國立政治大學亞太研究英語碩士學位學程 International Master's Program in Asia-Pacific Studies College of Social Sciences National Chengchi University

碩士論文 Master's Thesis

中國出口結構變化對中國與歐盟經濟關係的影響

政治

The Impact of the Change in China's Export Structure on the EU-China Economic Relations

Student: Marlène Dorsy Advisor: Alex Chiang

中華民國 103 年 06 月 June 2014

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Abstract

The economic relations between China and Europe have increased dramatically, especially since the 2000's. Although trade started slowly, the European Union has become China's number one trading partner, ahead of Japan and the US, since 2004 and China is now the EU's second largest trading partner after the US. This status of "partnership" is based on a great complementarity between the two sides, which enabled them to expand their trade continuously.

However, in the recent years, China's export structure has started to evolve and become increasingly technology-intensive. Indeed, its export structure is becoming quite similar to that of Europe, exporting traditionally Western EU products, such as capital goods and transportation equipment.

While some focused on the competition China represents for Europe, entering Europe's traditional export markets, this paper analyzes the impact of the change in China's export structure on the EU-China economic relations.

To do so, I first used a linear regression model to analyze the impact of the change in China's export structure on the EU-China economic relations and then performed a qualitative analysis, as well as, literature review to understand how these changes affect disputes and cooperation between the EU and China. I found that the change in China's export structure did not have any direct bad impact on the EU-China economic relations. However, it led to protectionism and disputes which were in part responsible for the deterioration of the EU-China economic relations.

Keywords: China, EU, export structure, economic relations

摘要

自 2000 年開始,中國和歐洲之間的經濟關係有顯著提升。在這期間儘管貿易緩慢地發展,對於中國來說,歐盟從 2004 年起取代了美國和日本的領先成為中國第一大的貿易夥伴,而中國對於歐洲來說目前是僅次於美國的第二大貿易對象。而夥伴關係的是基於兩方之間的貿易互補性,進而不斷地持續擴大。

然而最近幾年,中國的出口結構已朝向技術密集的層面發展,事實證明中國的出口結構和歐洲已有相當程度的類似,例如一些資本貨物和運輸設備。儘管部分的研究是針對歐洲和中國的貿易競爭性,此篇文章針對了歐洲和中國之間因出口結構改變所造成的影響。

為了分析出口結構所帶來的影響,首先透過線性回歸模型分析。再配合定性分析和文獻的輔助了解這些變化是如何影響到兩方之間的經濟合作和糾紛。

經過分析發現,中國出口結構的變化並不會對兩方的經濟貿易關係 有任何直接的不良影響,但卻導致了保護主義的開始、引發了部分 爭端,進而影響到兩方之間的經濟關係惡化。

關鍵字:中國、歐盟、出口結構、經濟關係

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1. Introduction

1.1 Background

China and the European Union attach a great importance to their economic relationship. Indeed, since their first trade agreement in 1978, their relations have improved continuously and reached comprehensive strategic partnership. Today, the EU is China's biggest trading partner and China is the EU's second one. Furthermore, their trade value topped the amount of €1 billion per day in 2012¹.

This economic partnership was mainly driven by a great complementarity between the two sides (Kong, 2012). However, China's economic structure has changed tremendously in the 2000s and has become increasingly specialized in the manufacture of high-tech products. This transition was reflected in its export structure which upgraded accordingly. In 1995, Chinese exports were dominated by labor and resource intensive goods which represented 36% of total exports, while high-skill and technology-intensive manufactures represented only 20%. In 2002, high-tech products overtook labor-intensive goods and in 2012, they reached 38% of total exports. On the other hand, labor-intensive goods dropped to 22%, under medium-skill and technology-intensive manufactures which reach 25%².

Furthermore, China used to export principally miscellaneous manufactured products, which stood for 36% of its total exports in 1995, followed by manufactured goods and machinery and transport equipment, both around 21%. However today, China's exports are largely dominated by machinery and transport equipment, with 47%, while miscellaneous manufactured products and manufactured goods are respectfully falling to 26% and 16% of total exports³.

Thus, China's export structure is growing similar to the EU's, which exports 30% of medium-skill and technology-intensive manufactures and 27% of high-skill and

¹ China. Retrieved March 8, 2014, from European Commission:

http://ec.europa.eu/trade/policy/countries-and-regions/countries/china/

² Data from UNCTAD http://unctadstat.unctad.org/ReportFolders/reportFolders.aspx

³ Ibid.

technology-intensive goods. Moreover, EU's exports are also dominated by machinery and transport equipment⁴.

On the other hand, the economic cooperation between the EU and China has also undergone important changes in the recent years. Indeed, despite a promising start marked by the upgrade of the 1978 agreement with the Trade and Economic Cooperation Agreement in 1985 and followed by numerous communications from the European Commission and one paper from the Chinese government (*A Long Term Policy for China EU Relations*, 1995; *Building a Comprehensive Partnership with China*, 1998; *EU Strategy Towards China: Implementation of the 1998 Communication and Future Steps for a more Effective EU Policy*, 2001; *A Maturing Partnership – Shared Interests and Challenges in EU-China Relations*, 2003; *China's EU Policy*, 2003), the relations started to cool down in 2006 due to the accumulation of disappointments from the two sides (Shambaugh, 2007; Andreosso - O' Callaghan & Nicolas, 2007; Fraser, 2009).

Many dialogues have been founded over the years, such as the EU-China Annual Summit in 1998, the sectoral dialogues in the late 1990s and early 2000s and the EU-China High Level Economic and Trade Dialogue in 2008, each aiming at solving disputes and improving cooperation between China and the EU. However, it seems that it is still not enough to resolve issues over Anti-Dumping measure, Intellectual Property Rights or Market Economy Status (Filippini, 2009; Tian, 2013).

As a consequence, competition between China and the EU is rising progressively and China is increasingly perceived as a threat to the EU (Benkovskis, Silgoner, Steiner, & Wörz, 2013). Hence, the way they handle this transition phase will be decisive for their future economic cooperation.

1.2 Motivations and Objectives

China and the EU are two of the three leading traders in the world⁵ which makes their economic relations one of the most important. Of course, the third one is the US and

⁴ Data from UNCTAD http://unctadstat.unctad.org/ReportFolders/reportFolders.aspx

the US-China economic relations surely deserve attention too. However, as Men (2007) explains, the Sino-US relations are already much more centered on competition than cooperation, which is a major difference with the Sino-EU relations. Nevertheless, things may be changing.

The objective of this thesis is to assess the impact of the change in China's export structure on the EU-China economic relations. Indeed, the increasing competition in the EU traditional markets has already been proven, but very little was said about consequences on trade and the economic relations between the EU and China (Andreosso - O' Callaghan & Nicolas, 2007; Holslag, 2007; Filippini, 2009; Benkovskis, Silgoner, Steiner, & Wörz, 2013). Yet, as their relations are mainly based on the economic aspect (Freman, 2006), a negative impact on trade could not only affect their economic relations and create more disputes, but also dampen their political relations and cooperation over security or environment issues.

However, we should remember that the impact is not necessarily negative. Both sides could manage to keep some complementarity and use this opportunity to strengthen their economic cooperation.

In either case, China's export structure is bound to be increasingly dominated by technology intensive products. Hence today's reactions from the EU and China will set the pace for their future relations. This thesis will analyze their reactions and see which road they are taking.

1.3 Research Question

As mentioned above, China and the EU's relationship is mainly based on their economic relations (Freman, 2006). Indeed, it is the prospect of mutual economic benefits which led to two sides to establish a strategic partnership. This cooperation could be threatened by the upheaval of their economic interests. However, it is unclear to which extent the upgrade of China's export structure is changing the situation.

⁵ http://www.wto.org/english/res e/statis e/its2013 e/its2013 e.pdf

So, how does the change in China's export structure affect its economic relations with the EU? One the one hand, do they manage to keep their complementarity or are they turning into competitors? On the other hand, are they strengthening their cooperation or intensifying their disputes?

1.4 Methodology

This study will be in part quantitative and in part qualitative. Firstly, we will use linear regressions to analyze the impact of China's upgrade on trade and investment in the EU. To measure the impact on trade, we will analyze the correlation between the variation in China's export structure to the world and the variation in EU-China trade. The independent variable will be the change in China's export structure to the world between 1995 and 2012, using data from UNCTAD classified by SITC main sectors. The dependent variables will be the change in imports and exports structure with the EU between 1995 and 2012, using data from Eurostat classified by SITC main sectors too.

Then, we will analyze the complementarity using descriptive statistics based on data from UNCTAD and Eurostat classified by SITC 3 digits, HS 4 digits and BEC, between 1995 and 2012.

Finally, to measure the impact on investments between the EU and China, we will analyze the correlation between the variation in China's export structure to the world and the variation in investments from the EU to China and China to the EU. The independent variable will be the change in China's export structure to the world between 2005 and 2011, using data from UNCTAD classified by SITC 3 digits. The dependent variables will be the change in FDI flow from China to EU and from EU to China between 2005 and 2011⁶, using data from Eurostat classified by NACE rev.1 until 2007 and NACE rev. 2 from 2008 to 2011⁷.

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⁶ Only data available on Eurostat

⁷ Data will be arranged at best to fit NACE rev. 2

The results will be displayed using scatterplots and r^2 will be calculated to analyze the strength of the association. For each case, EU-15 and the 12 new members from Central and Eastern Europe will be analyzed separately because of their different economic structures.

Secondly, we will use literature review to analyze the impact on cooperation and disputes between China and the EU. The literature review will be mainly based on reports from summits and dialogues provided by the EU and/or China, paper or articles from the European Commission and the Chinese Ministry of Commerce, newspaper articles and data from the World Trade Organization (WTO).



1.5 Chapters and Framework

The Chapters will be divided as follows:

Chapter I – Introduction Upgrade of the Chinese Background **Export Structure Research Question** Methodology Chapters and Framework Chapter II – Literature Review Trade and Investments between the EU and China Economic Cooperation between the EU and China Disputes between the EU and China Chapter III – Impact on Trade and Investment Trade Structure Investments and Impact on Trade Complementarity Impact on Complementarity Impact on Investments Chapter IV – Impact on Disputes and Cooperation Impact on Disputes Impact on Cooperation Disputes Cooperation

Chapter V – Concluding Remarks

2. Literature Review

2.1 Trade Theories

Many papers have been written on trade theories. The following authors provided significant contributions concerning inter- and intra-industry trade theories.

First, Samuelson (1948) tested an important trade theory, the Ohlin-Heckscher theorem, i.e. the factor price equalization. This theory states that prices in two different countries will be perfectly equalized if their factors of production can move freely between the two of them. Another assumption was that the free mobility of goods could be an alternative to the factors of production. However, according to Ohlin, in this case the equalization would be only partial. Nevertheless, Samuelson (1948) found out that "On the contrary, not only is the factor-price equalization possible and probable, but in a wide variety of circumstances it is inevitable" (p.169).

Then, Balassa (1966) and Grubel (1967) both focused on intra-industry trade (IIT). Balassa (1966) proved that intensifying trade in consumer goods between developed countries would not affect their home production since it was rather easy to modify and diversify the products. Thus, the author concluded that "trade among the industrial countries is characterized by intraindustry rather than interindustry specialization" (p.472). Grubel (1967) also explained why IIT happened and provided a theoretical model predicting its development.

Later, Krugman (1979) added researches on intra-industry trade and proved that "trade need not to be a result of international differences in technology or factor endowments.

Instead, trade may simply be a way of extending the market and allowing exploitation of scale economies" (p. 479).

Finally, Anderson (1979) and Bergstrand (1989) studied the gravity equation, which is an equation predicting trade between two countries according to their incomes and the distance between the two of them. Anderson (1979) first provided a theoretical foundation to the gravity equation. Bergstrand (1989) then presented a framework assimilating the equation into the factor-proportions theory.

2.2 Trade and Investments between the EU and China

As reflected by its export structure growing similar to advanced economies, China is increasingly competing with large industrialized countries. However, an important part of its exports are due to processing trade, similar export structure could also mean growing complementarity. Nevertheless, even if advanced countries can distinguish themselves with price and quality for now, emerging market economies, such as China, will be catching up quickly (International Monetary Fund, 2011).

Indeed, Amiti and Freund (2010) analyzed the remarkable change in China's export structure since 1992. They concluded that the sectors the most affected included machinery, especially telecoms, electrical machinery and office machines which soared considerably, and agriculture and apparel which shares on the contrary dropped. However, the authors also noted that China's growing specialization in more advanced industries is mainly the result of processing trade.

As highlighted by Nataraj and Tandon (2011), the change in China's manufacturing happened in the 2000s, when it switched from the 1990s specialization in labor-intensive goods such as footwear, textiles and toys, to the assembling of technology-intensive products. This change did not only result in a growth of China's export in technology-intensive goods, but also in increasing competitiveness in the manufacture of high-tech products between 2001 and 2006.

Moreover, Berger and Martin (2011) also focused on the main factors driving the growth of Chinese exports since the 2000s. They argued that the exchange rate only have a limited impact on export growth. However, they noted that the products growing the fastest were technology-intensive, including cell phones and laptops, and explained their expansion by Chinese industrial policy, development of the demand both in China and in the world, as well as a drop in US high-tech fixed investment. This growth of Chinese exports was not without consequences in industrialized countries which saw their manufacturing share decrease.

The EU is concerned by China's changing economy too. Indeed, Andreosso O' Callaghan and Nicolas (2007) noted an increase in intra-industry trade between the EU and China in some sectors, especially in Machinery and Transport Equipment, contrarily to the general trend which tended to decrease. They explained that the specialization would not be at the same stage at first, but China's quick catching-up could threaten the complementarity between the two sides.

On the other hand, Holslag (2007) argued that the economic complementarity between China and the EU had already started to weaken, as China turned towards EU's core sectors. According to the author, most of the EU member states can already feel the

pressure from China's rise. Moreover, China is also gradually catching up with Europe in research and development.

Filippini (2009) confirmed that EU exports to China and China's exports to the world are roughly the same, i.e. machinery and transport equipment, manufactured products and chemicals. However, Chinese exports to the EU are different and include textiles and clothing as well as manufactured goods and machinery.

The possible threat represented by China to the EU in terms of export competition was analyzed by Benkovskis, Silgoner, Steiner, and Wörz (2013). The authors showed that there was an increasing competition in capital goods and transport equipment. However, member states from Central, Eastern and Southeastern Europe (CESEE) seem to cope better than other members, having an increasing share of export in these sectors, while the shares are declining in the rest of the EU. In overall though, even if China is increasingly exporting in large EU countries' traditional market, there is only small "cut-throat competition" and these large countries are less affected than CESEE and small EU members.

Dettmer, Erixon, Freytag, and Legault Tremblay (2011) focused on comparative advantage and proved that China's comparative advantages in trade with the EU have evolved due to its specialization in technology-intensive products. Moreover, EU's comparative advantages alter faster with China than with the rest of the world.

Concerning investments, China became the first global recipient of direct investments in 2002. However, the number of EU projects to China is still relatively low compared to Japan or the US. Nevertheless, an interesting fact is that in terms of value, EU projects are similar to that of the latter's. The reason is that the EU is more open to

technology transfer to China and thus invests in high value-added, technology-intensive industries, such as automobile or telecommunications (Wai, 2009).

Hence, Zhang (2008) noted that China was mainly satisfied by the European investments. However, it does not hesitate to voice its dissatisfaction if needed, especially when it comes to the amount of technology transfer. On the European side, Chinese investments are low but increasing, particularly in Central and Eastern Europe where they are welcome to help closing the economic gap between Eastern and Western Europe.

Finally, Ash (2008) concentrated on the reasons driving FDI both in China and in the EU, and argued that European companies are not investing in China simply to cut the costs, but also to access Chinese market. Indeed, countries with low factor cost can be found in the EU itself, especially since the enlargements of the 2000s. The author showed that the EU members in Central and Eastern Europe are partly responsible for the EU relatively low rate of investment in China, stating that: "7.1 per cent of all EU FDI went to new Member States, compare to a mere 1.6 per cent to China" (p. 208). On the other hand, Chinese outward FDI are relatively low compared with inward FDI and investors tend to be less attracted by Western Europe than the North America because member states are too different from each other. Nevertheless, one of the major reasons for investment in Europe, except for facilitating knowledge transfer, is the acquirement of international brand names.

2.3 Economic Cooperation between the EU and China

China and the EU have many interests in common and many reasons to cooperate with each other. As Ash (2008) argued, China was first interested to have economic relations with the EU to balance the technological dependence it had with Japan and the US. On the EU side, they became growingly aware that relations with China were important both for their common foreign policy and economic future and competitiveness. The development of their economic relations was marked by the upgrading of its institutional framework. The sectoral dialogues, among others, became important means of coordinating trade relation, discussing sensitive issues and developing new projects.

Rees (2009) also argued that economic cooperation with Europe was important for China, as a source of technology. On the other hand, European members are all very attracted by the opportunity China represents and cannot afford to miss their chance.

Nowadays, new interests are also emerging. Indeed, Wong (2013) stated that China draws EU's attention not only because it is a huge market and the world's factory, but also because it is a holder of European Debts.

Furthermore, Freman (2006) argued that the most important part of the EU-China relationship was their economic relations. He asserted that the bases of the latter, from the European side, were mainly established by companies working in China, instead of politicians. However, today the Commission is responsible for formulating adequate responses to China's growth. The task is not an easy one though, as each member has different interests and industries at stake.

Nevertheless, except for the 16 months following the Tiananmen incident in June 1989, EU economic relations with China have been constantly improving. It started by the EC-China Trade Agreement in 1978, followed by a textile agreement in 1979 and the decrease of quantity restrictions on Chinese exports thanks to the Generalised System of Preferences (GSP). Then, the two sides became even closer in 1985 when they upgraded the 1978 agreement with the Trade and Economic Co-operation Agreement. In 2006, they started to discuss the revision of the later with a new Partnership and Co-operation Agreement (Andreosso - O' Callaghan & Nicolas, 2007). Fraser (2009) divided the relations between the EU and China into three main phases. First is the "Foundation" with two communications from the Commission in 1995 and 1998. The two papers ("A Long Term Policy for China EU Relations" and "Building a Comprehensive Partnership with China") aimed at consolidating their relationship and focused particularly on China's economic transformation, carefully avoiding sensible political issues. The second phase is the "Consolidation" with two other from the Commission: The 2001 "EU Strategy Towards China: Implementation of the 1998 Communication and Future Steps for a more Effective EU Policy" included notes on China's WTO accession and the 2003 "A Maturing Partnership - Shared Interests and Challenges in EU-China Relations" which was aimed at updating the two previous Commission's communications of 2001 and 1998. Then the third phase is "New Horizons" with the 2006 "EU-China: Closer Partners, Growing Responsibilities" assessing China's considerable growth and calling for further cooperation, notably through the Partnership and Cooperation Agreement (PCA), but also voicing some doubts concerning the ever growing trade imbalance. From the Chinese side, only one important paper has been issued in 2003. The "China's EU Policy" paper was rather positive concerning their economic relations

but also noted China's discontent about the market economy status or the antidumping measures.

Men (2012) confirmed that the 1995 Commission's paper "A Long Term Policy for China EU Relations" marked the beginning of a real engagement from the European side towards China. During the following 8 years, around 20 sectoral dialogues and agreements had already been created, and the relation between the two sides reached the status of strategic partnership. However, a few years later, China and the EU were disappointed by the development of the relations and the impossibility to solve issues such as the arms embargo, the European trade deficit or the market economy status. Today, these issues are still unsolved and affect the better development of the relations. The PCA is good example of the stagnating situation with negotiations progressing very slowly since 2007.

Nonetheless, Balme (2008) argued that these sectoral dialogues are essential to EU-China economic relations. Indeed, they favor the transfer of know-how and experience, not only from the EU to China but also the other way around, as in the case of nuclear energy. Furthermore, they help the implementation of policies in China and balance the negative impact of the numerous issues between the two sides.

Indeed, as Filippini (2009) explained, we cannot dissociate economics from politics, and the Tiananmen incident and following arms embargo are good examples of political issues disturbing their economic relations. These sectoral dialogues, ranging from agriculture to science or environment⁸, have been added to EU-China ordinary meetings to discuss these issues. In 2008, China added a new one, taking example on

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⁸ The full list is provided in Filippini 2009 p.29

its US-China Strategic Economic Dialogue to establish the EU-China High Level Economic and Trade Dialogue.

Another important dialogue founded earlier in 1998 is the EU-China Annual Summit. As Tian (2013) explained it aims at supporting the ever upgrading economic relations between China and the EU. These summits are the occasion for both sides to discuss about the evolution of trade cooperation and issues they may encounter.

Yet despite all these dialogues, Shambaugh (2007) argued that the 2006 European policy paper marked a change EU's change of attitude towards China. This change was the result of the accumulation of unsolved economic as well as political issues, such as trade barriers or human rights. Another fact affecting their economic relations was the change of leaders in the three major European countries, i.e. Germany, the UK and France.

Men (2007) also agreed that the honeymoon between the EU and China which lasted during 2003-2004 took another shape as soon as 2005. She argued that political divergences between the two sides were threatening EU-China relations and both sides would have to improve their cooperation to be able to cope with their conflicting interests.

Finally, Zhang (2012) argued that there were three important variables influencing China-EU economic relations: strategic foundations, reciprocity, and reasonable institutional arrangements. Thus, to improve their economic cooperation, they should strengthen their confidence in each other, see reciprocity in long term interests, instead of short term, and continue to promote dialogue between the two sides.

2.4 Disputes between the EU and China

The principal issues affecting trade between China and the EU are mainly due to the EU perceiving Chinese competition as unfair and its market as too protected. As a result, China is the first target of anti-dumping (AD) measures in the EU, with a number of cases increasing for electronics and mechanical products. Furthermore, China is accused to have too many entry barriers, such as high tariffs, non-tariff barriers, investment restrictions and lack of transparence in trade regulations (Andreosso - O' Callaghan & Nicolas, 2007).

Indeed, as Filippini (2009) explained, the main issues from the EU side are the non-tariffs barriers, the Intellectual Property Rights and the subsidies. Foreign products are under much more constraints, such as product certification or labeling standards, than Chinese goods. Furthermore, counterfeits of European goods are increasing and European companies suffer from unfair competitions with Chinese companies enjoying export subsidies. On the other hand, one of the Chinese most important complaints about the EU is the refusal to grant China the Market Economy Status (MES). Indeed, this status facilitates anti-dumping measures against China, which are seen by the latter as a tentative to hinder its development. However, this issue should be solved in 2016, as it was agreed that the MES would be granted to China 15 years after its accession to the WTO at the latest. Nevertheless, other problems are persisting, such as EU's tariffs and technical barriers or the arms embargo which started after the Tiananmen incident in 1989.

Concerning the Market Economy Status, Balme (2008) argued that the dispute was only symbolic. Indeed, without the MES, the EU can use prices of a third country

instead of the Chinese market as a reference to measure if Chinese exports prices are too low and thus launch anti-dumping investigations. However, the AD measures concern only a very small share of Chinese exports, hence resulting in limited losses for China. Nevertheless, the issue is still affecting EU-China economic relationship.

As for the Intellectual Property Rights, Wang (2004) stated that China's progress were significant. However, it is facing problems to enforce the intellectual property protection in such a big country and enforcement agencies proved to be rather ineffective. Furthermore, the piracy market has grown alongside with the Chinese economy, to the point that it became common for Chinese consumers to buy counterfeits. Finally, China crucially lacks judges and professionals to raise the awareness of the Chinese population concerning intellectual property.

Men (2012) explained that the EU was favorable to China's accession to the WTO because it hoped it would constrain China to suppress trade barriers and to enforce Intellectual Property Rights. However, improvements are too slow according to the EU which sees its trade deficit with China increase constantly. On the other hand, China argues that the EU is solely responsible for its trade deficit, imposing too many restrictions on EU exports to China, especially on products with high technology content, and refusing to give China the Market Economy Status.

Indeed, Zhang (2008) confirmed that it would be to the advantage of the EU and China to limit, rather than abuse of anti-dumping measures. Indeed, benefits brought to the consumers are more consequential than the disadvantages suffered by the manufacturers.

However, the EU is not the only one negatively reacting to China's rise. Möller (2006) stressed that the US and Europe reacted in a comparable way to the threat represented

by China's growth and its unfair competition. Nonetheless, the reaction of the EU tends to be more moderate than the US.

Time did not seem to improve the situation. Indeed, Tian (2013) argued that the crises in Europe generated a wave of protectionism, especially turned against China. The case of the dispute over solar panels, which represents a big part of Europe's exports, was seen an attempt to protect EU industry from losing export shares to China.

Furthermore, Men (2007) claimed that disputes between the EU and China are partly due to the fact that each side does not have sufficient knowledge about the other's market. Even more exchanges are necessary to cope with their increasing trade relations. Then, another fact affecting trade disputes between the EU and China is that Europeans have very divergent interests, not only inside the EU but also inside their own country. Indeed, manufacturers and retailers won't have the same opinion on Chinese imports. This lack of coherence makes it difficult for the Commission to come up with a common response to the disputes.

Holslag (2007) also explained that disputes with China were creating issues between the European countries, as EU members are diverse and do not have the same economic structure. Hence, Southern Western countries such as Spain or Italy are opposed to Northern countries and Germany. The latter, specialized in high-tech industries, are being increasingly reluctant to protect the former, still producing labor-intensive goods.

On the other hand, Kong (2012) argued that trade disputes between the EU and China happen because neither side is willing to make compromises. Thus, their cooperation is hindered by concerns over reciprocity and short-term gains.

Finally, Dreyer and Erixon (2008) stated that the many dialogues between the China and the EU seem to be rather ineffective to solve their problems. It remains to be seen if the new EU-China High Level Trade and Economic Dialogue, based on the US-China Strategic Economic Dialogue, will be more effective.

2.5 Other factors affecting the EU-China Economic Relations

The EU-China economic relations evolve in a complex environment, hence many factors, other than purely economic ones, can interfere and have an impact on the relations.

Indeed, as mentioned before, politics and economics are linked, thus politics is one of the factors affecting the EU-China economic relations. Brown and Crossick (2009) argued that issues over human rights and Chinese internal affairs, such as Tibet, are hampering economic relations between China and the EU. For example, in 2008 the meeting of French president Sarkozy with Dailai Lama led to the cancellation of the EU-China Summit and to the hindering of Chiese tourists traveling to Europe.

Moreover, Men (2013) explained that this was part of China's economic diplomacy, which became significant starting 2004. Indeed, as Europe's economy is stagnating, China is increasingly using business deals to turn the relations in its favor and avoid issues such as trade or environmental disputes and human rights. However, the author noticed that the use of economic diplomacy is relatively limited and only has an influence in the short term.

On the other hand, financial factors also enter into account. Indeed, Van der Geest (2007) stressed that the depreciation of the RMB in the 2000s enabled a boost of Chinese exports in the eurozone.

Nevertheless, the major financial factor influencing the EU-China relations is the financial crisis. Li (2009) argued that the financial crisis deeply affected the economic relations between EU and China, especially in terms of trade. Indeed, it became particularly clear in 2009, when trade between the two sides dropped by 20.9% compared to the same period in 2008. Chinese exports to the EU were the most affected with a decline of 24.5%, while EU exports to China decreased by 13.1%.

Finally, Sorroza (2011) also argued that the euro crisis, subsequent to the financial crisis, led to an increase of Chinese investments in Europe. Indeed, China can benefit from the situation in the eurozone and take the opportunity to gain influence in Europe and more power on global supply chains. Investments particularly soared in the Mediterranean region, which receives almost one third of China's investments in Europe.

3. Impact on Trade and Investments

China's change in export structure has raised some concerns, including the fear that it could have a negative impact for the EU. Indeed, as China's and the EU's export structure become similar some worry that the EU could lose its advantage in trading with China, hence hindering their economic relations.

3.1 Impact on Trade

3.1.1 Impact on Chinese Exports to the EU

In this part, we use a linear regression model to analyze the impact of China's change in export structure on China's exports to the EU, based on the following equation:

$$E(y) = \alpha + \beta x$$

The independent variable is the change in China's export structure to the world between 1995 and 2012, using data from UNCTAD, and the dependent variables is the change in China's exports structure to the EU during the same period, using data from Eurostat. The change (x_n) is a percentage of variation from *year* n data (X_n) compared to the 1995 data (X_{95}) (or 1999 for CESEE-12). It is calculated as follow:

$$x_n = (X_n/X_{95})-1^9$$
.

We will also use r^2 to analyze the strength of association, as well as a test of independence with the null hypothesis H_0 : $\beta = 0$ and alternative hypothesis H_α : $\beta \neq 0$. Accepting the null hypothesis means that the two variables are independent.

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⁹ See Appendixes 1 to 11

Table 1 Association Between the Change in China's Export Structure to the World and the Change in China's Export Structure to the EU

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	EU15		CESEE12			
	R2	t-value	P-value	R2	t-value	P-value
TOTAL	0,96	19,16	0,00***	0,97	17,83	0,00***
Sector 0	0,95	16,88	0,00***	0,88	8,78	0,00***
Sector 1	0,89	11,31	0,00***	0,85	7,85	0,00***
Sector 2	0,86	9,56	0,00***	0,78	6,32	0,00***
Sector 3	0,02	0,51	0,62	0,18	1,57	0,14
Sector 4	0,17	1,75	0,10*	0,94	13,11	0,00***
Sector 5	0,99	42,87	0,00***	0,97	17,50	0,00***
Sector 6	0,94	16,03	0,00***	0,94	12,68	0,00***
Sector 7	0,97	21,54	0,00***	0,96	16,04	0,00***
Sector 8	0,92	13,05	0,00***	0,89	9,25	0,00***
Sector 9	0,57	4,46	0,00***	0,24	1,85	0,09*

^{*, **, ***} indicates significance at the 90%, 95% and 99% level, respectively.

Impact on Exports to EU-15

The linear regressions revealed that there is a positive correlation between the change in China's export structure to the word and the change in China's export structure to the EU-15. We found a particularly strong association for 7 out of the 10 SITC main sectors – food and live animals; beverages and tobacco; crude materials, inedible, except fuels; chemicals and related products, n.e.s.; manufactured goods classified chiefly by material; machinery and transport equipment; manufactured articles – with r² ranging from 0.86 to 0.99. On the other hand, the correlation was particularly weak

0 - Food and live animals 1 - Beverages and tobacco 2 - Crude materials 600% 350% 250% 500% 400% 300% 200% 100% 300% Exports to EU-15 to EU-15 250% 150% 200% 150% 1009 100% 100% -0% 600% -100% 100% 200% 300% 0% 200% 400% -50% 0% 50% -100% 100% Exports to the World Exports to the World Exports to the World 4 - Animal and vegetables oils, 3 - Mineral fuels, lubricants 5 - Chemicals fats and waxes 300% 800% 700% 250% EU-15 600% Exports to EU-15 Exports to EU-15 600% 200% 500% 2 400% 150% 400% 300% -100% 2009 100% 0% 200% -200%,50% -100% -50% 0% 50% -500% 500% 1000% 1500% 400% 600% Exports to the World Exports to the World Exports to the World 7 - Machinery and transport 8 - Manufatured Articles 6 - Manufactured goods equipment 1200% 800% 2500% 700% 1000% \$1 600% 500% 9 400% ST 2000% 1500% 800% 600% 300% 1000% 400% 200% 200% 100% 0% -500% 500% 1000% 2000% 3000% 4000% 500% 1000% Exports to the World Exports to the World Exports to the World 9 - Other Total 700% 1200,00% 600% 500% 2 400% 800,00% 300% 200% 400.005 100% 40 -20000% 0% 200% 400% 600% 800% -200% 1000,00% 1500,00% Exports to the World Exports to the World

Figure 1 Correlation Between the Variation in China's Export Structure to the world and the Variation in China's Export Structure to the EU-15

Sources: Appendixes 1 to 11

for groups 3 and 4 – mineral fuels, lubricants and related materials; animal and vegetable oils, fats and waxes – which implies that Chinese exports from these groups to the EU-15 do not particularly follow the same track as Chinese exports to the world. This is confirmed by the P-value which is not significant for these sectors.

Nevertheless, on a general basis, Chinese exports to the world and to the EU-15 tend to evolve in the same way. Thus, the EU-15 is concerned by China's change in export structure.

Concerning Central and Eastern Europe, the results from the linear regressions are very close to the one found with Western Europe. The relation between the change in China's export structure to the world and the change in China's export structure with

2 - Crude materials 0 - Food and live animals 1 - Beverages and tobacco 250% 200% 160% 140% Exports to CESEE-12 150% Exports to CESEE-12 200% Experts to CESEE-12 120% 100% 150% 100% 80% 50% 100% 60% 0% 40% 100% 20% 0% 1009 0% 200% 400% 600% -100% 100% 200% 300% -150% Exports to the World Exports to the World Exports to the World 4 - Animal and vegetables oils, 3 - Mineral fuels, lubricants 5 - Chemicals fats and waxes 200% 600% Exports to CESE-15 400% 300% 200% 100% 150% Exports to CESEE-12 Exports to CESEE-12 600M 4000 4200% 200% -50% 50% -50% 046 -100% -200% Exports to the World Exports to the World Exports to the World 7 - Machinery and transport 6 - Manufactured goods 8 - Manufatured Articles equipment 1200% 500% 71 1000% 800% 800% 600% 400% 200% Exports to CESE-15 300% 200% 100% 2000% Exports to CESEE-12 1500% 1000% 500% 0% 0% 1000% 2000% 3000% 4000% 500% 1000% 500% 1000% Exports to the World Exports to the World Exports to the World 9 - Other 7000% 27 6000% 5000% 4000% 2000% 50 2000% 200% 400% 600% 800% Exports to the World

Figure 2 Correlation Between the Variation in China's Export Structure to the world and the Variation in China's Export Structure to CESEE-12

Sources: Appendixes 1 to 11

CESEE-12 is positive for all groups. The strength of association indicated by r^2 is slightly weaker than in the previous case, but the association is still strong enough for most groups. As for EU-15, groups 3 and 9 – mineral fuels, lubricants and related materials; commodities and transactions not classified elsewhere – show a weaker association with r^2 of respectively 0.18 and 0.24. Their P-value is also insignificant, which means that the changes in these sectors are independent from the change in China's export structure. However, there is a major difference for crude materials which got an r^2 of 0.94 and significant P-value.

Chinese exports to both Western and Eastern Europe evolve similarly to Chinese exports to the world. Hence, the change in China's global export structure also has an impact on its export structure to the EU. We will see in the following part the consequence on China's imports from the EU.

3.1.2 Impact on Chinese Imports from the EU

Following the first analyze on Chinese exports to the EU, we will now we use a linear regression model to examine the impact of China's change in export structure on its imports from the EU, based on the following equation: $E(y) = \alpha + \beta x$

The study is constructed in the same way: the independent variable is the change in China's export structure to the world between 1995 and 2012, using data from UNCTAD, and the dependent variables is the change in imports structure from the EU during the same period, using data from Eurostat. The change (x_n) is a percentage of variation from *year n* data (X_n) compared to the 1995 data (X_{95}) (or 1999 for CESEE-12). It is calculated as follow: $x_n = (X_n/X_{95}) - 1^{10}$.

We will also use r^2 to analyze the strength of association, as well as a test of independence with the null hypothesis H_0 : β =0 and alternative hypothesis H_α : $\beta\neq$ 0. Accepting the null hypothesis means that the two variables are independent.

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¹⁰ See Appendixes 1 to 111

Table 2 Association Between the Change in China's Export Structure to the World and the Change in China's Import Structure from the EU

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CHILLESE	1111111111111	

		EU15		CESEE12			
	R2	t-value	P-value	R2	t-value	P-value	
TOTAL	0,97	20,82	0,00***	0,93	11,86	0,00***	
Sector 0	0,89	11,09	0,00***	0,69	4,90	0,00***	
Sector 1	0,91	12,03	0,00***	0,90	9,85	0,00***	
Sector 2	0,96	18,63	0,00***	0,87	8,51	0,00***	
Sector 3	0,43	3,38	0,00***	0,56	3,73	0,00***	
Sector 4	0,56	4,33	0,00***	0,02	0,45	0,66	
Sector 5	0,96	19,11	0,00***	0,85	7,91	0,00***	
Sector 6	0,95	16,47	0,00***	0,80	6,57	0,00***	
Sector 7	0,96	17,96	0,00***	0,95	13,88	0,00***	
Sector 8	0,97	20,49	0,00***	0,91	10,36	0,00***	
Sector 9	0,53	4,13	0,00***	0,16	1,47	0,00***	

^{*, **, ***} indicates significance at the 90%, 95% and 99% level, respectively.

Impact on Imports from the EU-15

Once again, the results from the linear regressions show that for all SITC groups, as well as for the total, there is a positive correlation between China's change in export structure and China's change in import structure. Maybe more unexpected is that the same 7 groups as in the previous analyze – food and live animals; beverages and tobacco; crude materials, inedible, except fuels; chemicals and related products, n.e.s.; manufactured goods classified chiefly by material; machinery and transport equipment; manufactured articles – also have a very strong association with r² ranging from 0.89 to 0.97. Again, groups 3, 4 and 9 have weaker associations. Nevertheless, the test of independence rejected the null hypothesis for all the sectors.

0 - Food and live animals 1 - Beverages and tobacco 2 - Crude materials 600% 4000% 25000% from EU-15 Imports from EU-15 20000% from EU-15 3000% 400% 15000% 2000% 200% 10000% 5000% 600% 400% 100% 200% 300% 505600%.0% 50% 100% -200% Exports to the World Exports to the World Exports to the World 4 - Animal and vegetables 5 - Chemicals 3 - Mineral fuels, lubricants oils, fats and waxes 5000% 2000% 1500% 4000% 3000% 2000% Imports from EU-15 E 1000% 50% ports 0% 1000% 1500% 200% 400% 600% -500% 0% 500% -2001000% 0% Exports to the World Exports to the World Exports to the World 6 - Manufactured goods 7 - Machinery and transport 8 - Manufatured Articles equipment 1200% 2000% 800% EU-15 from EU-15 1500% 800% Imports from EU-15 600% from 1000% 400% Imports 500% 0% 1000% 2000% 3000% 4000% 1000% -500% 1000% 500% 0% 500% -200% Exports to the World Exports to the World Exports to the World **Total** 9 - Other 500% 800% \$ 400% 2 300% E 200% 100% 010 200% 400% 600% 800% Exports to the World

Figure 3 Correlation Between the Variation in China's Export Structure to the world and the Variation in China's Import Structure from EU-15

Sources: Appendixes 1 to 11

The results show that none of the imports from the EU-15 dropped because of China's increasing exports. Thus, imports from EU-15 to China not only do not suffer a bad influence from the change in China's export structure, but they also tend to increase accordingly.

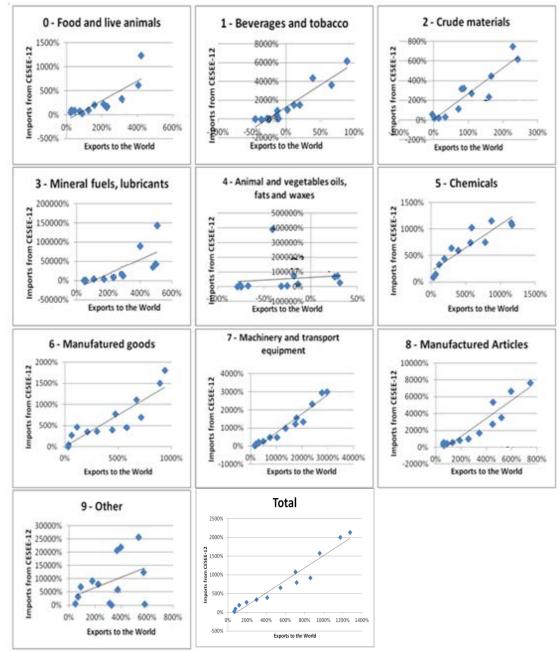


Figure 4 Correlation Between the Variation in China's Export Structure to the world and the Variation in China's Import Structure from CESEE-12

Sources: Appendixes 1 to 11

When we analyze the impact on imports from Eastern Europe, the results are again very similar to EU-15's results. All groups have positive correlations between the change in China's export structure and China's imports from CESEE-12, but once

more the associations are a bit weaker, r² ranging from 0.80 to 0.95 for groups 1, 2, 5, 6, 7 and 8. Furthermore, the P-value shows that the change in sector 4 and the change in China's export structure are independent.

Nevertheless, most of China's imports from CESEE-12 follow the increasing trend of its export structure. Thus, the EU's exports to China did not receive a bad impact from China's changing export structure and both parts seem to be developing their intraindustry trade.

3.1.3 Complementarity between the EU's and China's exports

Trade between developed countries is often characterized by intra-industry trade. As each country is specialized in the production of certain products in each industry, IIT does not necessarily bring problems.

Complementarity used to be one of the major pillars in the economic relations between the EU and China. In this paper, complementarity will be simply analyzed by comparing each side's export structure. The complementarity will be judged as good if both sides tend to mainly export different groups of products. On the contrary, it will be judged as limited, if they mainly export the same groups of products.

We will now see how EU's and China's structure of trade with each other has evolved since 1995 and if, despite the changes, they managed to keep some complementarity.

3.1.3.1 General trade structure

Trade with EU-15

First in 1995, almost three quarter of EU-15's exports to China were machinery and transport equipment. The two next sectors were manufactured goods and chemicals with respectively only 7.67% and 6.72%. On the other hand, China's exports to EU-15 were dominated by manufactured articles which represented half of its exports. Machinery and transport equipments and manufactured goods were also important with 24.09% and 12.97%.

EU15 to China - 2004 EU15 to China - 1995 EU15 to China - 2012 **2 s 1** 5 **=**7 **8** ■8 **8** China to EU15 - 1995 China to EU15 - 2004 China to EU15 - 2012 **=**1 **8**5 ■6 **=**7 =7 =8 118

Figure 5 EU15-China Trade Structure 1995-2012

Source: Eurostat

Then in 2004, EU-15's export to China had not changed a lot: machinery and transport equipment was still the most consequent sector with 63.95% and manufactured goods and chemicals rose to 12.08% and 9.14%. China's exports were also dominated by the same sectors, although machinery and transport equipment became the most important one, representing half of the exports.

Finally in 2012, machinery and transport equipment represented about half of the exports for both EU-15 and China. Manufactured goods were around 10% on both

sides too. The major differences were chemicals which represented 12.06% of EU-15's exports and only 4.52% of China's exports, and manufactured articles which stood for 31.5% of China's exports, compared to only 7.7% of EU-15's.

Trade with CESEE-12

In 1999, CESEE-12's exports were dominated by machinery and transport equipment, manufactured goods and crude materials, which represented respectively 41.23%, 23.48% and 21.62% of its exports. On the other hand, the share in machinery and transport equipment also stood for 41% of China's exports to CESEE-12, but the second exporting sector was manufactured articles with 34.94%.

CESEE12 to China - 1999 CESEE12 to China - 2004 CESEE12 to China - 2012 0% -2% -0% ■0 =1 **m** 1 **2 2 m** 2 **3 m**3 **m** 3 **1**4 **4 =**5 **s =**5 **m** 6 **■**6 **1** 7 **=**7 m 8 China to CESEE12 - 1999 China to CESEE12 - 2004 China to CESEE12 - 2012 **=**1 **1 m**2 **2 2** ■3 **m**3 ■3 =4 **4** =4 **m** 5 **s**5 **1**5 **16 17 m**7 m8 **8** 128

Figure 6 CESEE12-China Trade Structure 1999-2012

Source : Eurostat

In 2004, both sides increased the share of machinery and transport equipment, which reached 53.77% for CESEE-12 and 63.46% for China, and the share of manufactured goods did not change. For CESEE-12, the share of crude materials dropped to 6.52%. For China, the share manufactured articles dropped to 19.68%.

Finally in 2012, CESEE-12's and China's export structures were pretty close, even though manufactured articles represented only 7.56% of CESEE-12's exports, against

15.59% of China's exports, and manufactured goods stood for 20% of CESEE-12's exports compared to only 11.67% of China's exports.

To conclude, China's and the EU's export structures are getting closer and closer to each other. Nevertheless, each sector includes many products, with many different technology and skill levels. In the following parts, we will look at each sector more precisely – except sectors 3, 4 and 9 which did not show a strong results in part 2 and are not important exporting sectors – to observe the complementarity inside of each ¹¹.

3.1.3.2 Complementarity in Sectors 0 and 1: Food, live animals, beverage, tobacco

The combined share of the sectors 0 and 1, which includes food, live animals, beverage and tobacco, turns around 2-3% of both EU's and China's exports. As the share is pretty small, we will combine these two sectors together to analyze the complementarity between the EU and China.

Trade with EU-15

In 1995, China's export structure was very different from the EU-15's. Indeed, EU-15 exported almost exclusively cereals, whereas China's exports were much more diversified, including mainly edible vegetables, fish and crustaceans, and preparations of vegetables, fruits and nuts.

In the following years, China started to specialize in fish and crustaceans, which reached 34.02% in 2012. Nevertheless, its global export structure did not change too much, staying dominated by fish and crustaceans, preparations of vegetables, fruits and nuts, and edible vegetables.

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¹¹ Groups from HS 4 digits have been redistributed in the 10 major SITC sections to be able to analyze the technology and skill level in each section.

On the other hand, the share of cereals in the EU-15's export structure fell dramatically, from 80.71% in 1995 to 8.25% in 2012. Indeed, the structure started to diversify, but in different products than China. In 2012, EU-15's exports in SITC sectors 0 and 1 were dominated by beverages, spirits and vinegar with a share of 34.92%, followed by preparations of cereals, flour, starch or milk and meat.

Trade with CESEE-12

CESEE-12's export structure in sectors 0 and 1 is very different from that of EU-15, while China's export structures to both regions are very similar.

In 1999, half of CESEE-12's exports consisted of meat, followed by dairy, eggs and honey products, and edible vegetables. On the other hand, as explained before, China mainly exported fish and crustaceans and preparations of vegetables. Vegetables were only the fourth group, preceded by cereals.

Over the years, China's export structure changed a little. Indeed, it stayed dominated by fish and crustaceans and preparations of vegetables, but the share of cereals fell to nearly 0%. As for CESEE-12, the shares of meat and dairy, eggs and honey products decreased a little bit, but stayed the most important ones. However, vegetables were replaced by edible fruits and nuts.

To conclude, China's export structure in food, live animals, beverage and tobacco did not change too much from 1995 to 2012. Furthermore, although EU's exports structure undertook more variation, both sides kept a great complementarity over the year and tend to specialize in different products.

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3.1.3.3 Complementarity in Sector 2: Crude materials, inedible, and related materials

The sector 2 - crude materials, inedible, and related materials – is also a minor sector in both EU and China's export structure. Although it used to stand for 20% of CESEE-12's exports, it decreased to less than 10% in 2012. Its share is falling in China's exports too. Only EU-15 has an increasing share, but still very small.

Trade with EU-15

At first sight, we can see that China's exports and EU's exports are both very diversified. In 1995, EU-15 exported mainly man-made staple fibers, wool and fine or coarse animal hair, and copper. On the other hand, China's exports consisted mostly of products of animal origin, and fine or coarse animal hair, ores slag and ashes, and salt, sulphur, earth and stone, lime and cement.

Then, Eu-15's share of both man-made staple fibers and wool and fine or coarse animal hair fell to less than 1% in 2012. However the share of copper reached 37%, followed now by pulp of wood waste and scrap of paper. Concerning China, its structure stayed more or less the same: only the share of ores slag and ashes dropped from 15% in 1999 to 6% in 2012.

Trade with CESEE-12

Contrary to the trade between EU-15 and China, trade with CESEE-12 is much less diversified, especially in 1999. At that time, almost all of CESEE-12 exports were concentrated in copper, oil seeds and grains, and wood and articles of wood. China was also exporting oil seeds and grains, but much less than products of animal origin – which stood for almost half of the exports – and salt, sulphur, earth and stone, lime and cement.

Over the years, China's export structure started to diversify. The share of products of animal origin decreased to 23%. The share of oil seeds and grains and salt, sulphur, earth and stone, lime and cement decreased a little bit too, and other products such as silk and wool saw their share increase. However, CESEE-12's exports structure did not follow the same track at all as it became more and more dominated by copper which share reached 75% in 2012.

To conclude, EU's and China's exports structures in the sector of crude materials are evolving quite differently. Once again, both sides manage to keep their complementarity from 1995 to 2012.

3.1.3.4 Complementarity in Sector 5: Chemicals and related products

The sector of chemicals is the fourth most important sector for EU-15 and China, and the fifth one for CESEE-12.

Trade with EU-15

EU-15 and China seem to be a little less complementary when it comes to chemicals. Indeed, in 1995, organic chemicals represented half of the exports for both sides. Nevertheless, it was followed by pharmaceutical products and fertilizers for EU-15, and inorganic chemicals for China.

Then, in 2012, both EU-15 and China mainly exported organic chemicals, pharmaceutical products, inorganic chemicals and tanning or dying extract. However, the repartition was not exactly the same for organic chemicals and pharmaceutical products. Indeed, the share of organic chemicals stayed more or less the same for China, but decreased by almost half for EU-15, while the share of pharmaceuticals reached 45% for EU-15, against only 10.5% for China.

Trade with CESEE-12

The complementarity is also limited in the trade between CESEE-12 and China. Indeed, in 1999, both sides mainly exported organic chemicals too. As its neighbor, CESEE-12 was also exporting pharmaceutical products, whereas China's second exporting group was explosive, matches and pyrotechnic products.

In 2012, exports are still dominated by organic chemicals, even though the share dropped by 20% for CESEE-12. Its share of pharmaceutical products stayed about the same and both fertilizer and inorganic chemicals rose to around 10%. On the other hand, China's share of organic chemicals did not move, but the share of explosive decreased and gave way to oils and resinoids, perfumery, cosmetic and toilet preparations.

To conclude, the complementarity in the sector of chemicals is more limited as both sides tend to export the same products.

3.1.3.5 Complementarity in Sector 6: Manufactured goods classified chiefly by material

The sector of manufactured goods is one of the most important exporting sectors, especially for CESEE-12 and China. It includes a lot of product groups which give rise to very diversify export structures – except for CESEE-12.

Trade with EU-15

As mentioned above, EU-15 and China both have very diversified export structures from 1995 to 2012. Indeed, in 1995, EU-15 mainly exported articles of iron or steel, iron and steel, paper and paperboard. On the other hand, China also exported articles

of iron or steel, but with a smaller share – 11% against 29%. It mainly exported articles of leather, saddler and harness, travel goods, handbags and articles of gut.

Fifteen years later, both the EU-15 and China had become even more diversified. Indeed, in 2012, EU-15's share of articles of iron or steel and iron and steel both decreased, while the share of copper and pearls and stones increased. As for China, its share of articles of leather also dropped and the shares of many other small groups increased slightly, such as made-up textile articles or rubbers.

Trade with CESEE-12

Surprisingly, CESEE-12's export structure is a lot less diversified than EU-15 and China. Indeed, in 1999, copper accounted for almost 70% of CESEE-12's export. On the other hand, China's exports were dominated by articles of leather, tools, spoons and forks of base metal, and articles of iron or steel.

In 2012, CESEE-12 share of copper is more or less the same. China's export structure has become even more diversified with only articles of iron or steel having a share higher than 10%.

To conclude, the EU and China are globally complementary when it comes to manufactured goods. Indeed, they tend to specialize in different products over the years. Only articles of iron or steel seem to be favored by all sides.

3.1.3.6 Complementarity in Sector 7: Machinery and transport equipment

The sector of machinery and transport equipment is the most sensible one as it has always been EU's most important sector and has now become China's biggest exporting sector too.

Trade with EU-15

In 1995, EU-15 and China were almost the exact opposite with nuclear reactors, boilers, machinery and mechanical appliances, and computers standing for 57% of EU-15's exports and 35% of China's exports, and electrical machinery and telecommunication equipments accounting for 29% of EU-15's exports and 63% of China's exports.

In 2012, the export share of nuclear reactors, boilers, machinery and mechanical appliances, and computers for both EU-15 and China were around 40%. EU-15's export share of electrical machinery and telecommunication equipments decreased a little bit and the share of vehicles other than railway or tramway reached 33%. On the other hand, China's export share of electrical machinery and telecommunication equipments also decreased, but still stood for 50%.

Trade with CESEE-12

In 1999, CESEE-12's exports were dominated by vehicles other than railway or tramway and nuclear reactors, boilers, machinery and mechanical appliances, and computers, which together accounted for about 85%. On the other hand, China's exports were divided between nuclear reactors, boilers, machinery and mechanical appliances, and computers and electrical machinery and telecommunication equipments.

In 2012, there has been very little change in both sides: the share of electrical machinery and telecommunication equipments became slightly more important in CESEE-12's exports, and the share of nuclear reactors, boilers, machinery and mechanical appliances, and computers became slightly less important than electrical machinery and telecommunication equipments.

To conclude, the complementarity in machinery and transport equipment is very limited, although the Chinese share of vehicles other railway and tramway is very small for now.

3.1.3.7 Complementarity in Sector 8: Manufactured articles

The share of manufactured articles is the second most important in China's exports, although it is decreasing. On the other hand, the share is slowly increasing in the EU.

Trade with EU-15

In 1995, China's export structure was much more diversified than EU-15's. Indeed, the EU-15 exported 67% of optical and photographic instruments and the shares of all other groups were smaller than 6%. Concerning China, it was mainly exporting toys, games and sports equipment, articles of apparel and clothing accessories (not knitted) and articles of leather.

In the following years, EU-15's share in optical and photographic instruments decreased a little, however it did not seem to particularly specialize in any other group. On the other hand, China's exports became even more diversified, as the share of articles of leather and toys, games and sports equipment, articles of apparel and clothing accessories (not knitted) both decreased slightly, and the share of furniture and articles of apparel and clothing accessories (knitted or crocheted) both rose a little.

Trade with CESEE-12

In 1999, CESEE-12's export structure was more diversified than EU-15. Indeed, its exports were also dominated by optical and photographic instruments, but with only

27%, followed by articles of apparel and clothing accessories (not knitted) and vehicles other than railway and tramway. As for China, its export structure was also very diversified, exporting mainly toys, games and sports equipment, footwear and articles of apparel and clothing accessories (knitted or not).

Over the years, CESEE-12 became more specialized, especially in optical and photographic instruments and furniture, which together accounted for about 70% of CESEE's exports in 2012. On the contrary, China became even more diversified with an increasing share of furniture.

To conclude, there is some complementarity between the EU and China concerning manufactured articles, since both parts of the EU tend to specialize in some precise products, while China tends to export a little bit of everything.

Generally speaking, China and the EU managed to keep their complementarity over the years, even if it is more limited in sectors 5 and 7. Thus, the change in China's export structure does not seem to have a very strong impact.

Products requiring different technology and skill level can be found in the same sector and even in the same product group. We will now look at their complementarity in terms of technology and skill level.

3.1.3.8 Complementarity by technology and skill level

Only the sectors from 5 to 8 include products classified by their technology and skill level ¹². Indeed, the other sectors mainly include mineral fuels, non-fuel primary commodities or unclassified products. Unfortunately, almost all the products in sector 5 are classified high-skill and technology intensive. Thus, it is impossible to analyze the complementarity between the EU and China in this sector.

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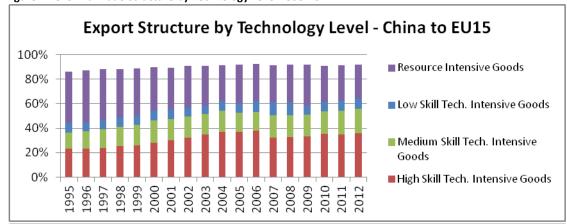
¹² According to UNCTAD: http://www.unctad.info/en/Trade-Analysis-Branch/Data-And-Statistics/Other-Databases/

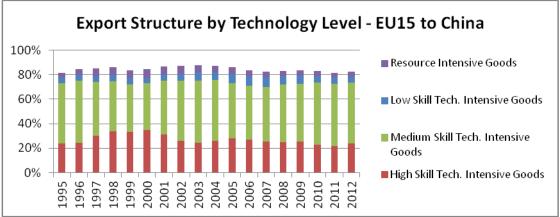
Total Exports

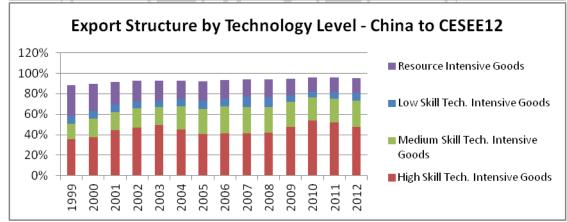
First, when we look at their total exports, we can see that about 50% of EU's exports (both EU-15 and CESEE-12) consist in medium-skill technology intensive manufactures. For EU-15, the second most important share is high-skill technology intensive manufactures which represents about 25% of its total exports. The shares almost did not change from 1995 to 2012. For CESEE-12, the second most important share is also high-skill technology intensive manufactures, but with only 15%. Concerning China, its export structure is bit different whether it trades with EU-15 or CESEE-12. With EU-15, the share of resource intensive products decreased from 42% in 1995 to 28% in 2012, and the share of high-skill technology intensive manufactures increased from 23% to 35%. With CESEE-12, the share of high-skill technology intensive manufactures is even more important: it rose from 36% in 1999 to 48% in 2012. On contrary, the share of resource intensive products was halved in thirteen years and now only account for 15%.

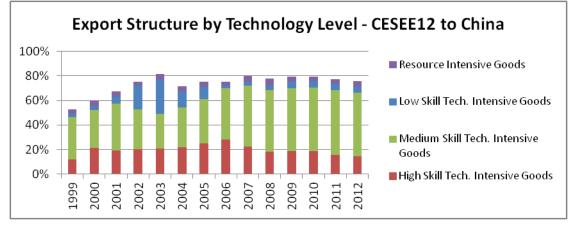
Hence, we can see that globally there is a technological complementarity between the EU and China, as the EU exports mainly medium-skill technology intensive manufactures and China exports more resource intensive and high-skill technology intensive manufactures.

Figure 7 EU-China Trade Structure by Technology Level 1995-2012









Source: Eurostat

In this sector, there isn't any high-skill technology intensive products, so the EU-15 and China both divide their exports between resource intensive and low-skill technology intensive products – the export share of medium-skill technology intensive manufactures being very small for everyone.

The Chinese export structure is almost the same while trading with EU-15 or CESEE-12. In both cases, resource intensive and low-skill technology intensive products have similar shares, although the share of low-skill technology intensive manufactures is slightly increasing over the years.

Concerning EU-15, the share of low-skill technology intensive manufactures is higher than the share of resource intensive products. Nevertheless, both of them tend to be decreasing.

CESEE-12's export structure is different. Indeed, the share of low-skill technology intensive manufactures topped the 50% between 2002 and 2004, but fell to 16% in 2012. However, the shares of resource intensive and medium-skill technology intensive manufactures are even smaller, with respectively 10% and 7%.

In this sector, the technological complementarity seems to be quite limited. However, the EU and China tend to specialize in different products, so the technological level should not be an issue.

Sector 7: Machinery and transport equipment

Contrary to the previous sector, the product complementarity is already limited in machinery and transport equipment. Hence, it would be better for the EU and China to differentiate themselves technologically.

In this sector once again, China's export structure is very similar when trading with EU-15 and CESEE-12. Indeed, in each case and from 1995 to 2012, the share of high-skill technology intensive manufactures is about 60% and the share of medium-skill technology intensive products is about 35%.

Both regions of the EU also have very close export structures, with a share of high-skill technology intensive manufactures around 15% and a share of medium-skill technology intensive products around 80%.

Hence, there is a pretty good technological complementarity between the EU and China, as China mainly exports high-skill goods and the EU mainly exports medium-skill goods. The results can be surprising as one could have expected the contrary. However, because of processing trade, parts of the products could have been produced abroad and only assembled in China. The statistics do not reflect China's production.

Sector 8: Manufactured articles

This sector reflects particularly well the difference of technology level between the EU and China. Indeed, with both EU-15 and CESEE-12, China's export structure is clearly dominated by resource intensive products. The share is slightly lower when trading with CESEE-12 and the share of high-skill technology intensive manufactures is slightly higher, but the difference is irrelevant.

On the other hand, EU-15 is the perfect opposite, with an export structure largely dominated by high-skill technology intensive manufactures.

CESEE-12 is more divided with a share of resource intensive goods standing for 40% of its exports in 2012, and a share of high-skill technology intensive manufactures accounting for 43%.

In this case, EU-15 and China have a better complementarity than CESEE-12 and China. Nevertheless, when we look at all the sectors, the EU and China generally tend to focus on different technology level.

Futhermore, processing trade is also taking an important place in international trade today, especially for China, and could influence the level of technology in one country's exports. Although complicated to analyze, in the next section we will try to understand the importance of consumer goods and capital goods in both sides' total exports.

3.1.3.9 Processing trade

As Eurostat does not differentiate capital goods from parts and accessories¹³, we will examine the share of goods intended to the consumers and the share intended to the production – i.e. capital goods including parts and accessories.

In 1995, the difference between EU-15's and China's export structure was pretty clear. Indeed, EU-15 mainly exported capital goods to China and imported consumer goods. This kind of structure could be a sign of processing trade, since the EU would export the parts to China and import the final goods once assembled. However, both EU's export share of capital good and China's export share of consumer goods have dropped by 20%. Furthermore, China's share of capital goods reached 43% in 2012. Thus, the importance of processing trade between the two sides is now unclear. One of the reasons could be that it is less direct than before and parts of goods are now produced in many different countries before being assembled.

Concerning CESEE-12, the export share of capital goods is slowly increasing, but only turns around 30%. The share of consumer good is really small too. On the contrary, China used to export about 40% of consumer goods to CESEE-12; however the share fell to 17% in 2012. Furthermore, its share of capital good is increasing and tops 60%. Such a big share might be explained by the fact that Eastern Europe also has a relatively cheap labor.

To conclude, it is difficult to assess the role of processing trade today, even though it is probably more important between EU-15 and China than between CESEE-12 and

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¹³ International trade classified by BEC

China. Nevertheless, it seems that in the future China's consumer goods won't represent a big part of EU-China trade anymore.

3.2 Impact on investments

Foreign investments are important in economic relations; however it was unclear if they could be affected by trade. In this part, we will look at investments between the EU and China and try to analyze if China's change in export structure had an impact on them.

Thus, as in the previous part, we use a linear regression model based on the following equation : $E(y) = \alpha + \beta x$

China's export structure to the world between 2005 and 2011 is used as independent variable, using data from UNCTAD, and the dependent variable is the change in the value of investments between the EU and China during the same period, using data from Eurostat. The change (x_n) is a percentage of variation from *year* n data (X_n) compared to the 2005 data (X_{05}) . It is calculated as follow: $x_n = (X_n/X_{05})-1$

We also use r^2 to analyze the strength of association, as well as a test of independence with the null hypothesis H_0 : β =0 and alternative hypothesis H_α : β ≠0. Accepting the null hypothesis means that the two variables are independent.

Table 3 Association Between the Change in China's Export Structure to the World and the Change in Chinese Investments in the EU

investments in the 20	Chine	Chinese investments in EU15			Chinese investments in CESEE12		
	R2	t-value	P-value	R2	t-value	P-value	
Total	0,00	0,11	0,92	0,42	1,70	0,17	
Agriculture, forestry and fishing	0,30	-1,14	0,34	0,58	2,34	0,08*	
Mining and quarrying	0,02	0,31	0,77	-	-	-	
Manufacture of food products; beverages and tobacco products	0,20	0,99	0,38	0,00	0,03	0,98	
Manufacture of textiles and wearing apparel	0,80	2,86	0,1*	0,35	-1,04	0,41	
Manufacture of wood, paper, printing and reproduction	0,23	-1,08	0,34	0,04	0,42	0,70	
Manufacture of petroleum, chemical, pharmaceutical, rubber and plastic products	0,01	0,19	70,86	0,14	-0,81	0,46	
Manufacture of basis metals and fabricated metal products, except machinery and equipment	0,04	-0,42	0,69	0,11	-0,70	0,52	
Manufacture of computer, electronic and optical products	0,00	0,03	0,98	0,01	-0,21	0,85	
Manufacture of machinery and equipment n.e.c.	0,05	0,45	0,68	0,49	-1,71	0,19	
Manufacture of motor vehicles, trailers, semitrailers and of other transport equipment	0,00	o,06 Chen	0,95	0,01	0,18	0,87	

Table 4 Association Between the Change in China's Export Structure to the World and the Change in European Investments in China

mvestments in Cima	Investments from EU15			Investments from CESEE12			
	R2	t-value	P-value	R2	t-value	P-value	
Total	0,45	1,81	0,14	0,35	1,46	0,22	
Agriculture, forestry and fishing	1	-	-	-	-	-	
Mining and quarrying	0,04	0,41	0,70	-	-	-	
Manufacture of food products; beverages and tobacco products	0,00	0,03	0,98	0,14	-0,82	0,46	
Manufacture of textiles and wearing apparel	0,18	-0,93	0,40	-	-	-	
Manufacture of wood, paper, printing and reproduction	0,42	1,72	0,16	0,11	-0,71	0,52	
Manufacture of petroleum, chemical, pharmaceutical, rubber and plastic products	0,01	-0,16	0,88	0,19	0,85	0,46	
Manufacture of basis metals and fabricated metal products, except machinery and equipment	0,74	3,38	0,03**	0,05	0,44	0,68	
Manufacture of computer, electronic and optical products	0,03	0,36	0,74	0,33	-1,21	0,31	
Manufacture of machinery and equipment n.e.c.	0,24	1,14	0,32	0,10	0,59	0,60	
Manufacture of motor vehicles, trailers, semitrailers and of other transport equipment	0,02	-0,29	0,79	0,18	-0,80	0,48	

^{*, **, ***} indicates significance at the 90%, 95% and 99% level, respectively.

The results of the linear regressions were not significant as only one r² topped 0.8 and P-values are insignificant for most of the variables. Indeed, the data available were not enough to really prove an association between trade and investments. However, the results found with the present data tend to show that there is no correlation between the two of them. Thus, investments are probably not affected by China's change in export structure.

Nevertheless, EU-15 seems to be mainly investing in the sector it exports the most such as transport equipment, chemicals or machinery and equipment. China's

investment in EU-15 in 2011 was also investing in exporting sectors such as offices machinery and computers or machinery and equipment. In 2011, CESEE-12 also mainly invested in transport equipment and chemicals.

Concluding Remarks

China's change in export structure could seem threatening for the EU, however no negative impact has been found on trade and investment between the EU and China.

Of course China's export structure to the EU is changing accordingly with its export structure to the world, but it did not have a bad influence on EU's exports. On the contrary, China and the EU tend to develop the same sectors and EU's exports to China did not slow down because of this change.

Then the threat could be to the complementarity. Indeed, by increasing intra-industry trade, there is a risk of exporting the same products. However, once again China and the EU manage to keep their complementarity in most of the sectors. Only the sectors of chemicals and related products, and machinery and transport equipments have a limited complementarity. Nevertheless, the share of chemicals is decreasing in China's export structure, so it is not a particularly important sector for China. Concerning the sector of machinery and transport equipment, they have another kind of complementarity as the EU mainly exports medium-skill technology intensive products while China mainly exports high-skill technology intensive manufactures.

Finally, investments did not seem to be affected by the change in China's export structure either. Hence, for now this change does not seem to be an actual threat to the trade between the EU and China. However, people and governments might think otherwise and have negative reactions.

4. Impact on Disputes and Cooperation

The EU-China economic relations have been marked by many disputes and issues during the 2000s, which were not without consequences on the two partners' cooperation (Shambaugh, 2007; Men J., The EU and China: mismatched partners?, 2012). These issues appeared for many different reasons, but the change in China's export structure is often seen as a threat emphasizing the tensions. In this part, we will see how the EU and China reacted to this situation and how their disputes and cooperation evolved.

4.1 Impact on Disputes

As explained earlier, the change in China's export structure is far from being the only issue affecting their economic relations. However, as the situation is unlikely to reverse, trade disputes could seriously affect and worsen the EU-China economic relations if they are not handled correctly.

One way to solve a trade dispute is through the World Trade Organization (WTO). Nevertheless, some trade disagreements can be solved by countries themselves: this is the case with dumping. Yet, anti-dumping measures can be controversial as the limit between restoring fair competition and protectionism is thin. The dumping disputes can eventually end up in the WTO if the country affected by the measures disagrees.

4.1.1 WTO dispute cases between the EU and China

One of the major roles of the World Trade Organization is the settlement of trade disputes between its members through the Dispute Settlement Body. These disputes usually happen when a member is blamed by another one to be failing to fulfill its

obligations or to respect the WTO agreements. Third parties can also take part if they have an interest in the dispute (WTO, 2014).

The dispute settlement system is divided in two main stages. The first stage is called consultation. This is a phase of discussion where each side tries to reach a consensus. After 60 days, if no solution has been found, they move on to the second phase which is the panel. The panel is constituted of 3 to 5 experts, chosen if possible in agreement with the disputing members. They have three months to hear and give their final conclusion which is binding and can only be rejected by appeal or consensus of the Dispute Settlement Body (WTO, 2014).

Since China entered the WTO in 2001, the EU resorted to the WTO seven times to solve disputes with China, against only three times for China¹⁴. This difference can be in part explained by the fact that, due to its culture, China primarily tries to avoid disputes and confrontations. Hence, it took a few years to the latter to accept and resort to the WTO system (Li, 2012).

On the ten disputes listed at the WTO, only two concern the sector of machinery and transport equipment¹⁵. This is the first exporting sector for both the EU and China and it was affected during the first and the seventh disputes.

Indeed, the first WTO case between the two partners happened in 2006 and concerned the tariffs of imported auto parts. Usually, China charged a 25% tariff for finished vehicles and 10% for spare parts. However, the latter increased if more than 60% of a car was composed of imported spare parts. According to China, this measure aimed at avoiding whole vehicles to be imported as spare parts. But the EU, as well as the US and Canada, argued that such tariffs created unfair competition and pushed foreign companies to relocate in China (China Appeals WTO Auto Parts Decision, 2008). The request for consultation was made by the EU in March 2006 and the final report from the Appeal Body eventually ruled in its favor (WTO, 2009).

The seventh case happened recently in 2011. Indeed, in early 2011 China implemented a five-year AD duty ranging from 33.5% to 71.8% on European X-Ray equipments (China's anti-dumping measures on EU X-ray scanner inconsistent with

http://www.wto.org/english/tratop_e/dispu_e/dispu_by_country_e.htm lbid.

rules: WTO panel, 2013). This measure, which was affecting 70 million euro of exports per year, was also seen as a Chinese reprisal for EU AD duties on cargo scanners the year before (Disputes Roundup: Trade Remedies in the Spotlight in Geneva, Brussels, 2013). The consultation began in July 2011 and the panel ruled mainly in favor of the EU in February 2013 (WTO, 2014).

On the other hand, four cases concerned the sector of manufactured goods, which is only the third exporting sector for the EU and for China. Nevertheless, three of them affect articles of steel which are important for both sides.

It started with China's first case against the EU. In the end of 2008, the EU decided to implement anti-dumping duties on iron and steel fasteners from China. These duties varied from 26.5% to 85% according to Chinese companies, and did not concern Chinese subsidiaries established in Europe (EU duties on Chinese industrial fasteners ruled illegal by WTO, but damage already done, 2012). This decision, which was judged unfair by Chinese manufacturers, was the result of a drop by 5% of European producers' market share between 2007 and 2004 – from 22% to 17% - while Chinese companies' market share increased by 9% - from 17% to 26%. Thus, the EU established a five-year tariff to rectify what they believed to be an unfair competition (Freedman, 2009). In July 2009, China turned to the WTO and made a request for consultation. The discussions did not succeed and the WTO finally ruled against the EU as the European and Chinese fasteners, which can be found in cars and furniture among others, proved to be on a very different level on the value chain (EU duties on Chinese industrial fasteners ruled illegal by WTO, but damage already done, 2012; WTO, 2013).

One year later, it is the EU's turn to file a request for consultation against Chinese provisional anti-dumping duties on certain iron and steel fasteners from the European Union (WTO, 2010). This Chinese AD measure was seen by many as retaliation to the EU's AD duties against Chinese imports. Furthermore, the EU declared that the duties, ranging from 6.1% to 26%, was affecting 140 million euro of exports per year to China (China slaps final anti-dumping duties on EU steel fasteners, 2010).

Then, in the end of 2012, China blamed the EU to be dumping the "HP-SSST" ¹⁶ in the Chinese market and thus implemented a five-year AD duty on these products (China to properly handle steel tube dispute with EU, 2013). These tubes, which can be found in superheaters and boilers in power stations, have been affected since November 2012 by duties ranging from 9.7% to 11.1%, leading the European exports to fall from ⊕0 million to €20 million. According to John Clancy, the EU Trade Spokesman, this could once again be a reprisal from a dispute concerning Chinese steel imports (European Commission, 2013). The request for consultation was made in June 2013 and the dispute has now reached the second stage, waiting for the panel's judgment (WTO, 2013).

The last case concerning the sector of manufactured goods is related to a case which happened a few years earlier and affected different raw materials from SITC sectors 2, 3 and 6¹⁷. Indeed, the Chinese soil is rich in some of the raw materials which are necessary for producing a multitude of goods, including high-tech products such as cell phones, wind turbine, electric cars components, etc (EU, US, Japan request WTO panel over China rare earth dispute, 2012).

At first, the dispute particularly involved the export prices of bauxite, coke, fluorspar, magnesium, manganese, silicon carbide, silicon metal, yellow phosphorus and zinc, which were twice higher than domestic prices (WTO, 2013; Moffett & Palmer, 2012). The request for consultation was made in June 2009. Even though, China claimed the measure to be for environmental and health protection, the WTO ruled in favor of the EU in January 2012 (WTO, 2013).

Then, a second request for consultation was filled in March 2012 concerning 17 rare earths, tungsten and molybdenum. In March 2014, the panel agreed that the export restrictions were unfair, but recognized China's need for environmental protection (WTO rules China's export measures on rare earth inconsistent with rules, 2014).

Concerning the three remaining cases, two of them concern the service sector and the last one involves footwear, which belongs to SITC 8 miscellaneous manufactured articles. This sector used to represent half of China's exports and in 2012 it still stood for 30%. Furthermore, footwear is one of the principal products of this sector and

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¹⁶ High-Performance Stainless Steel Seamless Tubes

¹⁷ Crude materials, mineral fuels and manufactured goods

troubles about Chinese footwear imports in the EU are not something new. Indeed, the anti-dumping measure was first established in 2006 to protect European manufacturers – especially Spanish and Italian – from the cheap Chinese imports (Luo, 2011). Yet, it was Europe's decision to extend this measure in 2008 which triggered the dispute. The decision was quite controversial as it was first rejected, until Germany, Austria and Malta changed their mind, and was also strongly opposed by European retailers (Anderlini & Chaffin, 2010). After the Chinese request for consultation in 2010, the panel ruled in favor of China in October 2011 (WTO, 2012).

To conclude, the EU uses more easily the WTO dispute settlement system to solve its disagreements with China than the contrary. However, this could not be the case for long as China is now starting to play by the same rules. Moreover, disputes do not necessarily concern products from the biggest exporting sector, but generally concern products with high competition between the two sides. Nevertheless, many other issues are not taken to the WTO.

4.1.2 Dumping and Anti-Dumping

As the EU explains: "A company is dumping if it is exporting a product to the EU at prices lower than the normal value of the product (the domestic prices of the product or the cost of production) on its own domestic market" 18. The anti-dumping measure thus aims at recovering a fair competition.

The use of dumping and anti-dumping (AD) is relatively new and became particularly popular during the last century. It occurs when the foreign market is more competitive than the home market and the lower prices still enable the producers to make some profit (Liu, 2005).

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¹⁸ http://ec.europa.eu/trade/policy/accessing-markets/trade-defence/actions-against-imports-into-the-eu/anti-dumping/index_en.htm

China is the country the most affected by EU anti-dumping investigations and measures (Liu, 2005). Between 1995 and 2013, 135 anti-dumping and anti-subsidy investigations were launched by the EU against Chinese imports. On the 135 investigations, only 10 were repealed and 68 measures are still active. The number of investigations started each year has been particularly high since 2004, with an average of 9 investigations a year, compared to 5 between 1995 and 2003. Of course, as the director-general of the WTO, Pascal Lamy, explains: the number of disputes increases as trade expends (Finance And Economics: When partners attack; Settling trade disputes, 2010). Hence, the rise of EU investigations is consistent with its increasing economic exchanges with China.

However, as Chinese exports to the EU mainly increased in the sector of machinery and transport equipment, one could expect EU AD measures to target particularly this sector. Nevertheless, as we can see in Figure 8, the number of investigations launched against imports from the sector 6 – manufactured goods classified chiefly by material – are more than twice higher than the number of investigations concerning the sector 7 of machinery and transport equipment. Indeed, the latter is only the third target after the sector of chemicals – SITC 5.

The results can be surprising since the share of exports of Chinese manufactured goods stayed more or less the same, varying between 11% and 15%, and the share of chemicals stayed around 4%, whereas the share of machinery and transport equipment soared from 24% to 50% ¹⁹.

¹⁹ Data from Eurostat

European Investigations against China Number of investigations 200A 2005 2006 Beginning of the investigations

Figure 8 European AD/Subsidy Investigations against China 1995-2013

Source: http://ec.europa.eu/trade/policy/accessing-markets/trade-defence/actions-against-imports-into-the-eu/anti-dumping/index_en.htm

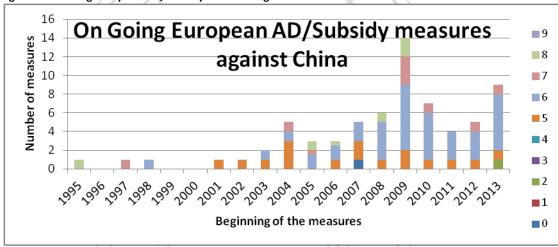


Figure 9 On Going European AD/Subsidy measures against China 1995-2013

Source: http://ec.europa.eu/trade/policy/accessing-markets/trade-defence/actions-against-imports-into-the-eu/anti-dumping/index_en.htm

These results are even clearer when we look at Figure 9 showing the number of ongoing measures. Indeed, 36 of the 68 EU anti-dumping measures are affecting manufactured goods, compared to 16 for the chemicals and only 8 for machinery and transport equipment.

Compared to the EU, China started later to use anti-dumping measures. Indeed, AD duties were not necessary before China's entry in the WTO in 2001 and the subsequent suppression of its trade barriers (Kennedy, 2005). Nevertheless, it does not resort to AD measures against European imports as often as the EU does. Indeed, China has only 21 on-going AD measures against EU products²⁰.

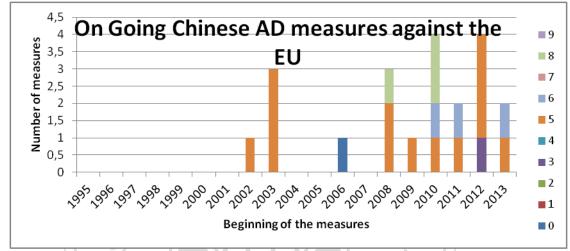


Figure 10 On Going AD Measures against the EU 1995-2013

Source: http://ec.europa.eu/trade/policy/accessing-markets/trade-defence/actions-against-imports-into-the-eu/anti-dumping/index_en.htm

As we can see in Figure 10, the Chinese AD measures are more numerous from 2008 on, but as only the active measures are represented, some may have been implemented earlier and be already terminated. The measures especially target the sector of chemicals, with 13 measures out of 21. Yet, as explained earlier, the fifth sector is not an important sector for China. On the other hand, EU's exports share to China in this sector in increasing but slowly. EU's biggest export sector to China is also machinery and transport equipment. However, the seventh sector is not affected by any AD measures.

Anti-dumping measures between the EU and China do not seem to be affected by the general change in China's export structure to the EU. However, they can be the result of a lack of complementarity, as it is the case in the sector of chemicals, or an especially high competition in certain products, such as articles of iron or steel. Indeed,

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²⁰ http://trade.ec.europa.eu/actions-against-eu-exporters/cases/index.cfm

the latter belongs to the sector of manufactured goods and is often the subject of investigations²¹. Nevertheless, many other products from this sector do not especially represent a big or increasing share of exports for the EU or China²². Hence, some other factors can enter into account in the rising of tensions.

4.1.3 People's Opinion

Issues between trading partners can also be increased if the population of a country perceives the other country as an economic threat. Indeed, when imported products are considered as a menace for their own economy, people react negatively to these products, hence intensifying tensions (Sharma, Shimp, & Shin, 1995).

When we look at the European people's perception of China, we can see that the EU-China economic relations are certainly not helped by Europeans' opinion of China. Indeed, between 2005 and 2013, the percentage of people having a favorable opinion of China generally decreased ²³. The average of Western Europeans ²⁴ thinking positively of China dropped from 50.6% to 38.8%. In 2013, the percentage is particularly low in Italy and Germany with 28%. On the other hand, Greece has a remarkably high favorable percentage with 59%. Concerning Eastern Europe, the percentage of positive opinion stayed around 35% from 2007 to 2013 in Czech Republic and rose from 37% ²⁵ to 43% in Poland. Moreover, the percentage of Chinese people having a positive opinion of the EU also decreased from 40% to 37% from 2007 and 2013 ²⁶.

Furthermore, the perception of China having a bad economic influence on Europe was also important in 2007²⁷. Indeed, in average 47.8% of Western Europeans²⁸ believed China's economic growth had a bad influence on their country, against 39.1% of

²³ http://www.pewglobal.org/database/indicator/24/group/3/

²¹ http://trade.ec.europa.eu/doclib/docs/2006/december/tradoc_113191.05.2014.xls

²² Eurostat

²⁴ The average includes Britain, France, Germany, Italy and Spain since other countries did not have enough data. Data of 2005 was unavailable for Italy and was replaced by 2007.

²⁵ In 2005.

²⁶ http://www.pewglobal.org/database/indicator/28/country/45/

²⁷ http://www.pewglobal.org/2007/06/27/chapter-3-views-of-china-and-its-increasing-influence/

²⁸ Including Britain, France, Sweden, Germany, Spain and Italy.

favorable opinion. The negative opinion especially increased for Britain and Germany between 2005 and 2007, from 31% to 41% and from 38% to 55% respectively. On the other hand, Sweden and Italy are the perfect examples of China's unequal economic influence in Europe. Indeed, Italy still has some low-end industries and 65% of its population thought China had a bad economic influence, against only 19%. Sweden is the entire contrary, it is specialized in high-end industries and 65% of its population thought China had a positive influence, against only 18%. On the other hand, Eastern Europeans²⁹ had a slightly lower percentage of negative influence with 43.75%, but the percentage of positive influence was also a little lower with 37.5%.

Nevertheless, the percentage of European people considering China as a partner generally increased between 2008 and 2013³⁰. Although this percentage is still pretty low with 24.25%³¹ in 2013, it is higher than the percentage of people perceiving China as an enemy – 13%. Italy is the only exception with only 12% of its population seeing China as a partner, against 39% perceiving it as a enemy.

To conclude, China's change in export structure certainly created some fears in the European population and especially in the countries producing lower-end products. In consequence, these fears partly influence Europeans' perception of China in a negative way which probably creates even more tensions between the EU and China. However, there are still some hopes of improvement as many European countries seem to have been increasingly considering China as a partner in the last few years.

Chengchi V

Concluding Remarks

The increase of disputes is a natural consequence of intensifying economic exchanges. Nevertheless, the EU is much more aggressive than China, both in its use of the WTO dispute settlement system and of anti-dumping measures. The latter is particularly sensible as China is the EU's biggest target and this overuse of AD measures can be

²⁹ Including Slovakia, Bulgaria, Poland and Czech Republic.

 $^{30}\ http://www.pewglobal.org/database/indicator/64/group/3/response/Enemy/$

³¹ Including Britain, Czech Republic, France, Germany, Greece, Italy, Poland and Spain.

interpreted as protectionism. Finally, tensions can also be exacerbated by European people who increasingly see China as an economic threat.

4.2 Impact on Cooperation

Since 1985 and the signature of the EEC-China Trade and Economic Cooperation Agreement, the EU and China have always striven to improve their cooperation (Andreosso - O' Callaghan & Nicolas, 2007). Yet, many issues have come to disturb them, especially since 2005 (Men J. , 2007). We will now see the EU-China cooperation structure and way of functioning, and see how it handled the changing situation and subsequent issues.

4.2.1 EU-China Cooperation Structure

As we can see in Figure 11, the EU-China Cooperation Structure is composed of three pillars topped by the EU-China Summit. The first pillar is the Political Dialogue, the second and most developed one is the Economic and Sectoral Dialogue, and the third one is the People-to-People Dialogue. We will pay more attention to the second dialogue as it is the engine for economic cooperation. This pillar is subdivided in three levels: the sectoral dialogues, the Joint Committee and the High Level Economic and Trade Dialogue.

The Sectoral Dialogues

The sectoral dialogues are the first level of economic cooperation between the EU and China. Every year, they give a report to the higher level, the Joint Committee, which will eventually be transmitted to the EU-China Summit (Information Note).

Figure 11 EU-China Cooperation Structure

			EU-China	Dialogue	Archited	cture –	main el	ements*	
			Pra	esidents of the	SUMMIT ANNUAL European Co		ommission		
	I Pillar	Political Dialogue		I I		nomic and Sec			III Pillar - People-to-People Dialogue
High Level Strategic Dialogue (Annual) High Representative for Foreign Affairs and Security Policy			EC Vice-Pres		conomic and Tr Annual	High Level People-to-People Dialogue (Biannual) Commissioner for Education, Culture, Multilingualism and Youth			
Regular contacts between Foreign Affairs/	een HRVP and Chinese Defenoe Minister	Political Directors Dialogue (annual)	Meetings between Chinese Foreign Affairs Minister and EU HoMs Chinese Foreign Affairs Minister and EU HoMs		Jont Committee MinistariaV Senior Officials Meeting (Annual)				Policy Dialogue on Higher Education and Dialogue on Training Affairs on Dialogue on Multingualism Affairs Affairs
Meetings of EUSRs and Special Envoys	Political Dialogue on Africa (COAFR Dialogue)	Political Dialogue on Latin America	Political Dialogue on Asia	Joint Customs Cooperation Committee (JCCC)	Macroeconomic Dialogue	Trade and Investment Policy Dialogue (TIPD)	Consultation mechanism on Industrial products and WTO/TBT	Dialogue and Consultation Mechanism on Industrial Sectors	
Security and Defence Dialogue	Dialogue on Non Proliferation and Disamament	Taskforce on Cyber Issues	Human Rights Dialogue	Economic and Trade Working Group (ETWG)	Dialogue/WG on Intellectual Property Rights	Economic and Financial Dialogue	Competition Policy Dialogue	Working Group on Best Practices in Trade Defence Instruments	Euro Area Troika (Chair of Eurogroup, ECB and Commissioner for Economic and Monetary Affairs) China Dialogue Pillar 2
	Disarmament	it		Working Group on Market Economy Status	EU-China Joint Customs Cooperation Committee Steering Group	Joint Follow-Up Group on Drug Precursors	High-level Transport Dialogue Subdialogues include:	EU-China Space Technology Cooperation	With Ministry of Finance, NDRC, People's Bank of China (Minister, Governor)
				Innovation Cooperation Dialogue	Science and Technology Steering Committee	Nuclear Energy cooperation Steering Committee	- EU-China Maritime Transport Agreement Implementation	Information and Communications Technologies Research Dialogue	
European Parliament All 3 Pillars			Dialogue on Information Technology, Telecommunications and Informatisation	Dialogue on Energy (including HLME)	EU-China Declaration en Energy Security /Working group	Meeting; - Dialogue (not formalised) on Aviation Relations; - Urban Mobility Dialogue	Dialogue on Electricity Markets	European Economic and Social Committee Pillars 2 & 3	
Deleg	ation for Relations	with the People's Repu	blic of China	EU-China Climate Change Partnership and BCM on Climate Change	Environment Policy Dialogue	Dialogue on International Trade in Endangered Species	China-Europe Water Platform Dialogue/W G	Bilateral Cooperation Mechanism on Forests	
				EU-China Urbanisation Partnership	Dialogue on Agriculture	High Level Dialogue on an Integrated Approach to Ocean Management	Dialogue on Fisheries	Regional Policy Dialogue	EESC-China Economic and Social Council Roundtable
				High Level Dialogue on Migration and Mobility	China Dialogue on Labour, Employment and Social Affairs	at Work	Dialogue on Health	Dialogue on Employment and Social Policies	
				Dialogue on Product Safety	Consultation and Cooperation Mechanism on Health and Safety of Consumers	Memorandum of Understanding concerning Animal Health Co- operation	EU-China Working Group on Pharmaceuticals	Dialogue on Sustainable Tourism	
							Other exchanges (not a regular dialogue):	Disaster Risk Management Project	
ource: European Ext	ernal Action Service					-	-	-	October 20

They are globally referred to as sectoral dialogues, but they can also be called "regular exchanges" or "co-operation", according to the area concerned. In practice, they can take the form of working groups, conferences, formal or informal meetings, and engage different participants from officials and politicians to private companies (An overview of the sectoral dialogues between China and the EU).

These dialogues are essential to strengthen and expand the economic relations between the EU and China. Their number increased faster after China joined the WTO in 2001, and particularly during the second half of the 2000s. The sectoral dialogues now cover more than 50 areas (Information Note) and their establishment echoes the growing EU-China economic relations. Hence, a large amount has been created during the last few years (An overview of the sectoral dialogues between China and the EU).

Finally, the EU particularly stresses the share of the European experience, know-how and the "EU model and practices" concerning economic reforms (An overview of the sectoral dialogues between China and the EU). Nevertheless, Balme (2008) reminds us that the sectoral dialogues also benefit the EU in terms of know-how, as in the case of nuclear energy, as well as in issues settlement.

EU-China Joint Committee

The EU-China Joint Committee is the second level of the economic cooperation between the EU and China. It was created by the EEC-China Trade and Economic Cooperation Agreement in 1985 and was assigned five major tasks:

- "- to monitor and examine the functioning of the Agreement;
 - to examine any questions that may arise in the implementation of the Agreement;
 - to examine issues that might hinder cooperation;
 - to examine new means and possibilities of developing trade and economic cooperation;
 - to make recommendations for achieving the objectives of the Agreement." 32

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³²http://europa.eu/legislation_summaries/external_relations/relations_with_third_countries/asia/r14206_en.htm

It was also agreed that the Joint Committee would meet once a year and be held and led by the EU and China alternatively (EEC-China Trade and Economic Cooperation Agreement, 2007).

The EU-China High Level Economic and Trade Dialogue

The EU-China High Level Economic and Trade Dialogue is the third and highest level of the pillar of economic cooperation between the EU and China. It is also a recent one since it first met in 2008. This new dialogue was proposed by China and was inspired by the US-China Strategic Economic Dialogue (Filippini, 2009).

The High Level Economic and Trade Dialogue was established during the 2007 EU-China summit. According to the subsequent joint communique, the tasks of the dialogue were to: "discuss strategies in EU-China trade, investment and economic cooperation and coordinate bilateral projects, studies and develop plans in priority sectors. It will cover issues affecting the trade imbalance, including inter alia effective market access, intellectual property rights, environment, high technology and energy in order to find concrete means to increase trade in a balanced way"33. Nevertheless, no meeting was held in 2011 and 2012 (China). Chengchi Universit

The EU-China Summit

The highest level of cooperation between the EU and China is the EU-China Summit which includes economic, political and social dialogues.

The summit has been held once a year since 1998 – except for 2008 and 2011 which were postponed to the following year (EU-China relations in times of crisis, 2011). It gives both sides the opportunity to exchange on their relations, cooperation and issues (Tian, 2013).

33 http://www.consilium.europa.eu/uedocs/cms data/docs/pressdata/en/er/97355.pdf

The participants are "the Chinese Prime Minister and other relevant Ministers and, for the EU, [...] the President of the Council of Ministers, the President of the European Commission and the High Representative for Common Foreign and Security Policy, as well as other relevant Ministers and European Commissioners" (EU-China Summits).

4.2.2 Evolution of the EU-China Relations through Summit Joint Communiqués

As explained earlier, the EU-China summit enables the EU and China to make an assessment concerning the evolution of their relations, discuss about issues and strengthen their cooperation. This summit is important as it join together all the reports from the lower levels, from the sectoral dialogues to the High Level Economic and Trade Dialogue, for the Economic Cooperation Pillar.

Since 2001, a joint communiqué is published after every meeting, summing up the different points discussed during the summit. Although very formal, they also reflect the atmosphere between the two sides.

We will now look at every EU-China Summit joint communiqué from 2001 to 2012 to try to understand the evolution of their view concerning their trade during that period.

Between 2001 and 2003, the same expressions were used to describe their trade. The expression is globally positive, even though it already refers to trade issues:

"Leaders welcomed the continued growth in EU-China trade and the rising levels of direct investment by EU companies in China. They discussed the issue of the EU trade deficit with China and agreed that it was important to exert further efforts to expand EU-China trade and, in the process, improve the balance of trade. They also discussed trade issues such as anti-dumping and quantitative restrictions. Leaders indicated that the two sides would handle these issues in accordance with WTO rules in view of accession and agreed that they would consult on these issues as appropriate."

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³⁴ http://europa.eu/rapid/press-release_PRES-01-312_en.htm?locale=en

In 2004, the assessment warmed up a little as trade increased between the two sides and EU became China's first trading partner:

"Both sides welcomed the dynamism of their trade relations, best illustrated by the EU becoming China's largest trading partner and China becoming the EU's second largest trading partner in 2004. [...] They reiterated their commitment to maximize mutual benefits of such relation by improving market access and increasing investment opportunities for both sides." ³⁵

However, in 2005, the tone already started to become colder. Indeed, 2005 is often described as the end of the EU-China honeymoon (Men, 2007) and it is reflected in the joint communiqué. At that time, the issues started to accumulate, notably the EU trade deficit vis-à-vis China:

"The two sides agreed to further strengthen mutual cooperation and sectoral dialogues to deepen and broaden trade and investment flows, which should take place in a balanced and mutually beneficial way." ³⁶

The following year did not improve their views on trade as most of the trade issues between the EU and China stayed unsolved:

"Both sides underlined the importance of dialogue and cooperation to solve bilateral trade issues with due regard to their international rights and obligations" ³⁷

In 2007, the assessment is a bit more positive, although it feels like their hearts are not in it. Indeed, whereas they used words as "welcome" in 2004 or "express their satisfaction" when it comes to cooperation, here they only used "recalled" and "emphasized", which means that they noted the evolution but did not express any satisfaction about it. Moreover, the trade deficit was still an issue:

"Leaders of China and the EU recalled the deepening and expanding economic cooperation and trade between the two sides, and emphasized that China and the EU are becoming each other's most important economic and trade partners thanks to efforts by both sides over the past 10 years, and that bilateral economic cooperation and trade had become one of the most important driving forces behind further strengthening of the China-EU comprehensive

 $http://www.consilium.europa.eu/ueDocs/cms_Data/docs/pressData/en/er/72250.pdf$

http://www.consilium.europa.eu/ueDocs/cms_Data/docs/pressData/en/er/77802.pdf

³⁵ http://www.consilium.europa.eu/ueDocs/cms_Data/docs/pressData/en/er/82998.pdf

³⁶ http://europa.eu/rapid/press-release_IP-05-1091_en.htm?locale=en

³⁷ http://www.consilium.europa.eu/ueDocs/cms_Data/docs/pressData/en/er/90951.pdf

strategic partnership. Leaders discussed the necessary actions to be taken to achieve a more balanced trade and economic partnership"³⁸

The Summit of 2008 was postponed to early 2009 because of the visit of the Dalai Lama in Europe (Council of the European Union, 2008). Hence, the joint communiqué was very brief and nothing was mentioned about trade³⁹. The second EU-China Summit in 2009 focused mainly on the financial crisis which consequences were spreading to the world and especially the EU⁴⁰.

Then, the 2010 joint communiqué was brief too. The same topics were mentioned again such as trade issues and the improvement of trade between the EU and China:

"They agreed to intensify discussions on ways to promote bilateral trade and investment, also removing trade barriers and ensuring a business climate conducive to the further development of trade and investment relations" ⁴¹

In 2011, the EU had to face the euro crisis and chose to postpone the 14th EU-China Summit, which was finally held on early 2012 (Council of the European Union, 2011). Despite the crisis, trade issues and postponement of the meeting, the joint communiqué was surprisingly positive. Although protectionism was mentioned, the two sides made an optimistic assessment of their trade relations:

"The two sides highlighted positive developments in the bilateral trade and investment relationship as a cornerstone of the strategic partnership. Among many mutually beneficial features of the relationship this was demonstrated by the fact that mutual trade was larger than ever before, economic integration had withstood pressures during the international crisis, Europe remained China's biggest export destination, and China was the EU's fastest developing export market."

Finally, the 15th EU-China Summit returned to a colder tone, focusing once more on trade issues:

³⁸ http://www.consilium.europa.eu/ueDocs/cms_Data/docs/pressData/en/er/97355.pdf

³⁹ http://www.consilium.europa.eu/uedocs/cms_Data/docs/pressdata/en/er/107965.pdf

⁴⁰ http://www.consilium.europa.eu/uedocs/cms_Data/docs/pressdata/en/er/111567.pdf

⁴¹ http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/er/116908.pdf

⁴² http://www.consilium.europa.eu/uedocs/cms_Data/docs/pressdata/EN/foraff/127967.pdf

"Reaffirmed the importance of trade openness to sustainable economic growth and development. They affirmed the importance of an effective Intellectual Property (IP) system and trade openness to innovation" ⁴³

To conclude the EU-China Summits reflected a rather negative view of trade between 2005 and 2011. Although there was no mention of China's changing export structure or a growing lack of complementarity, problems of protectionism and trade remedies were pointed out many times. Of course it was not the only issue; trade deficit, China's Market Economy Status⁴⁴, the intellectual property right or the lack of investment also entered into account. In the next part, we will see the concrete impact on the EU-China economic cooperation.

4.2.3 Agreements and Cooperation

The signature of economic and technologic agreements between the EU and China also reflected the phase of coolness which started around 2005. Indeed, as we can see in Table 1, 8 agreements have been signed between 1998 and 2004, related to technologic cooperation, nuclear energy, maritime transport and custom cooperation among others. Moreover, there were also 4 financing agreements to support China's reforms in 2004 and a Memorandum of Understanding on tourism in 2003.

However, from 2005 to 2008 only Memoranda of Understanding and joint statements or declarations were signed. The memorandum of understanding describes the general direction that parties agreed to follow on a specific subject, but contrary to the agreement, it is not legally binding⁴⁵. Hence, the EU and China took less engagement during that period, which is consistent with their growing estrangement. Nevertheless, the 5 MoU signed at that moment prove that both sides still try to maintain a certain level of cooperation. This is also reflected by the establishment of the High Level Economic and Trade Dialogue in 2007, which was, as mentioned before, especially adopted to boost their cooperation and improve their economic relations.

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⁴³ http://eeas.europa.eu/china/summit/summit_docs/20120920_joint_communique_en.pdf

⁴⁴ China's MES is the issue the most often cited in joint communiqués

⁴⁵ http://www.collinsdictionary.com/dictionary/english/memorandum-of-understanding

Table 5	Agreements Between the EU and China from 1995* to 2014
1998	Agreement on scientific and technologic cooperation
2000	Bilateral agreement on China's WTO accession
2002	EU-China maritime transport agreement
2003	Agreement on cooperation in the Galileo Satellite navigation program
	Agreement on industrial policy dialogue
	Agreement on EU-China dialogue on Intellectual Property
	MoU on tourism
2004	EU-China customs cooperation agreement
	Agreement on R&D cooperation on the peaceful use of nuclear energy
	4 financing agreements for new cooperation projects under the program of support for social and economic reforms in China
2005	MoU on labour, employment and social affairs
	Joint Statement on cooperation in space exploitation, science & technology development
	Joint declaration on climate change
	MoU on China-EU dialogue on energy and transport strategies
2006	MoU on administrative cooperation agreement between ADSIQ and DG SANCO
	EU-China MoU on food safety
	MoU on cooperation on near- zero emissions power generation technology
2007	High Level Economic and Trade Dialogue
2009	Cooperative agreement on EU-China Clean Energy Center
	Cooperative agreement on EU-China Science and Technology Partnership Scheme
	Cooperative agreement on EU-China SMEs Cooperation Point of Consensus.
	Renewal of the Science and Technology Agreement
	MoU launching phase II of the Near Zero Emission Coal Project
	MoU on Consultation and Cooperation Mechanism on Industrial sectors
	MoU on Cooperation Framework on Energy Performance and Quality in the Construction Sector
	Financing Agreement for the EU-China Environmental Governance Program
	Financing Agreement of the new Trade project "Support to China's sustainable trade and investment system"
2011	Cooperative agreement on ocean affairs
2012	MoU on cooperation in the area of anti-monopoly law
2013	EU-China strategic agenda for cooperation
	Administrative Agreement for an Intellectual Property Cooperation
	China-EU Joint Declaration on Energy Security
	Letter of Intent on Research and Innovation Cooperation in Food, Agriculture and Biotechnology
2014	Mutual recognition agreement
Source	http://eeas.europa.eu/china/docs/chronology 2014 en.pdf and EU-China Summit Joint

Source: http://eeas.europa.eu/china/docs/chronology__2014_en.pdf and EU-China Summit Joint Communiqués

^{*} No agreement signed between 1995 and 1998

During the following years, from 2009 to 2012, there were still no agreements signed, but a number of financing and cooperative agreements, as well as memoranda of understanding. The cooperation was mainly on environment-friendly project, as well as trade and technology.

Finally, the cooperation seemed to improve from 2013 on, with the adoption of the China-EU 2020 Strategic Agenda for Cooperation in 2013 and the Mutual Recognition Agreement in 2014. Although the Strategic Agenda for Cooperation is not an agreement, it is an important document which will lead the cooperation between the EU and China from now until 2020 (China-EU 2020 Strategic Agenda for Cooperation released at 16th, 2013). The Mutual Recognition Agreement is a custom agreement ⁴⁶ and it is the first agreement since 2004.

To conclude, the EU and China went through a rough time during the second half of the 2000s, nevertheless there was still a willingness to cooperate between the two sides. The last few years showed some signs of improvement. However, we will have to wait for the coming years to see if these improvements continue or not.

4.2.4 Signs of improvements in the EU-China Cooperation

There have been two major signs of the EU-China economic cooperation improvement since 2013. The first one, as mentioned earlier, is the China-EU 2020 Strategic Agenda for Cooperation adopted in 2013 and the second one is China's second policy paper on the EU published this year.

The China-EU 2020 Strategic Agenda for Cooperation

The China-EU 2020 Strategic Agenda for Cooperation was adopted during the 16th EU-China Summit in 2013. As explained in the subsequent joint communiqué, it is "a

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⁴⁶ http://europa.eu/rapid/press-release IP-14-555 en.htm

comprehensive document setting out China and the EU's shared aims to promote cooperation in the areas of peace and security, prosperity, sustainable development and people-to-people exchanges, to take forward the China-EU Comprehensive Strategic Partnership over the coming years".

In the second chapter called "Prosperity". Both sides particularly focus on trade and investment, explaining that "they are determined to enhance further their trade and investment relationship towards 2020 in a spirit of mutual benefit, by promoting open, transparent markets and a level-playing field". Furthermore, they also particularly emphasize the role of the Small and Medium Enterprises, the importance of the High-Level Economic and Trade Dialogue, the negotiations on the investment agreement, a mutually beneficial cooperation and the importance of the Intellectual Property Dialogue.

Finally, in the third part "Sustainable Development", both sides agree that they should strengthen their cooperation to achieve sustainable development. Hence, they should improve their cooperation concerning innovation and intellectual property rights.

This paper should give new impetus to the EU-China relations which have been staggering the last ten years. We will see in a few years if they managed to follow this agenda, but for now it is another sign of the EU's and China's willingness to solve their issues and continue advancing together. Chengchi University

China Second EU Policy Paper

On April 2014, China published a Policy Paper on the EU called Deepen the China-EU Comprehensive Strategic Partnership for Mutual Benefit and Win-win Cooperation⁴⁹. This paper is particularly important as it is only the second Chinese paper on the EU, the first one dating from 2003. It arrives at a time where the EU and China are trying to boost their cooperation and get over the many issues hindering their relations.

http://eeas.europa.eu/china/docs/eu-china_2020_strategic_agenda_en.pdf

⁴⁷ http://eeas.europa.eu/statements/docs/2013/131123_01_en.pdf

⁴⁹ http://www.chinadaily.com.cn/world/cn_eu/2014-04/02/content_17401044.htm

The paper is divided into ten major parts, concerning politics, economics, finance, industry, climate, health, education, etc. In the second part "China's EU Policy in the New Era", China emphasizes its wish to improve and deepen its relations with the EU. It also stresses its hope to reach, despite their differences, a mutually beneficial cooperation and recalled the EU, with the last sentence of this part, to be careful with its use of trade remedy and the way it handles their issues: "China believes that these issues should be properly handled through dialogue in the spirit of equality and mutual respect and encourages the EU to move in the same direction" ⁵⁰.

Then, the fourth part is about economic cooperation and trade. Once again, China raises the matter of EU's settlement of disputes and encourages the EU to use dialogue to solve their issues. It also discusses the investment agreement with the EU, wishing to sign the agreement as soon as possible. Furthermore, it also expresses its hope to quickly start a joint feasibility study on a China-EU FTA.

Finally, in the seventh part called "Cooperation on Industry, Agriculture, Transportation, Science and Technology and Information Technology", China expresses its wish to strengthen their cooperation, especially in agriculture, innovation, aerospace, energy, strategic emerging industries – such as renewable energy, digital information, nanotechnology – and telecommunication.

This paper shows that China is willing to further enhance its economic relations and cooperation with the EU and is calling the EU to do the same. However, the latter still seems to have some reservations. Indeed, although the EU agreed to launch the negotiations on the investment agreement⁵¹, it is not ready yet to consider signing an FTA with China.

Concluding Remarks

The change in China's export structure is creating additional tensions in the EU-China economic relations by increasing competition and fear for the European economy. As

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⁵⁰ Ibid

⁵¹ http://europa.eu/rapid/press-release_IP-14-33_en.htm

a result, the EU is particularly aggressive in its disputes against China and increased its AD investigations. Yet, whereas the increase of trade disputes is normal to some extent, the overuse of trade remedy adopted by the EU is partly responsible for the slowing down of its cooperation with China.

Indeed, no agreements were signed between 2005 and 2011 and the EU-China summit was postponed twice during that time. Nevertheless, China seems to be eager to solve its issues with the EU and further deepen their relations. While the EU drags its feet, China took the lead with its second EU policy paper, calling for stronger dialogue and cooperation.



5. Concluding Remarks

In this paper, we analyzed the impact of the change in China's export structure on the EU-China economic relations. First of all, we confirmed that China's export structures to the world and to the EU were globally evolving in the same way. The only exceptions are the sectors 3 and 9 – Mineral fuels, lubricants and related materials, and Commodities and transactions not classified elsewhere in the SITC – as well as the sector 4 of animal and vegetable oils for Western Europe only. Yet, no negative correlations were found between the change in China's exports to the EU and the change in EU's exports to China. Thus, this change of situation did not have a bad impact on trade between the EU and China.

Nevertheless, a widespread fear was that the complementarity between the EU and China, which was a key point in their relations, would be affected. However, both sides have globally kept a pretty good complementarity for now. Only the sectors of chemicals and machinery and transport equipment are affected, especially for Central and Eastern Europe. Moreover, the technological complementarity is also globally maintained as China's exports are switching from resource intensive products to high-skill technology intensive manufactures, while the EU exports mainly medium-skill technology intensive goods.

On the other hand, investments did not seem to be affected by China's change in export structure either. Thus, the latter does not have a direct negative impact on the EU-China economic relations. Nonetheless, this change of situation added to a difficult economic context in Europe engendered a fear from China in many European countries. In response, the EU multiplied the anti-dumping and subsidy investigations against China. Indeed, the average number of investigations launched by the EU is of 9 per year from 2004 to 2014, compared to 5 from 1995 to 2003. Moreover, most of these investigations ended up in at least provisory measures as only 10 on 135 have been repealed since 1995.

These measures are particularly badly received by China and contributed to the slowdown of their cooperation from 2005 on. Indeed, despite an especially well developed cooperation framework, the EU and China let their issues accumulate and

hinder their cooperation. During that period, no agreements, other than memoranda of understanding or cooperative agreements, were signed and both sides pushed their annual meetings to the background in favor of other priorities.

Nevertheless, further researches would be necessary to fully evaluate the role played by political or social factors in the EU-China economic relations.

5.1 The Experience of the US-Japan Economic Relations

This kind of situation already happened a few decades earlier with the US and Japan. Indeed, about 50 years ago, as China was still struggling with its Great Leap Forward and Cultural Revolution, Japan was the first Asian country to experience an "economic miracle". Japan's sudden export-led economic growth came as a surprise and a shock for the industrialized world and especially for the United States. The US and Japan had build special ties since the World War II, nevertheless the first global economy was not ready to see its power challenged (Watson & Powell, 1991).

Although the context is a bit different, there are many similarities between the challenges the US-Japan economic relations had to face because of the Japanese industrialization and the challenges the EU-China economic relations are facing nowadays.

Japan's Economic Development

Japan's economic development can be divided in 3 main periods: first from 1955 to 1964, then from 1965 to 1973, and finally from 1973 until today. The first period was characterized by innovation and dominated by raw material processing industries. The second period was marked by important industrial transformations as Japan turned to the machinery industry. Finally, during the last period, Japan moved to electronics and became a superindustrial society (Imai, 1982).

Japan's export started to soar as soon as the 1950's. Indeed, its share of global exports grew from 2.8% to 4.9% between 1953 and 1959. On the other hand, the US' share declined from 29.4% to 18.7% (Vestal, 1993).

Between 1960 and 1980, Japan's export structure undertook significant changes, not only in terms of type of manufactured goods, but also in terms of quality. This created tensions with the US as Japan imported raw materials from the US and exported back manufactured goods. Indeed, even though the US was Japan's most important source of raw materials, as well as food, this was not enough to balance the latter's increasing exports (Hollerman, 1982).

The two most representative sectors to illustrate Japanese catching up with the US are steel and passenger car. Indeed, in 1950 the Japanese production of crude steel represented only 5.5% of the US production and the Japanese passenger car production was so small that it did not even reach 0.1% of the US'. However, both sectors soared considerably in about 40 years and reached respectively 116% and 115% of the US production (Shinohara, 1991).

However, Japan's rapid industrialization and expansive exports were not without consequences for the US-Japan economic relations.

Consequences on the US-Japan economic relations

The tensions between the US and Japan started really early, as soon as the 1930s (Saxonhouse, 1972). Nevertheless, it was Japan's rise as an economic power and its failure to increase its exports above all which created important tensions in its economic relations with the US. Indeed, their relations deteriorated according to their trade balance, which was increasingly in favor of Japan (Bergsten, 1982).

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Indeed, the US complained about the many Japanese non-tariff import barriers, such as products regulations and standards specific to Japan, which prevented foreign companies to enter the Japanese market (Byron, Bolte, & Reingold, 1982).

In 1958, Japan's balance of trade became positive, notably thanks to its growing exports to the US. Although import quotas were officially suppressed in 1964, Japan's protectionism was slow to disappear, even for already competitive industries. In 1965, the US started to have a trade deficit with Japan and in 1971, the US had for the first time a negative balance of trade (Motoo, 1973).

Japan was challenging the US with high-tech goods such as semiconductor, biotechnology, computer, aircraft and intermediate technology goods like telecommunication or transport equipment. Those products mainly entered the American market through original equipment manufacturer imports, which means that American companies were buying Japanese products and selling them with their own brand (Hollerman, 1982). In 1980, about 500,000 US jobs were affected by the American trade deficit (Bergsten, 1982).

The US was divided between multinational companies and domestic ones. They were also particularly worried about the Japanese import restrictions and control over capital transactions. From the late 1960s on, Japan started to think about itself as equal to the US, however the reverse was not true until 1965 and Japan's trade surplus with the US (Motoo, 1973). From that time on, Japan became an economic challenge that the US had to overcome to stay the first global power (Watson & Powell, 1991).

US policies

Economic partnership is one of the most important components of the US-Japan relations. Yet, it was also the pillar that faced more difficulties because of trade imbalance (Fact sheet: U.S.-Japan relations, 1993). Indeed, from the end of the 1960s, the change between the US and Japan economic relations was often described as a switch from cooperation to competition (Motoo, 1973).

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The US' response to the situation was protectionism, pressuring Japan to limit its exports and open its market, and accusing it of dumping (Hollerman, 1982). Thus in 1960, the Japanese government planned in its National Income Doubling Plan to liberalize 90% of its import in 3 year (Vestal, 1993). Moreover, to reduce trade surplus and avoid reevaluation of the Yen, Japan gave in to the American pressure and

agreed to restrict its exports. Nevertheless, the results were not decisive and the government still had to reevaluate the yen twice (Motoo, 1973).

On the other hand, reducing Japan's exports came at a cost for US workers too. Indeed, as Japan exported less, it also imported fewer raw materials from the US. Furthermore, US protectionism led to a surge of Japanese investment in America (Hollerman, 1982).

Moreover, to control the situation the US also tried to manage its trade with Japan, arguing that their relations were special and could not abide by the same rules as the others. Indeed, the latter imposed benchmarks to ensure a minimum share of American exports to Japan in some sectors. Bahagwati (1994) explains that "Benchmarks are only a weasel word for targets (that is, quotas), and these import targets quickly turn into export protectionism: they work to guarantee for American firms a share of the foreign market just as conventional import protectionism gives firms a guaranteed share of the domestic market". However, although Japan accepted the benchmarks with Regan, it then refused it to Clinton (Bahagwati, 1994).

Indeed, in 1993 the US and Japan signed an agreement in which the US promised to decrease their deficit and increase their competitiveness. On the other hand, Japan agreed to greatly reduce its trade surplus and to boost its imports from all over the world. Yet, Japan refused to quantify the expected results this time. In the end, the agreement was not a success as neither side reached their goals (Altman, 1994).

Following the same "special relationship" argument, the US also tried to impose a unilateral settlement of disputes, where Japan would not have a say in the matter (Bahagwati, 1994).

Finally, many economists argued that the US should have adapted according to the concept of comparative advantage to stay competitive. However, this adaptation would have required too many changes, too quickly and too many workers would have suffered, to be acceptable to the American population (Saxonhouse, 1972). Nye, Jr. (1993) also explained that cooperation was mainly beneficial for the US and Japan, but it was the general belief that the US was declining which was creating tensions.

5.2 Policy Recommendations

This experience help us to understand the EU's reaction since some factors are similar, such as the decline of economic power or the people's inability to accept the adaptation required by the changing situation. However, other factors are different. First, the balance of power is not the same. The EU can hide behind AD measures, but cannot impose its rules on China. Second and most important, the US-Japan relations were built on security cooperation. They have not really paid attention to their economic relations for years. On the contrary, the EU-China relations are mostly based on trade and economy, and both sides spent years developing and strengthening their economic cooperation.

If the EU and China have to learn something from their predecessors, it is the cost of protectionism and confrontation, and the last few years are encouraging. Indeed, the EU should follow China's lead and turn to dialogue to solve their issues. But before all, the EU should strive to solve its internal problems.

Indeed, Europe is in a difficult situation for now, facing an economic, monetary and above all confidence crisis. The results to the European parliament elections proved the European people's confusion with a considerable increase of eurosceptics seats⁵². Yet, it would be difficult for the EU to establish strong ties with anyone if it does not even have strong ties between its own members. So, at first it needs to bring back confidence in its core. Then, both sides will have to strengthen their People-to-People Dialogue to improve their mutual image and reduce the fears. Finally, they should continue to deepen their economic dialogues and cooperation to face future challenges.

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⁵² http://www.economist.com/blogs/charlemagne/2014/05/european-elections-0

Bibliography

- Altman, R. C. (1994). Why pressure tokyo? Foreign Affairs, 73(3), 2.
- Amiti, M., & Freund, C. (2010). The Anatomy of China's Export Growth. In C. R. Feenstra, & S. J. Wei, *China's Growing Role in World Trade* (pp. 35-56). University of Chicago Press.
- An overview of the sectoral dialogues between China and the EU. (n.d.). Retrieved from Europa: http://www.eeas.europa.eu/china/sectoraldialogue_en.htm
- Anderlini, J., & Chaffin, J. (2010, February 04). *China takes EU shoe complaint to WTO*.

 Retrieved from Financial Times: http://www.ft.com/intl/cms/s/0/aacd7822-1178-11df-9195-00144feab49a.html#axzz33Q0mT9ue
- Anderson, J. E. (1979). A Theoritical Foundation for the Gravity Equation. *The American Economic Review*, 69(1), 106-116.
- Andreosso O' Callaghan, B., & Nicolas, F. (2007). Complementarity and Rivalry in EU? China Economic Relations in the Twenty-First Century. *European Foreign Affairs Review*, 12(1), 13–38.
- Ash, R. (2008). Europe's Commercial Relations with China. In D. Shambaugh, E. Sandscheinder, & Z. Hong, *China-Europe Relations: Perceptions, Policies and Prospects* (pp. 189-230). Oxon, England: Routledg.
- Bahagwati, J. (1994). Samurai No More. Foreign Affairs, 73(3), 7.
- Balassa, B. (1966). Tariff Reductions and Trade in Manufacturers among the Industrial Countries. *The American Economic Review*, *56*(3), 466-473.
- Balme, R. (2008). A European Strategy Towards China? The Limits of Integration in Foreign Policy Making. In R. Balme, & B. Bridges, *Europe-Asia Relations: Building Multilateralisms* (pp. 125-144). New York: Palgrave Macmillan.
- Benkovskis, K., Silgoner, M., Steiner, K., & Wörz, J. (2013). Crowding-Out or Co-Existence? The Competitive Position of EU Members and China in Global Merchandise Trade.

 European Central Bank Working Paper Series.
- Berger, B., & Martin, R. F. (2011). *The Growth of Chinese Exports: An Examination of the Detailed Trade Data.* Finance Discussion Papers, Board of Governors of the Federal Reserve System International.
- Bergsten, C. F. (1982). What to do about the US-Japan Economic Conflict. *Foreign Affairs*, 60(5), 1059.
- Bergstrand, J. H. (1989). The Generalized Gravity Equation, Monopolistic Competition, and the Factor-Proportions Theory in International Trade. *The Review of Economics and Statistics*, 71(1), 143-153.

- Brown, K., & Crossick, S. (2009). The EU and China: Time for a Change? *Asia Programme Paper*(ASP PP 2009/03).
- Byron, C., Bolte, G., & Reingold, E. M. (1982). Tempers Rising Over Trade. Time, 119(5), 62.
- China. (n.d.). Retrieved from European Council on Foreign Relations: http://www.ecfr.eu/scorecard/2014/china/1
- China Appeals WTO Auto Parts Decision. (2008, September 18). Retrieved from International Centre for Trade and Sustainable Development: http://www.ictsd.org/bridgesnews/bridges/news/china-appeals-wto-auto-parts-decision
- China slaps final anti-dumping duties on EU steel fasteners. (2010, June 28). Retrieved from Asia One News:

 http://news.asiaone.com/News/Latest+News/Business/Story/A1Story20100628-224306.html
- China to properly handle steel tube dispute with EU. (2013, June 14). Retrieved from CCTV: http://english.cntv.cn/20130614/100173.shtml
- China-EU 2020 Strategic Agenda for Cooperation released at 16th. (2013, November 23).

 Retrieved from Europa:

 http://eeas.europa.eu/statements/docs/2013/131123_01_en.pdf
- China's anti-dumping measures on EU X-ray scanner inconsistent with rules: WTO panel. (2013, February 27). Retrieved from 新华网:
 http://english.peopledaily.com.cn/90778/8144869.html
- Council of the European Union. (2008, November 26). *Postponement of the EU/China Summit*. Retrieved from Europa: http://europa.eu/rapid/press-release_PRES-08-347_en.htm
- Council of the European Union. (2011, October 21). *EU-China Summit Postponed*. Retrieved from Europa: http://europa.eu/rapid/press-release_PRES-11-384_en.htm
- Dettmer, B., Erixon, F., Freytag, A., & Legault Tremblay, P. O. (2011). The dynamics of structural change The European Union's trade with China. *The Chinese Economy,* 44(4), 42-74.
- Disputes Roundup: Trade Remedies in the Spotlight in Geneva, Brussels. (2013, February 27).

 Retrieved from International Centre for Trade and Sustainable Development:

 http://www.ictsd.org/bridges-news/bridges/news/disputes-roundup-trade-remedies-in-the-spotlight-in-geneva-brussels
- Dreyer, I., & Erixon, F. (2008). An EU-China trade dialogue: a new policy framework to contain deteriorating trade relations. *ECIPE Policy Brief*, *3/2008*.
- *EEC-China Trade and Economic Cooperation Agreement.* (2007, May 3). Retrieved from Europa:

- http://europa.eu/legislation_summaries/external_relations/relations_with_third_countries/asia/r14206_en.htm
- EU duties on Chinese industrial fasteners ruled illegal by WTO, but damage already done. (2012, July 25). Retrieved from Asia Trade Watch:

 http://www.asiatradewatch.com/cases/0022/case_view.html
- EU, US, Japan request WTO panel over China rare earth dispute. (2012, June 28). Retrieved from China Daily: http://europe.chinadaily.com.cn/business/2012-06/28/content_15529850.htm
- EU-China relations in times of crisis. (2011, October 28). Retrieved from Euractiv: http://www.euractiv.com/global-europe/eu-china-relations-times-crisis-analysis-508649
- EU-China Summits. (n.d.). Retrieved from Europa: http://eeas.europa.eu/china/summits_en.htm
- European Commission. (2013, August 16). *EU requests WTO Panel on Chinese Anti-Dumping duties on Steel Tubes*. Retrieved from Europa: http://europa.eu/rapid/press-release_IP-13-772_en.htm
- Fact sheet: U.S.-Japan relations. (1993). U.S. Department of State Dispatch, 4(28), 496.
- Filippini, C. (2009). Trade and Investment in the Relations Between the European Union and the People's Republic of China. *European Studies*, *27*, 225-240.
- Finance And Economics: When partners attack; Settling trade disputes. (2010). *The Economist*, 394(8669), 77.
- Fraser, C. (2009). The Development of EU-China Relations. European Studies, 27, 47-64.
- Freedman, J. M. (2009, July 31). *China Complains at WTO Against EU Duties on Fasteners*.

 Retrieved from Bloomberg:

 http://www.bloomberg.com/apps/news?pid=newsarchive&sid=aSgp6MpXLw3Q
- Freman, D. (2006). China's Rise and the Global Economy. In M. Zabarowski, *Facing China's Rise: Guidelines for an EU Strategy. (Chaillot Paper, no 94)* (pp. 15-26). Paris: EU Institute for Security Studies.
- Grubel, H. G. (1967). Intra-Industry Specialization and the Pattern of Trade. *The Canadian Journal of Economics and Political Science*, *33*(3), 374-388.
- Hollerman, L. (1982). Japan's Economic Impact on the United States. *The ANNALS of the American Academy of Political and Social Science, 460,* 127-135.
- Holslag, J. (2007). *China and Europe: the Myth of Post-Modern World*. Brussels: BICCS Background Paper.

- Imai, K. I. (1982). Japan's Changing Industrial Structure and United States-Japan Industrial Relations. In K. Yamamura, *Policy and Trade Issues of the Japanese Economy* (pp. 47-76). Seattle: University of Washington Press.
- Information Note. (n.d.). Retrieved from Europa: http://www.eeas.europa.eu/china/docs/sectoraldialogues_en.pdf
- International Monetary Fund. (2011). Changing Patterns of Global Trade.
- Kennedy, S. (2005). China's porous protectionism: The changing political economy of trade policy. *Political Science Quarterly*, 120(3), 407-432.
- Kong, Q. (2012). *China-EU Trade Disputes and their Management*. Singapore: World Scientific Publishing.
- Krugman, P. R. (1979). Increasing Returns, Monopolistic Competition, and International trade. *Journal of International Economics*, *9*, 469-479.
- Li, X. (2012). Understanding China's Behavioral Change in the WTO. *Asian Survey, 52*(6), 1111–1137.
- Li, Y. (2009). Impacts of the Financial Crisis on China-EU Trade. *The 7th Inha-Le Havre Conference*, 74-83.
- Liu, Y. (2005). Anti-Dumping Measures and China. Journal of Financial Crime, 12(3), 272-289.
- Luo, L. (2011, November 03). WTO sides with China in EU anti-dumping dispute. Retrieved from 人民网: http://english.people.com.cn/90778/7634278.html
- Men, J. (2007). The EU–China strategic partnership: achievements and challenges. *European Policy Paper*, 2.
- Men, J. (2012). The EU and China: mismatched partners? *Journal Of Contemporary China*, 21(74), 333-349.
- Men, J. (2013). China's Economic Diplomacy and Sino-EU relations. Economiaz, 82, 291-312.
- Moffett, S., & Palmer, D. (2012, March 13). *EU, U.S., Japan launch rare earth WTO case against China*. Retrieved from Reuters: http://uk.mobile.reuters.com/article/topNews/idUKBRE82C0K720120313
- Möller, K. (2006). China's Rise: The Return of Geopolitics. In G. Wacker, *China's Rise: The Return of Geopolitics* (pp. 68-73). Berlin: SWP Research Paper.
- Motoo, K. (1973). Japan-US Economic Relations. Japan quarterly, 20(3), 268-274.
- Nataraj, G., & Tandon, A. (2011). China's Changing Export Structure: A Factor-Based Analysis. *Economic & Political Weekly, 46*(13), 130-136.
- Nye, J. J. (1993). Coping with Japan. Foreign Policy, 89, 96-116.

- Rees, N. (2009). EU-China Relations: Historical and Contemporary Prespectives. *European Studies*, *27*, 31-46.
- Samuelson, P. A. (1948). International Trade and the Equalisation of Factor Prices. *The Economic Journal*, *58*(230), 163-184.
- Saxonhouse, G. R. (1972). A Review of Recent U.S.-Japan Economic Relations. *Asian Survey,* 12(9), 726-752.
- Shambaugh, D. (2007, November 26). *The "China honeymoon" is over*. Retrieved February 27, 2014, from The New York Times: http://www.nytimes.com/2007/11/26/opinion/26iht-edshambaugh.1.8482459.html?_r=0
- Sharma, S., Shimp, T. A., & Shin, J. (1995). Consumer Ethnocentrism: A Test of Antecendents and Moderators. *Journal of the Academy of Marketing Science*, *23*(1), 26-37.
- Shinohara, M. (1991). Japan as a World Economic Power. *The ANNALS of the American Academy of Political and Social Science*, *513*, 12-24.
- Sorroza, A. (2011). Is the Eurozone Crisis Changing EU-China Relations? Real Instituto Elcano.
- Tian, D. (2013, January 11). A Retrospective Look at 2012 China-EU Relations. Retrieved February 26, 2014, from China Today:

 http://www.chinatoday.com.cn/english/report/2013-01/11/content_512074.htm
- Van der Geest, W. (2007). The RMB in the Global Currency Market. In S. Crossick, & E. Reuter, *China-EU: A Common Future* (pp. 179-188). Singapore: World Scientific Publishing.
- Vestal, J. (1993). *Planning for Change: Industrial Policy and Japanese Economic Development,* 1945-1990. Oxford: Clarendon Press.
- Wai, T. (2009). China's Strategic Thinking: The Role of the European Union. In R. Balme, & B. Bridges, *Europe-Asia Relations: Building Multilateralisms* (pp. 145-171). New York: Palgrave Macmillan.
- Wang, L. (2004). Intellectual property protection in China. *The International Information & Library Review, 36*, 253–261.
- Watson, R., & Powell, B. (1991). Coming to Terms with Japan. Newsweek, 118(22), 46-47.
- Wong, R. (2013). China's Rise: Making Sense of EU Responses. *The journal of contemporary China, 2*(2), 111-128.
- WTO. (2009). China Measures Affecting Imports of Automobile Parts. Retrieved from World Trade Organization:

 http://www.wto.org/english/tratop_e/dispu_e/cases_e/ds339_e.htm

- WTO. (2010). China Provisional Anti-Dumping Duties on Certain Iron and Steel Fasteners from the European Union. Retrieved from World Trade Organization:

 http://www.wto.org/english/tratop e/dispu e/cases e/ds407 e.htm
- WTO. (2012). European Union Anti-Dumping Measures on Certain Footwear from China.

 Retrieved from World Trade Organization:

 http://www.wto.org/english/tratop_e/dispu_e/cases_e/ds405_e.htm
- WTO. (2013). China Measures Imposing Anti-Dumping Duties on High-Performance
 Stainless Steel Seamless Tubes ("HP-SSST") from the European Union. Retrieved from
 World Trade Organization:
 http://www.wto.org/english/tratop_e/dispu_e/cases_e/ds460_e.htm
- WTO. (2013). China Measures Related to the Exportation of Various Raw Materials.

 Retrieved from World Trade Organization:

 http://www.wto.org/english/tratop_e/dispu_e/cases_e/ds397_e.htm
- WTO. (2013). China Measures Related to the Exportation of Various Raw Materials.

 Retrieved from World Trade Organization:

 http://www.wto.org/english/tratop_e/dispu_e/cases_e/ds395_e.htm
- WTO. (2014). China Definitive Anti-Dumping Duties on X-Ray Security Inspection

 Equipment from the European Union. Retrieved from World Trade Organization:

 http://www.wto.org/english/tratop_e/dispu_e/cases_e/ds425_e.htmhttp://www.wt
 o.org/english/tratop_e/dispu_e/cases_e/ds425_e.htm
- WTO. (2014). *Understanding the WTO: Settling Disputes*. Retrieved from World Trade Organization: http://www.wto.org/english/thewto_e/whatis_e/tif_e/disp1_e.htm
- WTO rules China's export measures on rare earth inconsistent with rules. (2014, March 26).

 Retrieved from 新华网: http://news.xinhuanet.com/english/business/2014-03/26/c_126320535.htm
- Zhang, X. (2012). Three Key Variables in China-EU Economic and Trade Relations: Strategic Foundation, Reciprocity and Institutions. *International Understanding*, 1.
- Zhang, Z. (2008). China's Commercial Relations with Europe. In D. Shambaugh, E. Sandscheinder, & Z. Hong, *China-Europe Relations: Perceptions, Policies and Prospects* (pp. 189-230). Oxon, England: Routledge.

Appendix

Appendix 1 Change in China's Exports and Imports compared to (a)1995 or (b)1999 for all SITC Sectors, 1996-2012

	Change in	_	n Chinese ts from		
Years	WORLD ^a	EU15 ^a	CESEE12 ^b	EU15 ^a	CESEE12 ^b
1996	1,52%	14,05%	-	0,42%	-
1997	22,86%	42,31%	-	12,20%	-
1998	23,54%	59,34%	-	18,53%	-
1999	31,02%	88,49%	-	31,73%	-
2000	67,50%	166,77%	48,12%	73,58%	18,54%
2001	78,85%	188,12%	107,32%	104,82%	87,27%
2002	118,84%	210,80%	181,24%	133,03%	181,68%
2003	194,55%	263,82%	252,77%	174,78%	259,63%
2004	298,80%	348,97%	254,17%	220,19%	335,16%
2005	412,14%	464,66%	292,76%	242,01%	386,87%
2006	551,26%	582,08%	417,54%	317,74%	652,18%
2007	720,05%	705,24%	599,28%	370,20%	788,63%
2008	861,62%	749,58%	716,12%	411,68%	909,90%
2009	707,67%	636,96%	583,27%	436,26%	1073,91%
2010	960,47%	866,67%	847,07%	637,09%	1571,48%
2011	1175,97%	900,31%	925,51%	784,39%	1997,09%
2012	1277,06%	894,37%	868,83%	833,35%	2129,87%

Sources: UNCTAD for Chinese exports to the World & Eurostat for Chinese trade with EU

Appendix 2 Change in China's Exports and Imports compared to (a)1995 or (b)1999 for Sector 0, 1996-2012

Change in Chinase

	Change	in Chinese ex	•	in Chinese ts from	
Years	WORLD	EU15 ^a	CESEE12 ^b	EU15 ^a	CESEE12 ^b
1996	2,78%	10,81%	-	-59,34%	-
1997	11,26%	18,19%	-	-49,74%	-
1998	6,61%	32,84%	-	-40,59%	-
1999	5,06%	39,65%	-	-33,98%	-
2000	23,38%	78,61%	44,88%	-21,45%	42,57%
2001	28,36%	106,92%	74,35%	-18,13%	92,79%
2002	46,88%	73,65%	56,73%	-14,06%	80,45%
2003	76,11%	90,56%	92,70%	-1,23%	71,70%
2004	89,51%	116,05%	50,28%	10,47%	22,69%
2005	125,83%	175,95%	46,82%	34,28%	89,86%
2006	158,41%	244,99%	73,80%	38,73%	202,46%
2007	208,84%	311,79%	125,89%	76,50%	221,28%
2008	229,12%	332,21%	151,27%	104,20%	170,24%
2009	227,52%	300,58%	124,57%	141,24%	148,69%
2010	313,37%	383,20%	171,61%	217,88%	325,27%
2011	407,26%	436,11%	199,01%	359,76%	611,39%
2012	423,15%	421,18%	196,94%	537,81%	1231,70%

Appendix 3 Change in China's Exports and Imports compared to (a)1995 or (b)1999 for Sector 1, 1996-2012

		in Chinese ex	Change in imports	Chinese	
Years	WORLD	EU15 ^a	CESEE12 ^b	EU15 ^a	CESEE12 ^b
1996	-1,99%	32,50%	A	99,61%	//-
1997	-23,40%	44,50%	-	453,76%	-
1998	-28,77%	42,48%	- , , 1	578,82%	_
1999	-43,66%	13,33%	-	819,92%	-
2000	-45,60%	29,04%	-72,21%	1089,76%	-39,67%
2001	-36,21%	46,20%	-50,82%	1002,80%	-47,99%
2002	-28,16%	46,70%	-44,92%	966,44%	18,62%
2003	-25,57%	54,93%	-65,95%	1117,83%	-61,04%
2004	-11,34%	61,12%	-79,00%	1780,07%	23,68%
2005	-13,59%	77,58%	-71,28%	2626,20%	387,65%
2006	-12,84%	69,31%	-30,62%	3436,59%	877,71%
2007	2,01%	80,63%	-10,27%	5363,10%	970,37%
2008	11,71%	105,18%	22,35%	5556,99%	1468,27%
2009	19,89%	155,61%	49,57%	6417,32%	1492,88%
2010	39,20%	251,08%	123,29%	11106,72%	4327,92%
2011	66,21%	278,10%	160,12%	17436,68%	3590,58%
2012	89,20%	273,62%	117,12%	20221,44%	6147,41%

2012 | 89,20% | 273,62% | 117,12% | 20221,44% | 6147,41% Sources: UNCTAD for Chinese exports to the World & Eurostat for Chinese trade with EU

Appendix 4 Change in China's Exports and Imports compared to (a)1995 or (b)1999 for Sector 2, 1996-2012

	Change	in Chinese ex	Change in imports		
Years	WORLD ^a	EU15 ^a	CESEE12 ^b	EU15 ^a	CESEE12 ^b
1996	-7,49%	1,64%	-	-16,16%	-
1997	-3,98%	15,73%	-	27,11%	-
1998	-19,37%	18,01%	-	64,20%	-
1999	-10,29%	22,15%	-	234,03%	-
2000	2,18%	55,65%	23,85%	350,54%	19,46%
2001	-4,39%	55,94%	34,15%	316,52%	56,25%
2002	0,89%	41,49%	48,59%	317,61%	33,78%
2003	15,19%	41,26%	84,33%	437,83%	20,44%
2004	33,89%	82,49%	47,91%	655,13%	31,14%
2005	71,51%	142,33%	53,88%	978,47%	111,90%
2006	80,11%	151,24%	81,18%	1479,70%	317,46%
2007	108,94%	175,13%	77,05%	1632,78%	269,90%
2008	159,39%	188,34%	149,67%	1612,89%	235,81%
2009	86,90%	88,36%	75,94%	1759,32%	320,83%
2010	165,90%	167,06%	91,39%	2383,30%	447,15%
2011	243,19%	212,59%	151,23%	3164,47%	615,39%
2012	228,63%	185,71%	130,45%	3083,27%	747,58%

Appendix 5 Change in China's Exports and Imports compared to (a)1995 or (b)1999 for Sector 3, 1996-2012

		in Chinese ex	Change	in Chinese rts from	
Years	WORLD	EU15 ^a	CESEE12 ^b	EU15 ^a	CESEE12 ^b
1996	11,24%	-27,11%	<u> </u>	-71,95%	7/-
1997	31,03%	-4,29%	-	-56,06%	-
1998	-2,94%	5,85%	-	-54,50%	// -
1999	-12,63%	-5,44%	-	430,21%	-
2000	47,33%	22,66%	-51,35%	297,72%	415,40%
2001	57,63%	97,45%	-6,08%	223,58%	123,71%
2002	58,20%	57,24%	-34,88%	671,96%	720,63%
2003	108,44%	107,91%	56,43%	195,63%	3524,11%
2004	171,57%	262,48%	82,53%	167,81%	4450,79%
2005	230,49%	121,77%	13,77%	41,41%	8398,31%
2006	233,26%	76,27%	1,61%	131,65%	9219,11%
2007	291,55%	104,73%	8,40%	128,21%	12563,43%
2008	495,89%	186,72%	135,08%	280,33%	42766,56%
2009	282,27%	-17,38%	-0,89%	403,00%	17100,82%
2010	400,24%	-7,73%	-54,69%	1827,46%	88869,74%
2011	505,29%	3,62%	163,55%	2883,50%	143232,39%
2012	481,64%	-5,28%	-33,92%	4545,00%	34090,81%

Sources: UNCTAD for Chinese exports to the World & Eurostat for Chinese trade with EU

Appendix 6 Change in China's Exports and Imports compared to (a)1995 or (b)1999 for Sector 4, 1996-2012

	Change	in Chinese ex		e in Chinese orts from	
Years	WORLD	EU15 ^a	CESEE12 ^b	EU15 ^a	CESEE12 ^b
1996	-17,07%	32,79%	-	-57,61%	-
1997	42,78%	117,96%	-	-43,68%	-
1998	-32,29%	112,03%	-	-40,15%	-
1999	-70,98%	62,71%	-	-78,53%	-
2000	-74,39%	90,06%	-39,93%	-86,27%	-70,42%
2001	-75,52%	108,77%	-5,88%	-94,46%	11781,69%
2002	-78,47%	70,80%	28,37%	-83,25%	143,66%
2003	-74,60%	191,98%	38,13%	-93,85%	647,42%
2004	-67,35%	136,02%	109,89%	-91,20%	6534,74%
2005	-40,95%	243,03%	285,69%	-88,76%	389684,04%
2006	-17,71%	727,81%	378,79%	-83,36%	73008,45%
2007	-31,46%	726,42%	206,23%	-80,46%	2902,35%
2008	31,26%	277,77%	614,49%	-73,04%	26473,24%
2009	-25,22%	244,77%	341,00%	-71,99%	5885,45%
2010	-13,70%	224,70%	577,34%	-53,70%	16730,52%
2011	25,84%	431,03%	682,08%	-22,94%	66946,95%
2012	28,87%	620,81%	741,05%	1,60%	73684,04%

Appendix 7 Change in China's Exports and Imports compared to (a)1995 or (b)1999 for Sector 5, 1996-2012

\\	Change in	n Chinese exp	Change ir import	n Chinese s from	
Years	WORLD	EU15 ^a	CESEE12 ^b	EU15 ^a	CESEE12 ^b
1996	-1,75%	2,20%		20,86%	// -
1997	13,19%	24,69%	-	41,28%	-
1998	14,23%	33,47%	achi	44,64%	-
1999	14,81%	38,02%	-	67,97%	-
2000	33,90%	73,76%	31,81%	140,07%	89,21%
2001	47,78%	95,38%	40,79%	171,07%	114,00%
2002	69,61%	106,28%	62,47%	228,41%	145,95%
2003	116,72%	134,06%	108,01%	269,11%	329,51%
2004	191,75%	150,25%	108,93%	335,58%	440,25%
2005	295,92%	220,80%	142,52%	404,50%	634,01%
2006	392,85%	286,12%	212,66%	495,57%	595,04%
2007	567,85%	369,12%	232,77%	626,88%	741,20%
2008	777,82%	480,17%	295,72%	722,81%	743,78%
2009	586,30%	396,75%	224,32%	892,76%	1023,48%
2010	868,65%	588,63%	354,65%	1127,65%	1149,88%
2011	1169,74%	709,74%	487,03%	1367,98%	1077,55%
2012	1156.45%	695.84%	562.96%	1576.38%	1119.12%

2012 | 1156,45% | 695,84% | 562,96% | 1576,38% | 1119,12% Sources: UNCTAD for Chinese exports to the World & Eurostat for Chinese trade with EU

Appendix 8 Change in China's Exports and Imports compared to (a)1995 or (b)1999 for Sector 6, 1996-2012

	Change	in Chinese e	•	in Chinese ts from	
Years	WORLD	EU15 ^a	CESEE12 ^b	EU15 ^a	CESEE12 ^b
1996	-11,43%	6,33%	-	32,71%	-
1997	7,02%	34,94%	-	53,44%	-
1998	0,94%	53,90%	-	58,58%	-
1999	3,38%	74,17%	-	78,37%	-
2000	32,23%	146,62%	45,00%	146,43%	1,22%
2001	36,17%	160,03%	87,02%	191,11%	48,45%
2002	64,58%	173,50%	149,44%	253,76%	265,81%
2003	114,51%	203,34%	211,23%	356,12%	463,57%
2004	212,81%	292,98%	242,46%	404,10%	345,40%
2005	301,31%	416,20%	339,20%	494,52%	359,37%
2006	443,33%	607,60%	520,14%	622,79%	403,64%
2007	584,55%	879,86%	917,35%	666,94%	452,85%
2008	715,51%	873,36%	1006,62%	664,86%	689,63%
2009	474,28%	559,03%	578,46%	668,20%	771,79%
2010	674,26%	779,80%	781,35%	792,05%	1108,83%
2011	893,20%	898,78%	952,06%	957,25%	1495,74%
2012	938,57%	856,90%	975,87%	999,17%	1798,30%

Appendix 9 Change in China's Exports and Imports compared to (a)1995 or (b)1999 for Sector 7, 1996-2012

Appendix 5 Cit		in Chinese ex	Change i	in Chinese ts from	
Years	WORLD	EU15 ^a	CESEE12 ^b	EU15 ^a	CESEE12 ^b
1996	12,57%	20,06%	\.	-3,49%	<i>//-</i>
1997	39,34%	58,78%	-	4,92%	
1998	60,09%	93,83%	- , \	11,79%	-
1999	87,57%	150,02%	-	18,30%	-
2000	163,33%	304,68%	70,86%	52,87%	9,20%
2001	202,54%	352,35%	181,61%	85,25%	107,83%
2002	304,80%	413,49%	313,52%	105,69%	202,15%
2003	498,62%	561,46%	430,61%	141,94%	249,11%
2004	755,21%	782,17%	448,95%	180,57%	467,53%
2005	1022,92%	975,11%	470,26%	182,39%	472,39%
2006	1354,82%	1232,40%	667,02%	240,11%	975,62%
2007	1742,09%	1394,02%	948,69%	282,04%	1224,02%
2008	2048,92%	1473,63%	1132,44%	317,60%	1334,18%
2009	1784,51%	1288,36%	1014,64%	330,66%	1563,95%
2010	2390,06%	1872,75%	1543,26%	520,46%	2331,09%
2011	2777,49%	1852,28%	1627,28%	631,72%	2953,53%
2012	2977,34%	1898,49%	1474,47%	648,86%	2993,32%

Sources: UNCTAD for Chinese exports to the World & Eurostat for Chinese trade with EU

Appendix 10 Change in China's Exports and Imports compared to (a)1995 or (b)1999 for Sector 8, 1996-2012

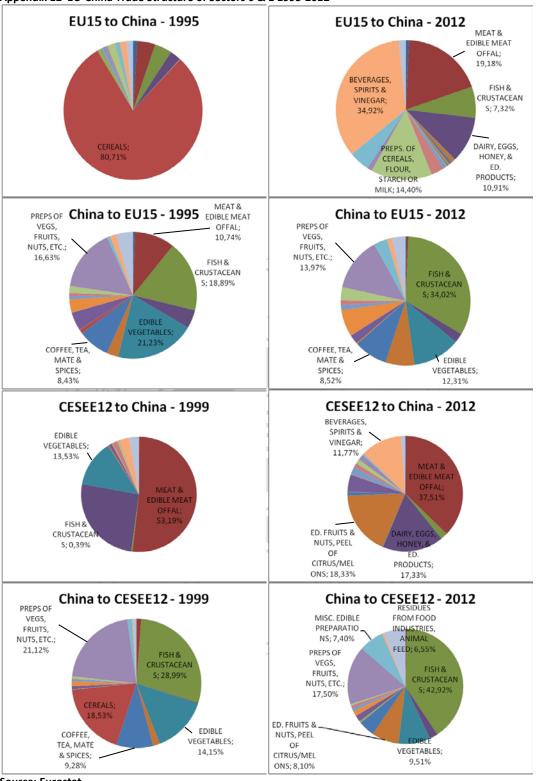
	Change	in Chinese ex	Change ir import	n Chinese s from	
Years	WORLD ^a	EU15 ^a	CESEE12 ^b	EU15 ^a	CESEE12 ^b
1996	3,76%	16,43%	-	0,48%	-
1997	29,32%	42,78%	-	30,99%	-
1998	29,47%	52,08%	-	50,70%	-
1999	33,43%	77,50%	-	75,41%	-
2000	58,59%	130,82%	30,57%	143,80%	48,06%
2001	60,66%	140,84%	49,86%	216,51%	282,55%
2002	86,55%	158,44%	86,47%	287,86%	548,37%
2003	132,54%	180,30%	118,95%	339,89%	442,49%
2004	188,44%	211,69%	99,47%	440,98%	538,50%
2005	258,13%	305,98%	148,89%	443,53%	805,86%
2006	338,97%	356,87%	205,77%	555,88%	1045,11%
2007	447,79%	434,98%	267,41%	643,79%	1761,00%
2008	518,27%	473,67%	336,34%	753,32%	2753,35%
2009	451,42%	442,34%	247,62%	790,29%	3508,60%
2010	595,04%	530,15%	293,11%	1136,42%	5355,92%
2011	745,73%	548,18%	329,36%	1468,18%	6637,15%
2012	884,46%	537,99%	332,26%	1706,55%	7620,60%

Appendix 11 Change in China's Exports and Imports compared to (a)1995 or (b)1999 for Sector 9, 1996-2012

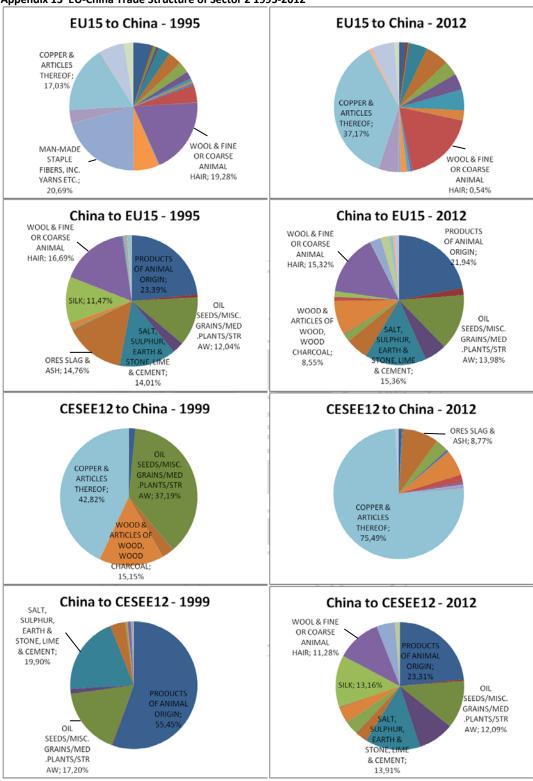
\\	Change	in Chinese e		rts from	
Years	WORLD	EU15 ^a	CESEE12 ^b	EU15 ^a	CESEE12 ^b
1996	-46,10%	-19,83%	△	17,70%	//-
1997	4,23%	-68,05%	-	-55,49%	-
1998	-98,38%	-15,01%	- , ,	-45,29%	-
1999	-49,29%	-24,71%	-	-38,53%	-
2000	49,44%	-5,51%	55,98%	6,73%	482,03%
2001	69,86%	46,05%	2690,29%	10,11%	3147,46%
2002	88,67%	0,44%	444,80%	22,61%	6949,05%
2003	179,74%	20,50%	1604,25%	29,43%	9103,15%
2004	223,65%	76,66%	1663,02%	17,25%	7932,73%
2005	367,34%	148,49%	6345,08%	67,56%	20712,16%
2006	573,55%	161,92%	3021,08%	152,61%	12412,12%
2007	534,51%	245,88%	4323,78%	156,34%	25680,25%
2008	397,61%	357,32%	3684,29%	392,64%	21835,91%
2009	373,98%	428,29%	2826,47%	225,42%	5901,33%
2010	327,15%	517,54%	1594,14%	396,08%	71,01%
2011	581,67%	586,41%	1624,99%	292,13%	392,16%
2012	312,30%	480,78%	657,85%	291,09%	751,26%

2012 | 312,30% | 480,78% | 657,85% | 291,09% | 751,2 Sources: UNCTAD for Chinese exports to the World & Eurostat for Chinese trade with EU

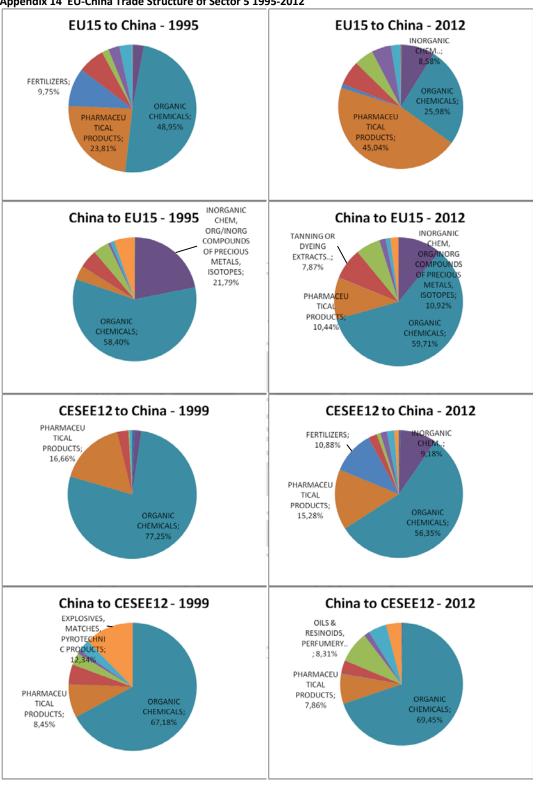
Appendix 12 EU-China Trade Structure of Sectors 0 & 1 1995-2012



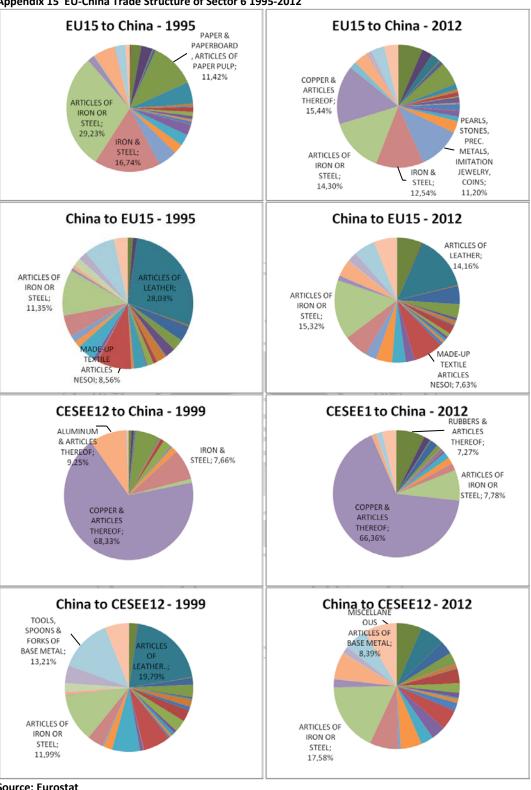
Appendix 13 EU-China Trade Structure of Sector 2 1995-2012



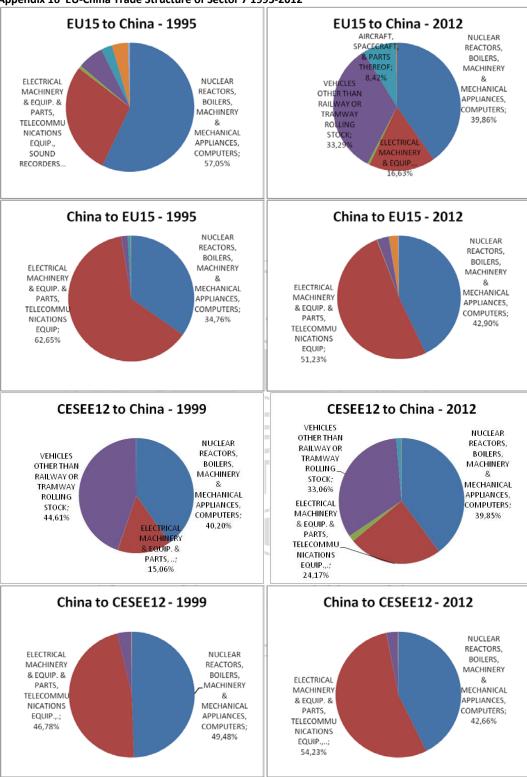
Appendix 14 EU-China Trade Structure of Sector 5 1995-2012



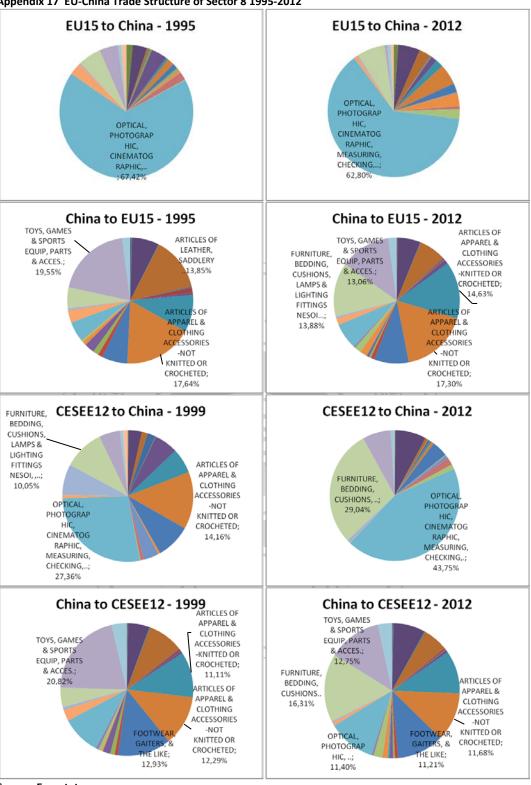
Appendix 15 EU-China Trade Structure of Sector 6 1995-2012



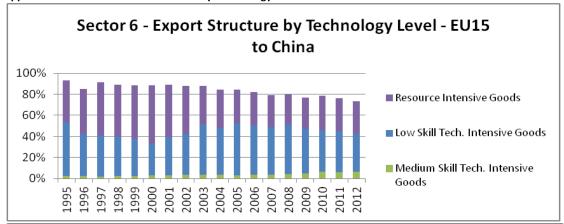
Appendix 16 EU-China Trade Structure of Sector 7 1995-2012

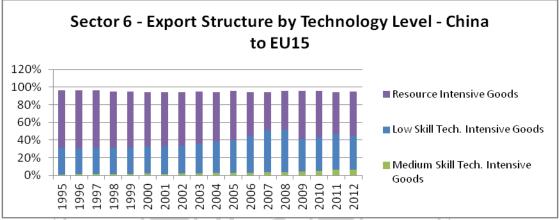


Appendix 17 EU-China Trade Structure of Sector 8 1995-2012

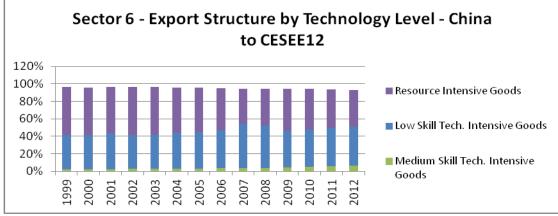


Appendix 18 EU-China Trade Structure by Technology Level Sector 6 1995-2012



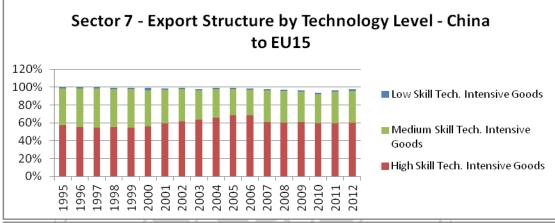


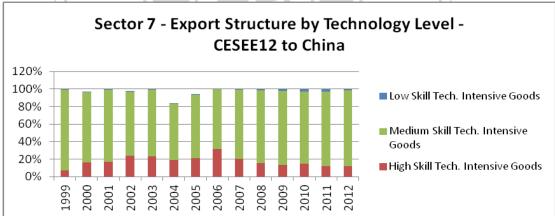


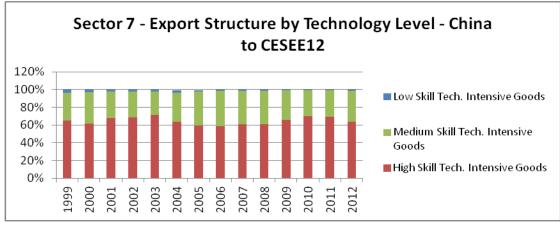


Appendix 19 EU-China Trade Structure by Technology Level Sector 7 1995-2012



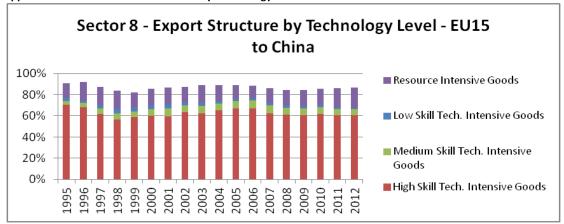


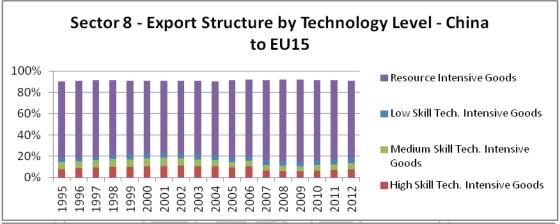


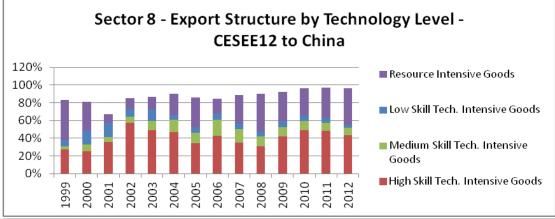


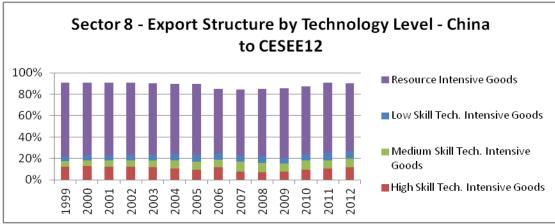
Source: Eurostat

Appendix 20 EU-China Trade Structure by Technology Level Sector 8 1995-2012



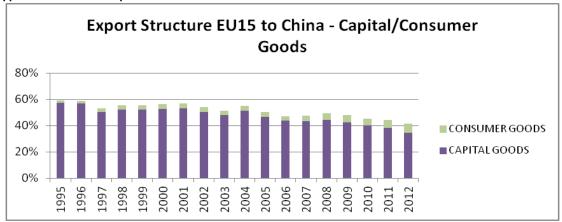


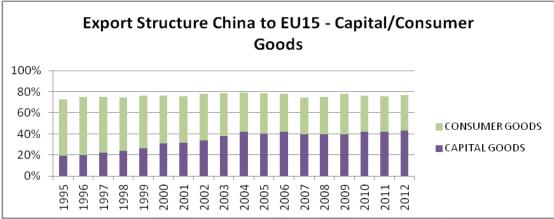


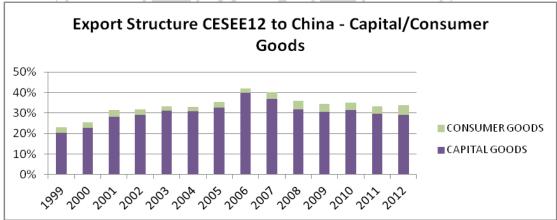


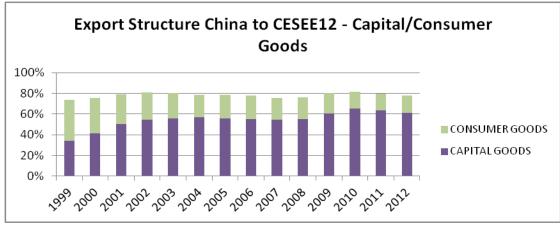
Source: Eurostat

ppendix 21 Share of Capital and Consumer Goods in EU-China Trade 1995-2012









Source: Eurostat

Appendix 22 Change in China's Exports to the World and Investments with the EU compared to 2005 for all Investments, 2006-2011

		Change in China 's ODI to		Change in China's FDI from	
Years	Change in China's exports to the world	EU15	CESEE12	EU15	CESEE12
2006	29%	502%	-4200%	0%	67%
2007	61%	-812%	-8800%	12%	-567%
2008	88%	-834%	-13300%	-44%	0%
2009	56%	537%	3800%	15%	0%
2010	104%	898%	12500%	121%	200%
2011	143%	264%	17600%	110%	433%

Appendix 23 Change in China's Exports to the World and Investments with the EU compared to 2005 for Investments in Agriculture, Forestry & Fishing, 2006-2011

/		Change in China 's ODI to		Change in China's FDI from	
Years	Change in China's exports to the world	EU15*	CESEE12	EU15	CESEE12
2006	7%		-100%	-7/	
2007	29%	-125%	100%	-	-
2008	-8%	-100%	-700%	}	
2009	12%	-100%	100%	<i>J-</i>	-//
2010	27%	-100%	-100%	-	2 //
2011	12%	-100%	0%	19	b' /-/

^{*}Compared to 2006

Sources: UNCTAD for Chinese exports to the World & Eurostat for investments

Appendix 24 Change in China's Exports to the World and Investments with the EU compared to 2005 for Investments in Mining & Quarrying, 2006-2011

	_	Change in	China 's ODI to	Change in China's FDI from	
Years	Change in China's exports to the world	EU15	CESEE12	EU15	CESEE12
2006	1%	200%	1	17%	-
2007	17%	-100%	-	27%	-
2008	52%	200%	-	-174%	-
2009	-36%	-100%	-	-176%	-
2010	31%	-300%	-	70%	-
2011	21%	0%	-	376%	-

Appendix 25 Change in China's Exports to the World and Investments with the EU compared to 2005 for Investments in Manufacture of Food Products, Beverages & Tobacco Products, 2006-2011

		Change in (China 's ODI to	Change in China's FDI from	
Years	Change in China's exports to the world	EU15	CESEE12	EU15	CESEE12
2006	16%	-425%	-100%	-89%	-100%
2007	16%	225%	-400%	-109%	-100%
2008	12%	-450%	700%	29%	0%
2009	-4%	-450%	-500%	-76%	-100%
2010	25%	3825%	-400%	-206%	-200%
2011	26%	-550%	-600%	83%	-100%

Appendix 26 Change in China's Exports to the World and Investments with the EU compared to 2005 for Investments in Manufacture of Textiles & Wearing Apparel, 2006-2011

	// 3	Change in Ch	ina 's ODI to		n China's FDI from
Years	Change in China's exports to the world	EU15*	CESEE12*	EU15	CESEE12
2006	25%	- LI	X	277%	-
2007	19%			92%	
2008	8%	200%	-300%	192%	-
2009	-10%	-17000%	-200%	454%	311
2010	24%	2000%	-600%	-315%	6 /-/
2011	20%	-1900%	-200%	562%	

*Compared to 2007

*Compared to 2007
Sources: UNCTAD for Chinese exports to the World & Eurostat for investments

Appendix 27 Change in China's Exports to the World and Investments with the EU compared to 2005 for Investments in Manufacture of Wood, Paper, Printing & Reproduction, 2006-2011

		Change in Cl	hina 's ODI to	Change in China's FDI from		
Years	Change in China's exports to the world	EU15	CESEE12	EU15	CESEE12	
2006	36%	-1022%	0%	-53%	0%	
2007	22%	-122%	-100%	-168%	-100%	
2008	1%	14400%	-100%	-116%	0%	
2009	-10%	-89%	-200%	-177%	-100%	
2010	27%	-78%	-400%	-121%	-300%	
2011	28%	-144%	0%	-27%	-400%	

Appendix 28 Change in China's Exports to the World and Investments with the EU compared to 2005 for Investments in Manufacture of Petroleum, Chemical, Pharmaceutical, Rubber and Plastic Products, 2006-2011

		Change in C	hina 's ODI to	· ·	n China's FDI from
Years	Change in China's exports to the world	EU15	CESEE12	EU15	CESEE12*
2006	26%	-450%	-167%	-7%	-
2007	36%	700%	-100%	-53%	-1900%
2008	29%	-725%	-1867%	-147%	0%
2009	-20%	2075%	233%	-14%	0%
2010	40%	9475%	-300%	-3%	400%
2011	32%	-2675%	-500%	38%	400%

^{*}Compared to 2006

Appendix 29 Change in China's Exports to the World and Investments with the EU compared to 2005 for Investments in Manufacture of Basis Metals & Fabricated Metal Products, except Machinery & Equipment, 2006-2011

		Change in	China 's ODI to		n China's FDI from
Years	Change in China's exports to the world	EU15	CESEE12	EU15	CESEE12
2006	50%	-125%	100%	-11%	-33%
2007	35%	-325%	767%	61%	-67%
2008	24%	75%	-733%	-22%	-67%
2009	-46%	350%	567%	-138%	-100%
2010	42%	375%	-167%	16%	-100%
2011	31%	950%	33%	-32%	-167%

Appendix 30 Change in China's Exports to the World and Investments with the EU compared to 2005 for Investments in Manufacture of Computer, Electronic & Optical Products, 2006-2011

		Change in C	hina 's ODI to	•	China's FDI om
Years	Change in China's exports to the world	EU15	CESEE12	EU15	CESEE12*
2006	28%	4622%	-336%	205%	-
2007	23%	-4989%	-493%	512%	0%
2008	12%	-4811%	471%	131%	-100%
2009	-10%	189%	-107%	628%	100%
2010	31%	-1578%	357%	1094%	-300%
2011	12%	1878%	543%	-1263%	300%

^{*}Compared to 2006

Appendix 31 Change in China's Exports to the World and Investments with the EU compared to 2005 for Investments in Manufacture of Machinery & Equipment n.e.c., 2006-2011

/		Change in	China 's ODI to	Change in China's FDI from		
Years	Change in China's exports to the world	EU15	CESEE12*	EU15	CESEE12*	
2006	36%	-33%		-1%		
2007	41%	-148%	67%	60%	0%	
2008	36%	33%	-300%	129%	0%	
2009	-19%	-122%	500%	-49%	-100%	
2010	28%	-78%	300%	212%	-200%	
2011	27%	207%	-233%	177%	100%	

^{*}Compared to 2006

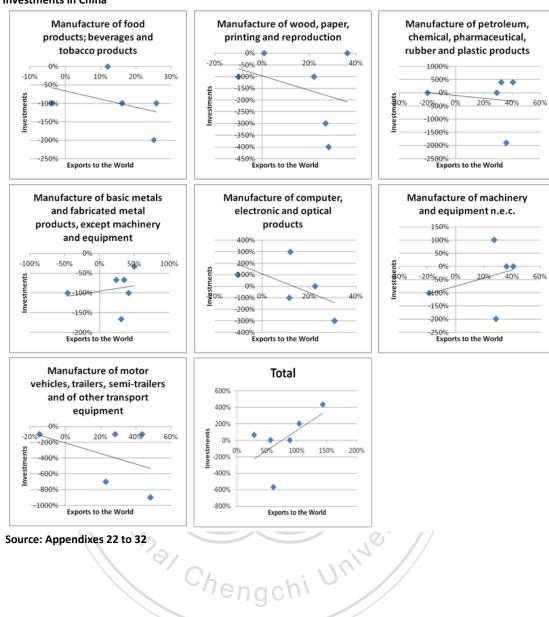
Appendix 32 Change in China's Exports to the World and Investments with the EU compared to 2005 for Investments in Manufacture of Motor Vehicles, Trailers, Semi-trailers & of other Transport Equipment, 2006-2011

2000 2011		Change in C	hina 's ODI to	Change in China's FDI from	
Years	Change in China's exports to the world	EU15	CESEE12	EU15	CESEE12*
2006	36%	-156%	-80%	6%	-
2007	44%	-163%	30%	7%	-100%
2008	28%	75%	1580%	-51%	-100%
2009	-15%	-719%	-400%	184%	-100%
2010	48%	-1163%	-640%	303%	-900%
2011	23%	138%	-1150%	573%	-700%

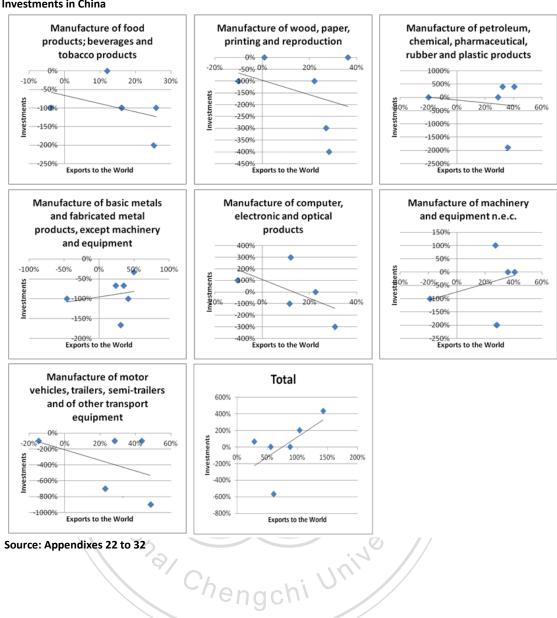
^{*}Compared to 2006



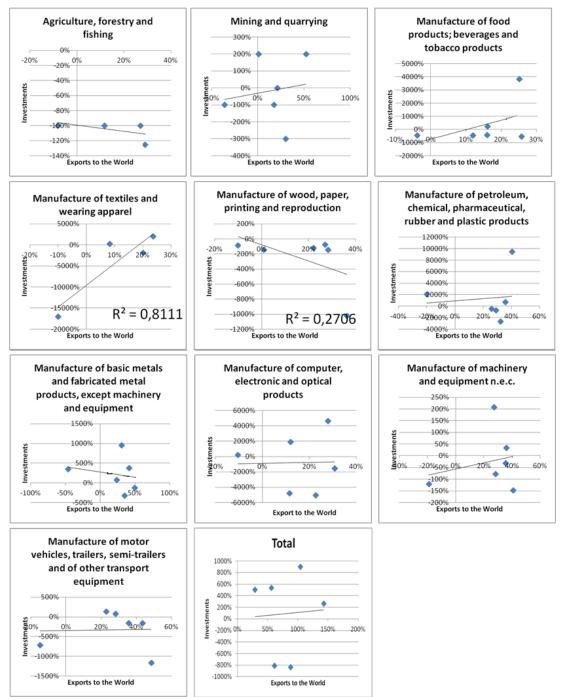
Appendix 33 Correlation Between the variation in China's Export Structure to the World and EU-15's **Investments in China**



Appendix 34 Correlation Between the variation in China's Export Structure to the World and CESEE-12's **Investments in China**

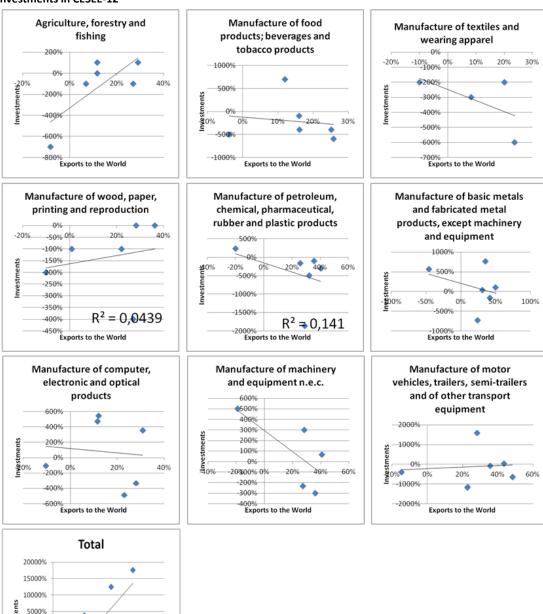


Appendix 35 Correlation Between the variation in China's Export Structure to the World and Chinese Investments in EU-15



Source: Appendixes 22 to 32

Appendix 36 Correlation Between the variation in China's Export Structure to the World and Chinese Investments in CESEE-12



Source: Appendixes 22 to 32

100%

Exports to the World

150%

0%

-5000%

-15000%