.110	30.62%
<b>2009</b>	\$2.136	\$7.685	\$0.091	27.79%

\*(Tires are reported as the commodity #4011 in the UN-comtrade: New pneumatic tyres, of rubber)

Data Source: UN-comtrade Database (UN-comtrade, 2010b, 2010c, 2010d)

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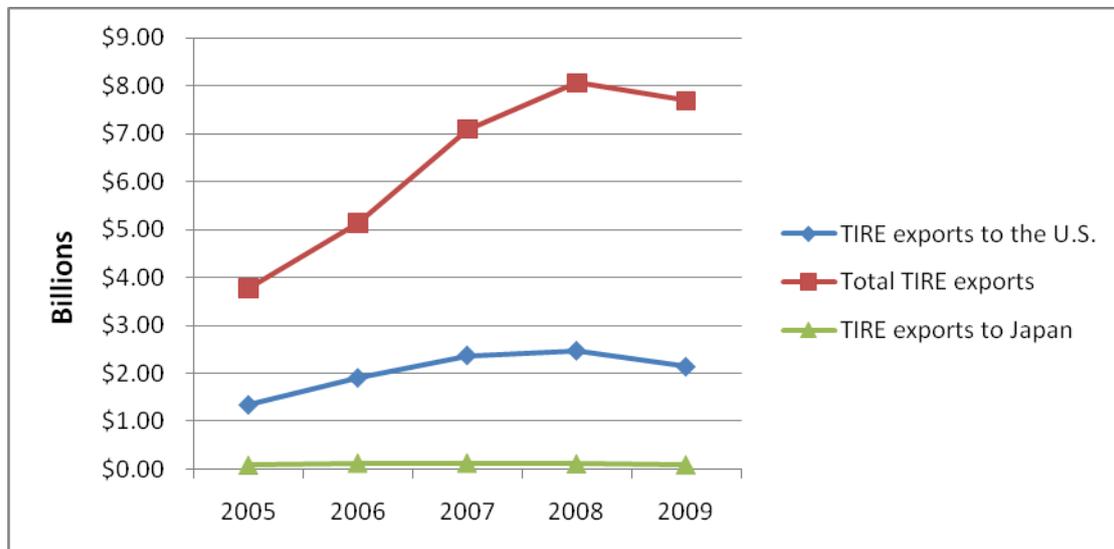
<sup>14</sup> Calculation method: Data K = Data H / Data I

**Table 4: Compound Annual Growth Rate of Tire Exports to the World, the U.S. and Japan 2006-2009**

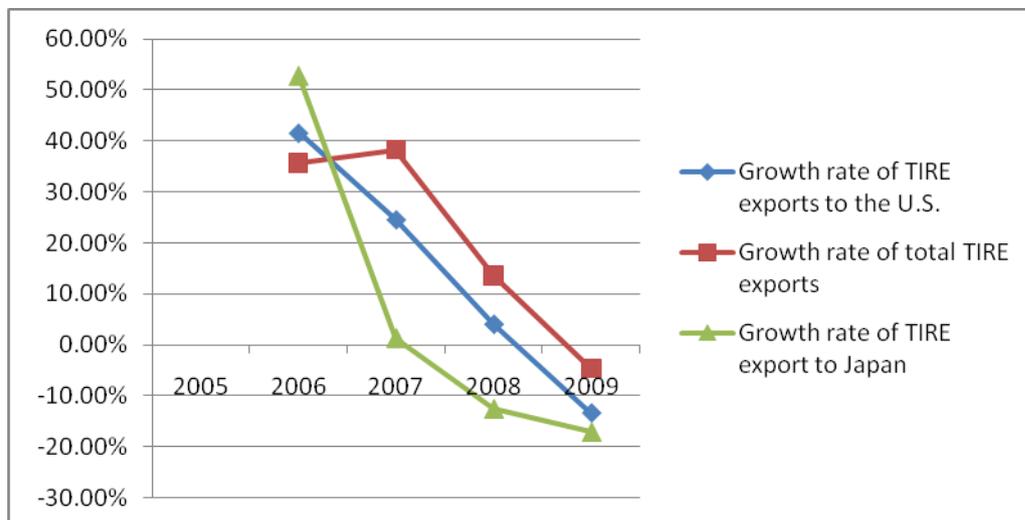
	L: Growth Rate of TIRE Exports to the U.S. (US dollars) *CAGR	M: Growth Rate of Total TIRE Exports to the World	N: Growth Rate of TIRE Exports to Japan
2005			
2006	41.64%	35.63%	53.09%
2007	24.51%	38.30%	0.81%
2008	4.05%	13.65%	-12.00%
2009	-13.45%	-4.65%	-17.27%

\*CAGR = Compound Annual Growth Rate

**Figure 3: China's Total Tire Exports to the U.S. and Japan 2005-2009**



**Figure 4: Compound Annual Growth Rate of Tire Exports to the U.S. and Japan 2006-2009**



**Table 5: Japanese and American Passenger Car Production 2004-2009**

Quantities (Numbers)	Japanese Passenger Car Production	American Passenger Car Production
2004	8,720,385.00	4,229,625.00
2005	9,016,735.00	4,321,272.00
2006	9,754,903.00	4,366,220.00
2007	9,944,637.00	3,924,268.00
2008	9,928,143.00	3,776,641.00
2009	6,862,161.00	2,246,470.00

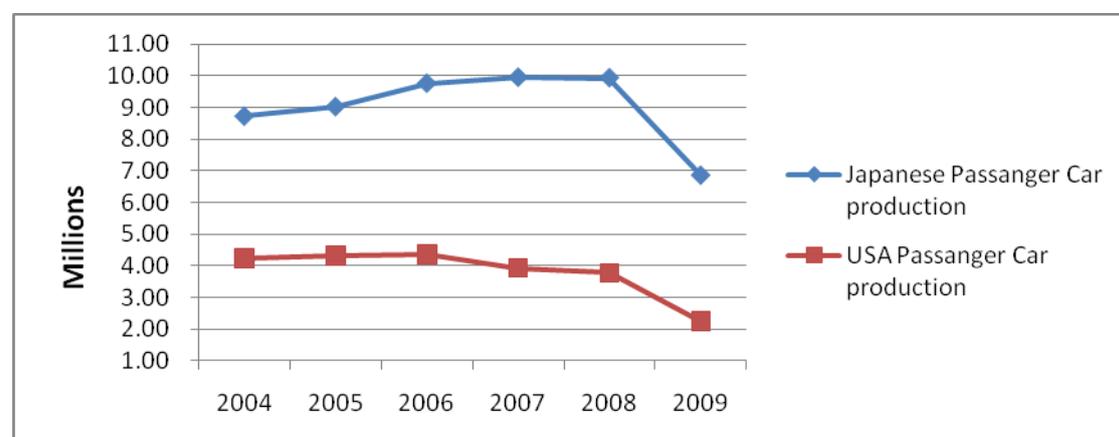
Data Source: OICA Database – Production Statistics (OICA, 2010a, 2010b, 2010c, 2010d, 2010e, 2010f).

**Table 6: Compound Annual Growth Rate of Japanese and American Passenger Car Production 2005-2009**

	Growth Rate of Japanese Passenger Car Production (Numbers) *CAGR	Growth rate of American Passenger Car Production
2004		
2005	3.40%	2.17%
2006	8.19%	1.04%
2007	1.95%	-10.12%
2008	-0.17%	-3.76%
2009	-30.88%	-40.52%

\*CAGR = Compound Annual Growth Rate

**Figure 5: Numbers of Japanese and American Passenger Car Production 2004-2009 (trend lines)**



## 4.22 Analysis and Findings

America is a major importer of Chinese-made tires, while Japan has a much smaller market share of tire imports from China. As can be seen from Table 3, the value of Chinese tire exports to the U.S. accounted for more than one third (37%) of total Chinese tire exports in 2006. But this figure decreased to approximately 28% in 2009, revealing a declining market segment of the U.S. in recent years. The fact is that China has exported more tires to other foreign markets including the United Kingdom, Australia and Germany. For example, Chinese tire exports to Australia were increasing even in the global recession period, the trade volume went up from \$236 million to \$301 million in the period 2007-2009 (UN-comtrade, 2010a).

According to Table 3, prior to the recent global recession the Chinese tire industry was strong. The value of tire exports to the world almost doubled over the previous three years with exports going up from \$3.78 billion in 2005 to \$7.10 billion in 2007. At the same time tire exports to the U.S. and Japan both expanded as shown in Tables 3 and 4. It is worth noting that the growth of tire exports to Japan became very slow as the annual growth rate decreased from 53.1% in 2006 to 0.81% in 2007.

It can be seen from Figure 3 and Table 4 that as world trade crashed in 2008 Chinese total tire exports commenced to shrink and exports to both Japan and America declined. As an illustration the annual growth rate of tire exports to the U.S. declined sharply from 41.6% to 4.1% between 2006 and 2008. In 2009, tire exports to the U.S. declined by a further 13.5%. Likewise, the growth rate of tire exports to Japan fell from 2007. Exports to Japan declined by 12% in 2008, and declined by a further 17.3% in 2009. Figure 4 clearly demonstrates that the decline in tire exports to Japan was greater than in the U.S. in the period 2006-2009.

The world automotive market slowed significantly and global automotive output slumped in the recent downturn (Leggett, 2010). Car production in Japan and America

would have a direct effect on the demand for Chinese-tires to some extent. Two segments can explain this, one is Original Equipment Manufacturer (OEM) and the other segment is the consumer replacement market. An OEM usually produces products for others companies to repackage and sell. OEM tires refer to the tires produced for automotive manufacturers' assembly plants (WiseGeek, 2010). For example, most Japanese car manufacturers prefer to purchase tires produced in domestic manufacturers or import high-quality tires from other countries rather than importing lower-quality tires made in China. Thus, car plants' purchases can directly affect how many tires needs to be produced. Furthermore, the consumer replacement market is another segment that relates to individual tire buyers who have options of purchasing new tires for replacement or delaying the replacement of tires. Thus, the consumer replacement tire market in both Japan and America would determine much of the demand on Chinese tires. Japanese individual consumers seem to prefer to purchase Japanese tires with better quality rather than Chinese tires with relative lower quality. In contrast, America has a relatively larger market for tire replacement.

Examination of Japanese and American domestic car production in the period of 2005-2009 is shown in Table 5 and Figure 5. Domestic passenger car production in both America and Japan experienced a dramatic decline in late 2007. The number of cars produced in Japan decreased from 9.94 million in 2007 to 6.82 million in 2009. Similarly, American car output fell from 4.37 million to 2.25 million in the period of 2006-2009. These figures suggest that the numbers of cars produced in both countries were negatively affected by the impact of the global recession. As the two countries produced fewer cars their demand for Chinese OEM tires fell.

It appears that while Chinese tire producers enjoyed a significant rise in tire exports to both America and Japan before the global recession, exports to the two countries fell with the recession. Chinese tire exports to the two countries experienced stronger influences from the global recession. The diminishing output of automotives in both

countries in the period of 2007-2009 indicates the lower demand for Chinese tires. These findings are consistent with scenario 3, which suggests the recessionary effect is greater than the protectionist effects. In this context, the Hypothesis 2 cannot be fully supported as the negative impacts from the U.S. protectionist measures on Chinese tire industry are outweighed by the negative impacts from the global recession.

## **5. Discussion**

### **5.1 Chinese Toy Industry**

#### **5.11 Impacts on Toy Industry**

The feature of labour intensive nation and cheaper costs of raw materials of China indicates that '*China is a world toy production based*' (Xinhua-News, 2009a). Toy exports are one of the major trading businesses in China. The annual growth rate of Chinese toy production was around 30%-40% in the period of 2002-2007 with almost \$30 billion toys made by producers from the City of Guangzhou. The Chinese government has initiated several economic stimulus plans to enlarge the internal demand and domestic toy production was increasing (Zheng, 2010). The research finding shows that total toy exports of China fell sharply from 2008. Based on the evidence discussed in the previous section, it can be concluded that global protectionism has had an impact on the Chinese toy industry. China's toy industry has been affected in several ways. The first is that the financial crisis and falling employment rate caused foreign demand for Chinese-made toys to fall. Unemployment rates in the OECD area reached 8.5% in August 2010 and the unemployment rate for the U.S. was around 9.6% (OECD, 2010). Toys are not a necessary commodity for daily life and consumers might delay their purchases. Secondly, many toy producers/exporters are facing problems of increasing cost prices

of raw materials, labour and transportation in 2010. Recently the dollar value of the RMB increased to 6.6708 in November an almost 2% appreciation of RMB relative to one year ago (Business-China, 2010; Ma & Lu, 2010). This means American consumers have to pay more dollars to purchase Chinese toys.

Thirdly, one of the most important factors affecting the Chinese toy industry is in regard to concerns about safety and quality standards and whether these can be met by Chinese toy producers (exporters). This is a major issue which can directly affect demand for Chinese toys. Many consumers, including American and Japanese consumers, may find substitutes of toys that are made in countries other than China (Bapuji & Beamish, 2008; Berman & Swani, 2010; Luo, 2008). The research finding clearly shows that toy exports to the U.S. experienced a dramatic decline amid the global recession, while exports to Japan experienced a slight rise in the research period. This suggests that the 'special safeguard' was the key factor that dragged down the value of Chinese toy exports to the U.S.

Besides the negative impacts revealed in the research results, the new protectionist measure of 'safety and quality concern' has negatively influenced the toy industry in others ways. The General Administration of Customs of China claimed that 49% of toy producers closed down (approximately 4,388 toy manufactures) due to the protective actions initiated by the U.S., such as the prevailing cases of 'toy recalls' and complaints about the poor safety and quality standard of Chinese toys since 2007 (Bapuji & Beamish, 2008; Berman & Swani, 2010; Xinhua-News, 2009a). The 'toy recalls' event caused many Chinese toymakers to lose their export licenses. An investigation of 3,000 Chinese toy manufacturers revealed that, around 750 toy manufacturers have been prohibited from exporting toys to overseas and 690 toy companies were compulsorily required to enhance processing efficiency and improve quality as well as proving quality and safety certification (Barton, 2007).

U.S. toy importers recalled a large number of Chinese toys amid the global recession and the U.S. government and institutions intend to impose more trade protective policies on Chinese-made toys (Feng, Keller, Wang, & Wang, 2010). At the meantime, other foreign countries might adopt similar or other forms of protectionist measures towards the toy industry in China. The American Society for Testing and Materials (ASTM) released several methods to test the safety standard of toy ingredients. The lead-paint problems and loose magnets fault seem to a warning signal for consumers, because in the later period, many countries like India and Australia banned importation of Chinese toys for a certain period. In addition, many countries implemented higher safety and quality standards of toys imported from China, for example the toy safety standard of '*EN71-4 Experimental Sets for Chemistry and Related Activities*' released by the E.U. in 2009 and the standard of 'ASTM F963 Standard Consumer Safety Specification on Toy Safety' released by the ASTM in 2008 <sup>15</sup>(Barboza & Lipton, 2007; International-Council-of-Toy-Industries, 2010). One of the potential risks faced by Chinese toy producers is the increasing costs for self-inspection fees. Some American toy importers started to require safety and quality inspection certificates before shipping to the host country. This would add to the total costs for making toys and some small-size toy producers have shut down as they were unable to afford higher costs. For instance, in 2009 a 'New Toy Safety Directive' was promulgated by the E.U. and will be enforced in July 2011. In this case, the average total costs of toy producers in Shandong Province are forecasted to go up 16% (European-Commission-Enterprise-and-Industry, 2009).

## **5.12 Implications for Toy Industry and Policies**

Both the Chinese toy industry and Chinese policymakers should take account of the safety and quality issue of Chinese-made toys so as to avoid foreign countries limiting their imports from China by using protective measures as excuses. Regaining foreign

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<sup>15</sup> More toy safety standards in the worldwide see [www.toy-icti.org/info/toysafetystandards.html](http://www.toy-icti.org/info/toysafetystandards.html)

consumer' confidence of Chinese toys and implementing a well prepared response-mechanism against global protective actions are crucial.

Firstly, Peng and Chen (2008) suggested that toy producers who received recalls and faced pressures from foreign and domestic markets have to use a 'proactive strategy' to deal with the problem rather than applying 'passive strategy' or 'defensive strategy'. This implies that these firms have to learn from the experience of the toy recalls and actively seek strategies for escaping from the protectionism. Meanwhile, they should establish a well prepared response-mechanism towards foreign protective measures enforced on Chinese toys.

Secondly, the Chinese government complained about the 'toy recalls' as a new form of trade protectionism, but toys made in China do have some safety and quality problems. Along with the living standards improvements and technology advances, consumers have higher requirements regarding to the standards of safety and quality issues of toys. As mentioned earlier, toy producers are facing increasing challenges from U.S. safety and quality control and inspection of Chinese toys. It is suggested that once a new inspection or testing method is introduced by the U.S., Chinese toy exporters must pay attention to test their products to see whether they qualify for the new program of inspection or not. Lately, the ASTM has approved a new testing method to determine lead-paint substance that enables 'lead quantification separately for the substrate and paint level in a five minute measurement cycle' (ASTM-International-News-Releases, 2010). In response, Chinese toy makers should track the development of international inspection methods so that they can launch self-inspection program to avert 'recalls'.

Thirdly, the Chinese government must deal with a poor surveillance management problem. Although the majority of 'toy recalls' in 2007 were caused by the design fault of toys manufactured outside China (Bapuji & Beamish, 2008), existing

literature indicates the phenomena of poor surveillance management of the safety and quality control over production and assembly processes in the toy industry (Feng, et al., 2010). Along with all the testing procedures policymakers should ensure transparency and China's quality watchdog must make all efforts to monitor the entire process and maintain the required safety and quality level of Chinese toys. In addition, all toy producers should monitor each other and report any ineligible producers to the surveillance departments.

Fourthly, research and development activities must be increased in the toy industry. To escape increasing global protectionist actions the structure of the toy industry needs to change. The Chinese toy industry needs to transform from labour-intensive and high-carbon intensive industry to high-technological and low-carbon industry in the long-term. It is recommended that toy makers could focus on technological innovation in producing low-carbon intensity toys like solar toys that contain nontoxic substances. This would not only enhance the competitive advantages of toy producers but also bring new business opportunities for the Chinese toy industry. Furthermore, according to the Chinese Toy Industry Report released in April 2010 (Zheng, 2010) toy makers should follow consumers' requirement to innovate new products. The Barbie doll created by Mattel Inc. is one successful example for Chinese toy producers (Zheng, 2010).

Lastly, one strategy to survive the rising protectionism for Chinese industries is to divert exported products to other emerging markets such as Brazil, India and Africa, although America is the largest importer of Chinese-made toys. This strategy could help these producers to avoid protective activities from counties such as the U.S. (Yue, 2009). For example, Tianjin Jinmao Group Ltd, the largest home equipment producers in China, successfully shifted its exporting destination to Mexico and Africa due to a large decrease of its exports to the U.S. and European markets in the recession period (Ding, 2009).

## **5.2 Chinese Tire Industry**

### **5.21 Impacts on Tire Industry**

The latest ‘tire war’ between China and the U.S. has enhanced their trade frictions and conflicts. Even though the data analysis above shows that the recent global recession has had a stronger negative impact on the Chinese tire industry than the impact from U.S. protectionist measures, the trade restrictive actions undertaken by the U.S. against Chinese passenger vehicle and light truck tires is still likely to have some negative impacts on the tire industry. These negative impacts cannot be ignored. There are two reasons for this. Firstly, China exports approximately 40% of the tires it produces, and one third of these exports are supplied to the U.S. market (Si, 2009). This indicates that the Chinese tire industry depends on overseas demand. Thus, the U.S. protective actions must impact on the tire industry to some extent. Secondly, the American ‘special safeguard’ provisions on ‘tires’ is designed to deal with the tire imports surge from China which threaten its domestic tire manufacturers (Choate, 2009). According to the Data K shown in Table 3, the market share of the U.S. in terms of the total Chinese tire exports declined gradually. The Chinese tire industry is shifting its export focus from the U.S. to other nations like the Middle East and South East Asia. Over time the impact from the U.S. trade protectionism on Chinese merchandises may decline as dependence on the U.S. is reduced. However, the U.S. market still accounts for a significant share of total exports from China.

Theoretically, the ‘tariffs on importing Chinese tires’ is a form of the new protectionism which can affect Chinese export values to the U.S. Another form of the protectionism is in regard to the quality and safety concerns with Chinese tires which were recalled by some U.S. firms like Foreign Tire Sales Inc. This concern has to be taken into account if the Chinese tire industry does not attach great importance to improve tires’ safety and quality, more and more trade restrictions from foreign nations are likely to be imposed. The negative impacts are also reflected in declining

employment in the tire industry. The China Daily reported in 2009 that the ‘tire case’ may affect 100,000 tire workers and jobs related to tire production. It is likely to bring almost \$1 billion aggregated loss to tire exporters in China (Fremlin, 2008; Si, 2009). Additionally, as some related-costs of tires went up, tire producers suffered even more. From January 2009 to February 2010, prices of raw rubber soared by 150% forcing tire prices to increase (Li, 2010a).

Furthermore, the E.U. has recently announced an extra import tariff as 22.3% on Chinese tires over the next five years (Miller, 2010). If other nations or organizations like the E.U. imitate the U.S. initiatives in terms of imposing import tariffs on Chinese tires, then the entire tire industry will face immeasurable difficulties, such as shrinking foreign demand and the closure of small-medium tire factories.

From the other perspective, the ‘tire case’ also directly affects American tire consumers who are keen on purchasing low-cost Chinese tires who will have to pay more for the tires after the U.S. raised import tariffs. The consumer replacement tire market accounts for two-third of the total tire demand in North America (Reade, 2010). The prices of Chinese-made tires went up at least 35% in 2010 after the first year ‘special safeguards’ 35% additional tariffs on Chinese tires. Some low-income households can only afford the lower cost Chinese tires for replacement rather than paying double or triple prices for tires made in the U.S. More seriously, some consumers may delay their purchases and extend the lifetime of tires they are using (Xinhua-News, 2009b). In addition, four out of twenty large tire producers in China are owned by U.S. firms. Michelin, Goodyear, Firestone and Cooper all have operations in China (Si, 2009). In this case, these U.S. manufacturers suffer higher costs of importing tires from their Chinese plants.

## 5.2.2. Implications for Tire Industry and Policies

To respond to the ‘special safeguard measures on Chinese tires’, China tried to send retaliatory messages against foreign protectionist actions and started to take further actions in order to protect domestic industries (Back & Ho, 2009). Some Chinese policymakers strongly opposed to the U.S. protectionism, such as Fan Rendd, the Chairmen of China Rubber Industry Association, claimed to keep fight against the U.S. protective measures (Si, 2009). Two days after the imposition of tariffs on Chinese tires by the Obama’s administration, the Chinese government responded in a number of ways. For example, China applied antidumping and anti-subsidy policies to limit imports of American poultry products. Meanwhile, China also put restrictions on imports of American automobiles and enforced additional tariffs on steel and pipe products imported from the U.S. (Morrison, 2009b; Yue, 2009). This has caused a chain reaction to distort trade relations between the two countries (Matlack, LeVine, & Sasseen, 2009). Chinese tire producers and exporters should consider counter-measures to offset the global protectionism.

Firstly, China should adjust the market structure of the tire industry and develop new foreign markets with lower level of trade barriers and high level of purchasing power. Nowadays, the tire industry is facing problems with excess production (Si, 2009). With the trade protectionist pressures from the U.S., foreign demand for Chinese tires decreased. Thus, China needs to find other distribution channels to absorb the excess production. Shandong Linglong, one of the top twenty tire producers in the world, relies on its ‘flexible marketing strategy’ and has successfully diverted sales from America to alternatives like the Middle East, Southeast Asia and Africa (Tyreexpress.com, 2010a, 2010b). In the ‘Research Report on Global Tire Industry 2010-2011’, Gen (2010) indicates that there is a huge demand for tires in India.

Secondly, the economic stimulus plan must be implemented by the Chinese government in order to exploit the potential of the home market. The enhancement of

internal demand relative to the overall GDP is necessary. For tire exporters, the importance of the domestic tire market cannot be neglected. The Chinese domestic market will be an alternative to absorb tire outputs. It is surprising to see that sales of Chinese tires are expected to grow by 10% in 2011. Accompanied by the economic resurgence of the world automobile market, the global demand for Chinese tires could increase by 3%. Domestic tire demand of China will be triple the global growth rate. Furthermore, American demand for cars is expected to pick up (China-Daily, 2010; Gomes, 2010). Chinese demand for automobiles is surging, automotive sales in China increased by 46% in 2009, and is expected to remain strong (Li, 2010b). As automotive sales rise, more tires can be absorbed by the domestic Chinese market. In summary, the tire industry should seize the growing opportunities in the Chinese market which will allow local tire manufacturers to gain more profits and survive the recent economic downturn, especially small-medium enterprises.

Last but not least, by facing ‘special safeguard imposed on tires’, Chinese tire producers should strengthen their competitive advantage in the international market and formulate effective strategies to counter the rising global protectionism. The situation is similar to the toy industry, Chinese tire production is labor-intensive with a relatively low level of competitiveness and low level of technology. Moreover, Chinese vehicle tires need to be upgraded to a higher quality level in response to a rapid changing global tire market. This would allow foreign consumers to increase their demand for Chinese tires. Therefore, tire producers should be motivated to innovate new higher technology tires and establish their own brands in China. Finally, the tire industry needs to obtain a higher level of competitive advantage among worldwide tire producers. A Korea-based global tire manufacturer Hankook, for example, concentrates on producing ‘green tires’ with the feature of green technology and supplying OEM tires. This company has generated an increase of 15% of net sales every year and become a strong competitor of Goodyear and Cooper. Hankook advanced technologies in reducing rolling resistance and ensuring tires comply with

environmental standards (Just-Auto, 2010).

## 6. Conclusions

This dissertation addresses existing literature of the global protectionism in terms of the recent bilateral trade relationship in China and the U.S. as well as discussing the likely impacts of the U.S. protectionist measures on China between particularly the toy and tire industries. The contribution of this dissertation is to suggest several strategies for these industries avoiding negative effects from the U.S. trade protectionism.

As illustrated in the literature review, some problems between the two countries slowed down the pace of development of their trading relations, including imbalance of trade, safety and quality concerns, and demands for RMB revaluation. These trading problems are interrelated. Since the U.S. enjoyed the large economic benefits gained from importing low-costs Chinese made merchandise, its trade deficit with China increased. To reduce the deficit, the U.S. government put pressure on the Chinese government to revalue the RMB. Meanwhile, rising concerns about safety and quality standards of Chinese goods is affecting Chinese exports to the U.S.

Along with the collapse of global trade, traditional trade protectionism has transformed to the new global protectionism in different forms, such as subsidies, interventionist industrial policy, safety and quality concerns and creation of national champions. Safety and quality concerns by the U.S. as a new form of protectionist measure aims to restrict Chinese products like toys and tires. Additionally, America imposed 'special safeguard' provisions on Chinese tire imports in 2009. In order to examine the global protectionist effects on the Chinese toy and tire industries an empirical research study was undertaken. The research used Japan as a third country

to make comparison of the protectionist impacts on the China's toy and tire industries between Japan and the U.S.

This empirical research offers two distinct results. The research data shows that as the export volume of Chinese toys to America fell dramatically, exports to Japan appeared to increase. Thus, the U.S. protective actions such as 'safety and quality concerns' and 'toy recalls' seem to have negatively impacted on China's toy industry. In contrast, the negative impact of protectionism on the tire industry is outweighed by the impacts of the recent global recession because tire exports to both Japan and the U.S. slumped during the recession period. The tire exports to the U.S. decreased due to the recession and the additional import tariffs. Even though Japan did not impose any trade restrictions on Chinese tires its tire imports fell because of the world economic recession. The reduction of tire imports from China in Japan and America seem to be largely due to falling car production in both countries. In summary, the impacts from the global protectionism on the China's tire industry do not appear to be as strong as the recessionary impacts.

In spite of the results shown from the empirical research, some other negative impacts from the U.S. protectionism on the two Chinese industries cannot be ignored such as American consumers concern with Chinese goods' quality and safety standards, increasing unemployment rate in the two industries, and excess production. The far-reaching impacts on China are ongoing. If the E.U. and India imitate the U.S. actions restricting Chinese-made products, the future impacts will be considerable.

Undoubtedly, the U.S. protectionist measures like 'special safeguards' and 'marketing disputation' excuses have impeded China-U.S. trade relations. Once the U.S. takes further protective actions against China, the Chinese government announced some retaliatory actions. The Chinese government should prioritise solving the quality issues and find ways to improve the safety standards of Chinese-made products. This

is the only way to avoid further negative impacts from increasing global protectionism in the long-term. The most important thing is to reconstruct the industry structure and solve the problems of ‘oversupply’. There are several options that the toy and tire industries can choose from. The first option is to increase sales in the domestic Chinese market through the economic stimulus plans initiated by the Chinese government for urging domestic consumption. The other option is to exploit other overseas markets in order to ease the economic dependency on the U.S.

China is looking forward to expand its international trade during the period of the economic recovery. To conquer the negative impacts from the global protectionist measures imposed by America, E.U. and other foreign countries, Chinese industries should reconstruct themselves from high labour-intensive industries to relatively lower labour-intensive and high technology involved industries. All in all, China should make itself stronger in knowledge, technology and skills that can sustain its international trade.

## **7. Limitations and Further Investigations**

This dissertation is subject to several limitations. Firstly, the selection of the two typical Chinese industries – toy and tire offers a certain limitation. Different forms of protectionist measures imposed on different Chinese industries and the impacts on those industries vary. This research study has focused on the toy and tire industries and the research shows two distinct results which have been discussed in the previous sections. In addition, as illustrated earlier in the literature review, the U.S. imposed extra quotas on textile products that can impact on the quantities of these Chinese products which would import to America (Jones, 2005; Morrison, 2009b). Thus, it would be difficult to draw a general conclusion of the U.S. protectionist impacts on all Chinese industries. Further research could undertake investigation on the impacts of

the U.S. protectionist actions on other industries such as textile industries and apparel industries.

This research study offers a tentative test by using Japan as the benchmark to make comparison of the protectionist impacts on the two industries. Japan is just one example of the countries who do not apply any protectionist measure against Chinese merchandises. Moreover, Japan plays a less important role in Chinese toy and tire exports relative to the U.S. In the case of the Chinese tire industry the research results suggest that the recessionary effect outweighed the protectionist effect, at least in the comparison between Japan and America. If a different comparison country was selected, the result may differ. To overcome this limitation, other scholars should conduct further research by using other countries as a benchmark to make comparisons, such as India.

Last but not least, the chosen research method limits the research data and narrows the scope of the data analysis. The direct testing method might offer clearer findings. Due to the lack of data in China the indirect testing method was chosen. The research results investigated by the indirect testing method may be different from the direct testing method. Other scholars should continue to undertake further research using the direct testing method once more data is all available in China.

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