

**The Effect of Regional Trade Agreements (RTAs) on Foreign
Direct Investment in New Zealand: The Case of the New
Zealand–China Free Trade Agreement**

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List of Abbreviations

ADB	Asian Development Bank
ANZSCEP	Agreement between New Zealand and Singapore on a Closer Economic Partnership
APEC	Asia-Pacific Economic Cooperation
ASEAN	Association of Southeast Asian Nations
AU	Australia
CAGR.	Compound Annual Growth Rate
CER	Closer Economic Relations
CIS	Commonwealth of Independent States
CTC	Change of Tariff Classification
CUSFTA	Canada-US Free Trade Agreement
EU	European Union
FDI	Foreign Direct Investment
FTA	Free Trade Agreement
FTAA	Free Trade Agreement of Americas
GDP	Gross Domestic Product
ICSID	International Centre for the Settlement of Investment Disputes
IMF	International Monetary Fund
MERCOSUR	Southern Common Market
MFN	Most Favoured Nation
MNC	Multinational Corporation
NAFTA	North American Free Trade Agreement
NZ	New Zealand
NZD	New Zealand Dollar
OECD	Organization of Economic Co-operation and Development
RoO	Rules of Origin
RTA	Regional Trade Agreement

RVC	Regional Value Content
TII	Trade Intensity Index
US	United States
USD	United States Dollar
UK	United Kingdom
UNCTAD	United Nations Conference on Trade and Development
WTO	World Trade Organization

Attestation of Authorship

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

I also further take responsibility for any remaining errors in this dissertation.

Tony Yu

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Abstract

Regional trade agreements (RTAs) refer to legal agreements between one or more countries that agree to reduce trade barriers between each other rather than with all countries in general. Countries can benefit by reducing the tariff and non-tariff barriers under RTAs. Due to these benefits, firms in these countries can reap economies of scale and increase the volume of investment and trade flows between members. A literature review shows that RTAs can affect intra-regional foreign direct investment (FDI) through the trade liberalisation and investment liberalisation processes. Regional trade agreements can improve a member country's location advantage to induce FDI flows.

In the global trend of regional economic integration, New Zealand (NZ) officially signed the NZ–China Free Trade Agreement (FTA) with China in April 2008. However, there has been very little research focus on the NZ–China FTA and its effects on FDI. This study therefore fills this gap in the literature by undertaking a critical literature review of the impact of RTAs on FDI, and placing it in the NZ context of the NZ–China FTA. This is of significance because NZ is the first developed country to enter into an RTA with a large developing country (China). Furthermore, this study analyses the effect of the NZ–China RTA on FDI by analysing historical NZ–China direct investment data and the investment intensity index between NZ and China. The result shows there has been a favourable impact on NZ's inward FDI stock from China after the RTA was signed. Since Chinese agricultural and dairy product demands are growing fast, after the RTA was signed, Chinese investors increased their agricultural and dairy investment in NZ. However, the impact on NZ's outward FDI stock to China is not that strong and shows no clear trend over the post-RTA period. Financial crisis, cultural differences and less government support are the main factors that limit the success of NZ's investment in China. The shares of both inward and outward FDI from

and to China are relatively small compared with NZ's other main trading partners. Because only four years have passed since the signing of the NZ-China RTA, it is still too early to positively conclude that the agreement has had a favourable impact on FDI flows for NZ. This is subject to limitations with regard to sectorial and country-wise bilateral FDI data from NZ sources. Therefore, the future trends of NZ–China bilateral FDI should be monitored to evaluate the influence of the RTA in the future.

Chapter 1: Introduction

Regional trade agreements (RTAs)¹ refer to the legal agreements between one or more countries that permit reduction of trade barriers between each other, while maintaining those barriers against the trading partners that are not members of such agreements. The agreements benefit RTA member countries by reducing the tariff and non-tariff barriers under the RTAs. Trade agreements can also set rules for regulating trade-related activities as well as incorporating commitments to remove trade barriers. Furthermore, RTA member countries can benefit from customs cooperation, service liberation, and an encouraging investment environment under RTAs. Due to these benefits, firms in these countries can reap the rewards of economies of scale and increase the volume of investment and trade flow between members (Moser, 1997).

However, according to Park (2008), one of the reasons behind the current trend of proliferating RTAs has mainly been to create more foreign direct investment (FDI) flows across borders rather than for seeking traditional gains from the freer trade of goods and services. FDI is defined as a category of international investment that reflects the objective of a resident in one economy obtaining a lasting interest in an enterprise resident in another economy (International Monetary Fund [IMF], 2007). This is allowed through RTAs either through separate investment treaties or through a separate chapter on investment liberalisation as part of an RTA. Moreover, the net benefit from freer capital flows will be expected to trigger “the domino effect of new regionalism”² and finally lead the regional trade blocs to a global free trade area (Baldwin, 1993; Ethier, 1998, 2001).

Jensen (2003) found that domestic political structures and policies may attract FDI, and that democratic institutions and policies can attract more FDI inflows than

¹ The terms “RTAs” & “free trade agreements” are interchangeable. RTA is used in this study as per WTO convention.

² The domino effect is a sequence reaction that happens when a small change causes a similar change, that then causes another similar change, and so on.

authoritarian political institutions. For example, developed countries with well-established legal systems and transparent political systems will attract more FDI since the political risk is lower than in developing countries, with or without RTAs. RTAs can help reduce the risk of political uncertainty, but such risk still exists and remains a major concern for most potential investors. Furthermore, the investment agreement in an RTA may impact on the investor's investment decision as well. The principle obligations associated with RTAs (including non-discrimination clauses between member countries, together with a range of investment protections and provisions) will affect investors' decisions as well. In general, attracting FDI has been recognized as a successful strategy for economic growth, and RTA membership has proven effective in attracting FDI by creating a positive market size effect and providing a better investment environment that is favourable to foreign investors. Park and Park (2008) indicated that RTA membership has proven effective in attracting FDI by creating a positive market size effect and providing a better investment environment.

The Organization for Economic Cooperation and Development (OECD) analysis (2003) strongly supports the free trade areas that encourage FDI both among signatory countries and third party countries by enlarging the market size and reducing the relative trade cost under RTAs. In particular, RTA membership can be a device to ensure a commitment to domestic reform for attracting more FDI. The impact on FDI is through investment liberalisation based on the rules in RTA and the trade liberalisation process (Blomstrom & Kokko, 1997; Worth, 1998; Blomstrom, Kokko & Globerman, 1998). There have been a large number of studies that examine the effect of RTAs at the country level in the context of how they affect the flows of trade and FDI (e.g. Bhagwati & Pnagariya, 1996; Blomstrom & Kokko, 1997; Park & Park, 2008). However, there is no general consensus and this still remains an empirical question. Some studies have analysed the impact of RTAs on FDI and have indicated that RTAs

have a significant positive impact on attracting FDI (Blomstrom & Kokko, 1997; Buckley, Clegg, Forsans & Reilly, 2003; Raff, 2002). For example, Blomstrom and Kokko (1998) found that RTAs have positive impact on attracting FDI by enlarging economies of scale and lowering cost under the North American Free Trade Agreement (NAFTA). However, some studies found that RTAs have no impact on attracting FDI (Balasubramanyam, 2002; Graham & Wada, 2000). For instance, Graham and Wada (2000) found that the increase in FDI in Mexico is unlikely to be linked with NAFTA but more likely is related to the economic reform in Mexico. Moreover, Balasubramanyam (2002) argued that the economic characteristics of the host and source countries determine the size and direction of FDI flows rather than the existence of RTAs.

Further, some studies have focused on investigating the impact of RTAs on FDI in China (Liu, 2006; Liu, 2008; Shu & Zeng, 2006), while some studies have focused on investigating the impact of RTAs on FDI in NZ (Sen, 2005). However, there have not been any specific studies on the RTA between New Zealand (NZ) and China, and its effect on FDI — in spite of NZ entering into an RTA with China in 2008. Under the NZ–China RTA, there are some investment provisions to ensure NZ investors remain competitive with investors from other countries, and NZ will benefit from enhanced protection of investments established in China. The NZ–China RTA also provides NZ investors with access to binding third party arbitration procedures if the Chinese government breaches investment provisions (NZ Ministry of Foreign Affairs & Trade, 2011a). New Zealand’s economic development is highly dependent on FDI, China’s FDI is growing fast and given the increasing volume of bilateral trade and investment between NZ and China in recent years, there is a special need to analyze the impact of RTA. This study therefore fills this gap in the literature by undertaking a critical

literature review of the impact of RTAs on FDI, and placing it in the NZ context of the NZ–China RTA.

1.1 Research objective

The objective of this research is to analyse the effect of bilateral RTAs on FDI in NZ within the specific context of the NZ–China RTA. The reason for choosing China is because NZ has recently signed an RTA with China (in 2008) and it will be interesting to see if such an RTA has had a significant effect on stimulating inward FDI and outward FDI in NZ (from, or to, China). Moreover, China is becoming a very important player in the international market — it is not only a big exporter but also a big importer in the world market, and many countries have targeted China as a big consumption market. In 2009, China ranked as the number one exporter in the world, with total exports of United States (US) \$1,201.6 billion dollars, and ranked as the number two importer, with US \$1,005.9 billion total imports in merchandise trading (World Trade Organisation [WTO], 2011).

China is also a major trading partner with NZ. In 2009, China became NZ's fourth largest export trading partner and third largest import trading partner (WTO, 2011). Furthermore, China is a developing country and is often considered a net recipient of FDI, primarily from developed countries. However, China has been also quite active in recent years in international investment. In 2009, China's total outward FDI was US \$5.653 billion, an increase of 1.1% compared with 2008 (United Nations Conference on Trade and Development [UNCTAD], 2011).

New Zealand is a small, developed country, and is highly dependent on foreign capital. New Zealand is among the most indebted countries in the OECD, with a net international investment position of -87% of gross domestic product (GDP). Foreign direct investment makes up 34% of the total stock of foreign investment in NZ.

Moreover, the NZ stock of FDI is quite high, 53% of GDP, which is higher than both Australia and the UK. About 54% of the stock of FDI is from Australia; the US is the next highest country with 12% (NZ Treasury, 2009). From the above figures we can see that NZ is highly dependent on FDI, and as China's economy is growing fast and its stock of FDI is continuously increasing, the signing of the NZ–China RTA should have a positive impact on NZ and China's bilateral FDI.

In order to find out if the RTA is an important determinant of FDI in NZ, the following research questions will be addressed:

- Does the creation of RTAs in general and specifically in the NZ context lead to growth in inward and outward bilateral FDI?
- Has the NZ–China RTA been successful in attracting more inward or outward FDI in NZ from China compared to before the NZ–China RTA?

1.2 Motivation for this study

The impact on FDI is through investment liberalisation based on the rules in RTA and the trade liberalisation process (Blomstrom & Kokko, 1997; Worth, 1998; Blomstrom, Kokko & Globerman, 1998). There have been a large number of studies that examine the effect of RTAs at the country level in the context of how they affect the flows of trade and FDI (e.g. Bhagwati & Pngariya, 1996; Blomstrom & Kokko, 1997; Park & Park, 2008). Some studies have analysed the impact of RTAs on FDI have a significant positive impact on attracting FDI (Blomstrom & Kokko, 1997; Buckley, Clegg, Forsans & Reilly, 2003; Raff, 2002). However, some studies found that RTAs have no impact or less impact on attracting FDI (Balasubramanyam, 2002; Graham & Wada, 2000).

With Association of Southeast Asian Nations (ASEAN) economies recovering from the regional financial and economic crisis of 1997–1998, and the inability of the World Trade Organisation (WTO) to yield any substantial efforts to improve growth

prospects of Asian economies, bilateralism has emerged as the preferred option to capture free trade goals among Asian–Pacific economies (Sen & Srivastava, 2009). In this context, the NZ–China RTA came into force in April 2008. China is one of the most important trading partners to NZ, and is now its second largest trading partner. . It is also a major source of international students and tourists to NZ (NZ Ministry of Foreign Affairs & Trade, 2011c). However, the two countries’ bilateral relationship goes back much further — diplomatic relations were established in 1972 and there has been a good history of cooperation since then. Both countries are members of the WTO and the Asia-Pacific Economic Cooperation Forum (APEC), and more importantly, both are committed to strengthening the multi-bilateral trading system and to prompting regional economic development. Based on the mutual benefits that could be realised by signing an RTA, the first round of negotiations was held in December 2004. This agreement was extremely important to NZ because it is a country where standard of living, jobs, and economic growth depend to a large extent on its competitiveness in selling goods and services to overseas markets (NZ Treasury, 2009). Moreover, NZ is the first developed country to enter into an RTA with China. Therefore, it is important to find out whether the RTA has brought the benefits the NZ government expected.

Moreover, an RTA can bring many other benefits besides increased trading volume to a country. More importantly, it can increase FDI to the country and provide more investment opportunities to local companies as well. Benefits provided by RTAs include enlarging economies of scale, providing competition and opportunities for innovation, allocating resources efficiently, and encouraging policies that may increase investment and trade. Due to the importance of FDI to an economy, it is essential to analyse and investigate the determinants of FDI in general, and specifically in the context of the NZ–China RTA. The findings of this study can be used to gain a better understanding of whether NZ RTAs attract more FDI inflows or outflows, and are

therefore useful to government and policy makers when entering into negotiations for further RTAs.

Since the New Zealand-China RTA was only recently signed in 2008, there is currently no research published on the NZ–China RTA and its impact on bilateral FDI. Therefore, this paper will contribute to the current literature on this subject and provide policy insights on the impacts of RTAs on FDI flows for a small open economy like NZ's.

1.3 Methodology

Since the NZ–China RTA was signed just four years ago, this study relies on a critical literature review as the principle methodology to undertake a policy analysis. Secondary data on inward and outward FDI, trade, and RTAs was analysed with the emphasis on analysing the trends in NZ's bilateral inward and outward FDI stock with China. Most of the previous studies in this area have relied on stock data as well (Liu, 2006; Sen, 2005). Comparisons were made between the pre- and post-RTA scenarios, subject to data availability. New Zealand's inward FDI stock from China's data is from 2003 to 2010, and NZ's outward FDI stock to China's data is from 2006 to 2010. Moreover, FDI intensity was calculated to support the analysis. FDI intensity is used to determine whether the value of bilateral FDI inward stock between two countries is greater or smaller than expected on the basis of their importance in attracting world FDI stock. To calculate FDI intensities, this research has used bilateral FDI data between NZ and China from 2006 to 2010. This method would facilitate the answer to the question of whether the NZ-China RTA has been successful in attracting more inward or outward FDI from China compared to the pre- NZ-China RTA. All data are analysed in NZ dollars (NZ \$) and have been approximately converted, wherever required by the period average NZD / USD exchange rate sourced from UNCTAD.

1.4 Structure of this research

The remaining part of this paper is organized into five chapters. Chapter 2 will provide an overview of the trade relationship between NZ and China and the key outcomes of the NZ–China RTA, focusing on the likely impact on bilateral FDI. Chapter 3 will conduct a thorough review of past literature on RTAs and their effects on stimulating inward and outward FDI. Chapter 4 analyses the NZ FDI historical data from and into China between pre- and post-RTA periods to ascertain the trends of FDI between NZ and China. By analysing empirical data, the question of whether RTAs can influence the level of FDI to NZ from China and vice-versa can be answered. Chapter 5 concludes this research by summarizing the main findings of this study, answering the research questions, and highlighting the limitations of the study and areas for potential future research.

Chapter 2: New Zealand-China Trade and Investment Relations: An Overview

2.1 Introduction

In the early 19th century NZ businesses were already starting to trade in China, and up to the present time NZ and China have had an excellent relationship strengthened by a high level of interaction through trade and investment connections, education, tourism, and exchange programmes. Both NZ and China are members of the WTO and the Asia-Pacific Economic Cooperation group (APEC), and have a long history of working together to promote trade and economic facilitation, liberalisation, and cooperation (NZ Ministry of Foreign Affairs & Trade, 2011b). China and NZ signed an RTA in 2008. During China's negotiation for access to the WTO, NZ was the first country to recognize China as a "market economy", and is the first developed economy to sign an RTA with China. This chapter provides an overview of the trends in bilateral trade between China and NZ from 2000 to 2010. It also provides an overview of the NZ-China RTA and the key outcomes of the investment agreement in particular.

2.2 Trends in New Zealand-China bilateral trade

Since NZ started to trade with China in the early 19th Century, both countries have had a longstanding and healthy bilateral trade relationship through to the present. China has been one of NZ's most important trading partners during the past decade, especially after China joined the WTO in 2001. Since China is a significant member of the WTO and a major member of APEC, China is important to NZ as a bilateral, regional, and multilateral partner.

Tinbergen (1963) introduced the "gravity model" to analyse trade flows. He found that trade flows were influenced by distance and size of economy: trade flows were greater if the distance between trading countries was closer. Moreover, the larger

the size of the economy, the greater the trade flows are. Since China has a large economy, it tends to have a strong trading position with NZ. China became the second largest trading partner to NZ in 2010, and is also a major source of international students, migrants, and tourists to NZ. In 2010 there were over 122,000 visitors to NZ from China, and over 20,000 foreign students came to NZ from China (Statistics NZ, 2011a). Furthermore, China's middle class is growing fast, which will lead to an increasing demand for NZ's exports including agricultural products such as dairy, meat, and wool (NZ Ministry of Foreign Affairs & Trade, 2011c). New Zealand also plays an important role in China's economic development, especially in regards to agricultural and forestry products. In 2010, NZ exported over NZ \$1.8 billion worth of dairy products, and nearly NZ \$1 billion worth of wood products to China. New Zealand has sizeable manufacturing and service sectors, complementing a highly efficient agriculture sector. New Zealand's economy is strongly trade oriented, with the export of goods and services accounting for about 33% of total output. Agriculture, forestry, mining, and fishing play an important role in NZ's economy, especially in the export sector. In total, the primary production sector contributes over 50% of NZ total export earnings (NZ Ministry of Foreign Affairs & Trade, 2011c).

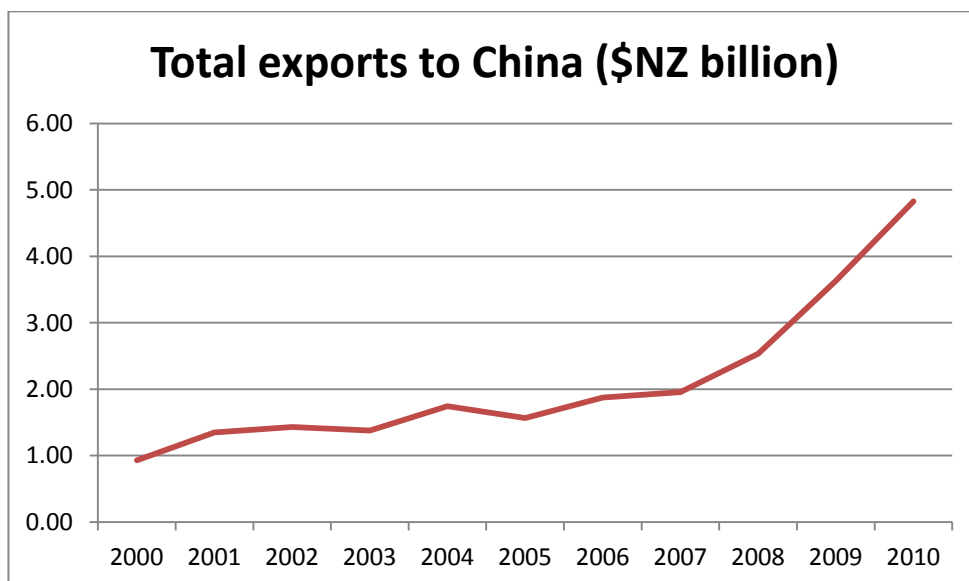
According to the WTO (2011), China became the fourth largest export partner and third largest import partner with NZ in 2009. In the year 2000, the total NZ exports to China were about NZ \$0.9 billion, and the total import value from China was NZ \$1.9 billion. However, by the end of December 2010, total NZ export value to China was NZ \$4.8 billion, total import value from China was NZ \$6.7 billion, and the total trade value was NZ \$11.6 billion with a trade deficit of NZ \$1.9 billion for NZ.

2.2.1 New Zealand exports to China

In the last two decades China has achieved a high growth rate and become one of the largest economies in the world — its total GDP was about US \$5,878 billion in 2010

and the GDP per capita was US \$7,600 in 2010 (WTO, 2011). The large market and high growth rate of China generate big opportunities for NZ exporters.

Figure 1: New Zealand’s total exports to China from 2000 to 2010



(Source: Statistics NZ, 2011b)

Figure 1 shows NZ’s total merchandise exports to China from the year 2000 to 2010. New Zealand’s exports to China exceeded NZ \$0.93 billion in 2000; by 2010 the export amounts increased to NZ \$4.8 billion. The total growth rate from 2000 to 2010 was over 400%.

The Compound Annual Growth Rate (CAGR) formula helps to calculate the overall growth rate in this situation. This kind of formula is often used for the year-by-year growth rate of investment over a given period of time. The formula is interpreted as:

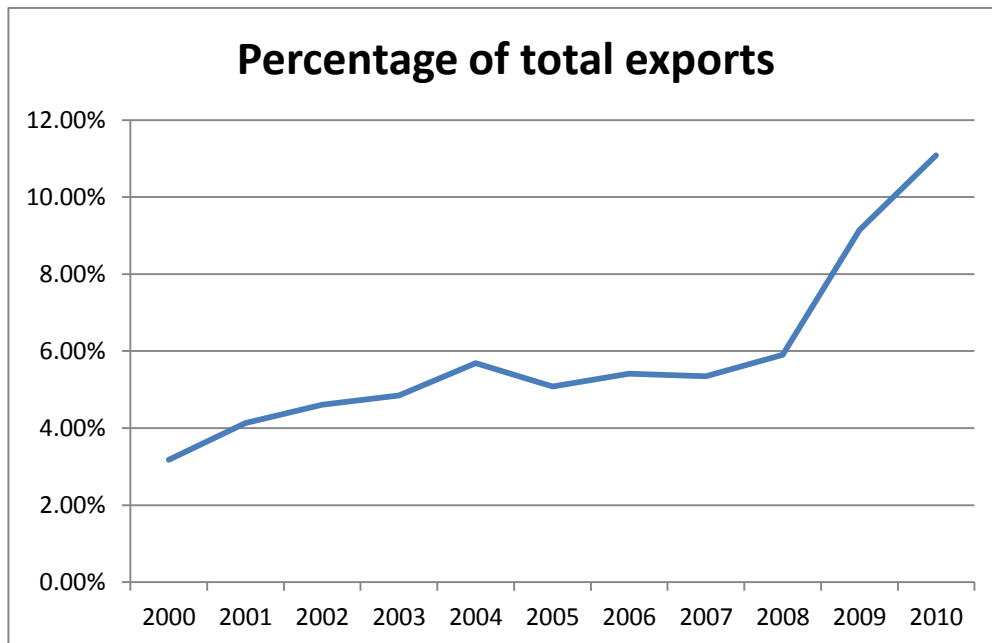
$$\text{CAGR} = \{ [(Ending\ Value / Beginning\ Value)^{(1 / Number\ of\ Years)} - 1] * 100\%$$

Using the formula, the growth rate of exports to China for the period 2000 to 2010 is about 16.2%. Moreover, the total NZ exports to China have shown a significant and continuous increase from 2000 to 2010, except for a decline in 2003 and 2005.

Moreover, from Figure 1 we can see that after the RTA was signed, NZ’s exports to China have significantly increased since 2008. By using the CAGR formula we can break the time period into two parts to see the growth rate changes since the

RTA was signed. The time periods are 2000--2007 and 2008--2010. In the period 2000–2007, the growth rate for NZ’s exports to China was around 9.7%. From 2008 to 2010, the growth rate was around 24%.

Figure 2: Share of New Zealand’s total exports to China from 2000 to 2010



(Source: Author’s calculation based on Statistics NZ, 2011b)

Figure 2 shows the share of NZ’s total exports to China from 2000 to 2010. As mentioned above, the total value of NZ’s exports to China are increasing overall, except for some slight downward movements in certain years. From Figure 2 we can see the share of total exports to China has increased significantly from 2000 to 2010, except for slight drops in 2005 and 2007. After 2008 there was a significant increase in the share of exports to China, in 2009 the share of exports to China was over 9% of NZ’s total exports, and in 2010 the share was over 11%. So NZ’s total exports to China have significantly increased since the RTA was signed. Table 1 shows the bilateral growth rate of exports between NZ and China, and compares them with NZ’s total exports to the world.

Table 1: Growth rate of New Zealand exports to China compared with rest of the world

Year	NZ exports to rest of the world	NZ exports to China
2001	10.6%	45.2%
2002	-5.5%	6.0%
2003	-8.7%	-3.8%
2004	7.2%	27.0%
2005	1.0%	-10.7%
2006	12.0%	19.9%
2007	5.6%	4.2%
2008	16.7%	30.0%
2009	-10.7%	43.5%
2010	7.4%	33.2%

(Source: Author's calculation, based on Statistics NZ, 2011b)

From Table 1 we can see the growth rate of exports to China was higher than the growth rate of exports to the rest of the world, except in 2005 and 2007. From 2008, the growth rate of exports to China has grown significantly.

Table 2 shows NZ's top ten merchandise export products to China from 2000 to 2010. From Table 2 we can see the major NZ exports to China were agricultural products: wood, wool and dairy products. In 2010, the top ten export products constituted 85.2% of NZ's total exports to China. In the year 2000, wool (16.2%) and dairy products (12.3%) were the top two export products to China. However, in 2010 dairy products were the biggest export to China with 37.9% of total exports. Wood became the second largest exported product with a share of 20.6%. Wool products still held an important position in third place, however, the share of wool decreased to 6.1% of total exports. Meanwhile, in the year 2000, organic chemicals had a large share in

total exports (9.4%), however, in 2010 organic chemicals were not represented in the top ten exports category at all.

Table 2: Top ten goods in New Zealand’s merchandise exports to China: 2000 and 2010

Year 2000		
Product	Export value (NZ \$ million)	Percentage of total exports
Wool	150.5	16.2%
Dairy products	114.6	12.3%
Wood and articles of wood	88.0	9.5%
Organic chemicals	87.6	9.4%
Wood pulp	65.6	7.0%
Raw hides and skins	59.9	6.4%
Animal or vegetable fats and oils	44.7	4.8%
Food industries	40.7	4.4%
Fish and other seafood	37.9	4.1%
Animal origin products	36.2	3.9%
Subtotal of top ten exports	725.6	78.0%
Total exports	929.6	
Year 2010		
Product	Export value (NZ\$ million)	Percentage of total exports
Dairy products	1828.3	37.9%
Wood and articles of wood	993.9	20.6%
Wool	292.3	6.1%
Wood pulp	185.2	3.8%
Preparations of cereals, flour, starch or milk, pastry (cooked)	183.0	3.8%
Fish and other seafood	165.4	3.3%
Meat and edible meat offal	135.6	2.8%
Animal origin products	120.5	2.5%
Animal or vegetable fats and oils	112.4	2.3%
Confidential items	99.3	2.1%
Subtotal of top ten exports	4110.8	85.2%
Total exports	4826.2	

(Source: Author’s calculation, based on Statistics NZ, 2011b)

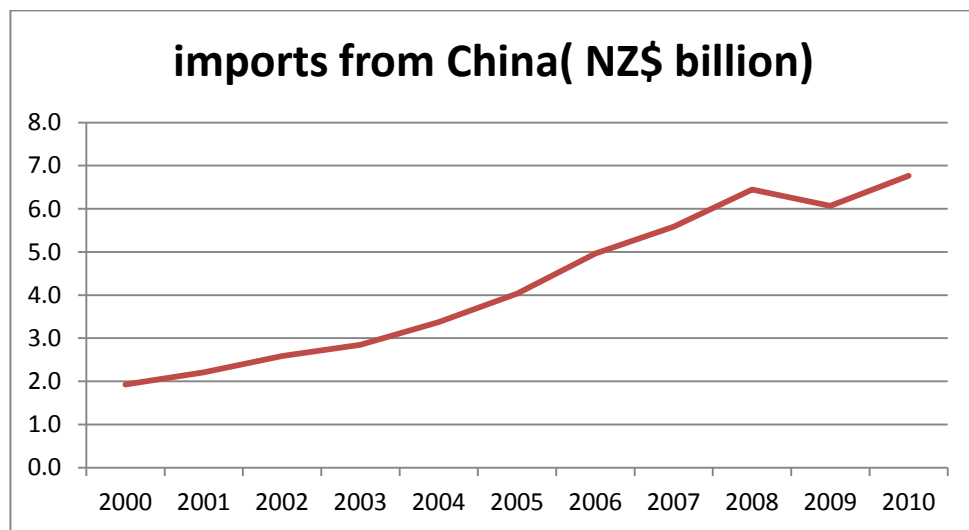
Furthermore, the total value of the top ten categories increased dramatically between 2000 and 2010. In 2000, NZ’s top ten exports were valued at NZ \$725.6 million and comprised 78.1% of NZ’s exports to China. In 2010, the top ten exports to

China had increased to NZ \$4,110.8 million, and the share increased to 85.2% of NZ's total exports to China.

2.2.2 New Zealand imports from China

New Zealand's imports from China have grown rapidly in recent years. China is now becoming the fourth largest import partner of NZ (Statistics NZ, 2011b).

Figure 3: New Zealand's total imports from China from 2000 to 2010



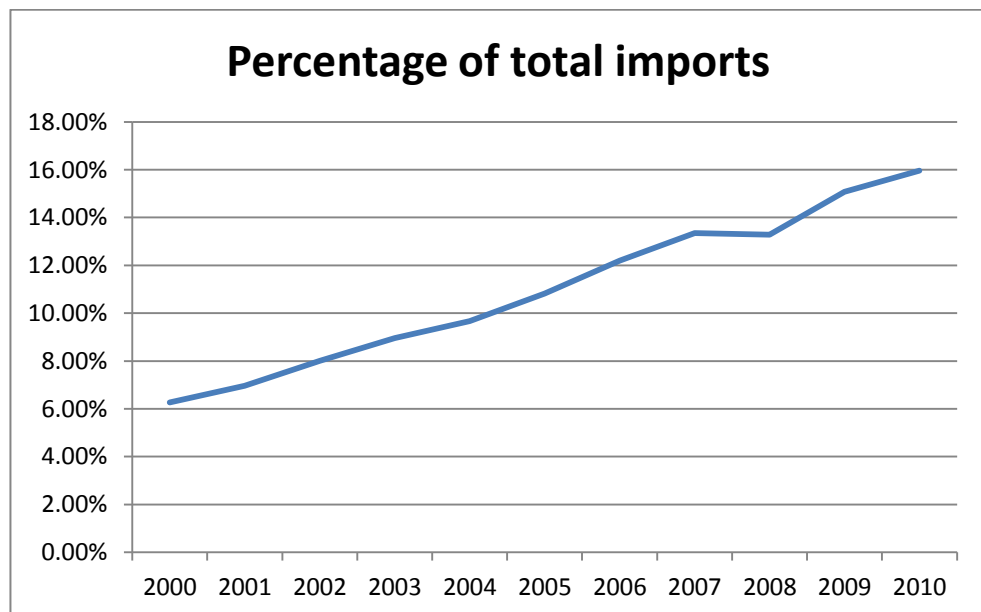
(Source: Statistics NZ, 2011b)

Figure 3 shows the total NZ imports from China from 2000 to 2010. From Figure 3 we can see the total value of imports from China had a significant and continuous increase from 2000 to 2010, except for a drop in 2009. The reason for this decrease may be because of the world financial crisis which occurred at the end of 2008. Not only did the value of imports from China decrease, the total import value to NZ also decreased.

In the year 2000, total imports from China were NZ \$1.9 billion, while in 2010 the total import value reached NZ \$6.7 billion. The total growth rate was over 250%. By using the CAGR formula, the overall growth rate of NZ's imports from China from 2000 to 2010 can be calculated, and is shown to be about 12.1%.

Furthermore, from Figure 3 we can also see that after the RTA was signed, NZ's imports from China dropped in 2009 and then rose again after that period. This drop makes analysing the impact of the RTA ambiguous. As a result, we break the time period into two parts to analyse the impact of the growth rate after the RTA was signed, further using the CAGR formula for analysis. The time periods are 2000–2007 and 2008–2010. After calculation, we see that the growth rate for NZ's imports from China was around 14.2% for the period of 2000 to 2007; the growth rate for the period of 2008 to 2010 was about 1.6%. The reason for the decrease in growth may be the world financial crisis in 2008. As a result, we cannot see the impact of the RTA on NZ's imports from China clearly. In the next section we will further analyse the shares of NZ's total imports from China and compare them with the rest of the world.

Figure 4: Share of New Zealand's total imports from China from 2000 to 2010



(Source: Author's calculation based on Statistics NZ, 2011b)

Figure 4 shows NZ's total imports from China as a share of total imports from the world, from 2000 to 2010. From Figure 4 we can see there is a significant and continuous increase in NZ's import share from China. In the year 2000, the share was just over 6%, however, in 2010, the share was nearly 16%. In 2008, the share of NZ's

imports from China decreased from 13.3% to 13.2%. However, in 2009, the share increased again, to 15.1%. As mentioned earlier, the import values decreased in 2009, probably because of the financial crisis. From Figure 4 we can see that although the total value of imports decreased in that year, the share of imports from China increased.

Table 3: Growth rate of total New Zealand imports from China compared with total New Zealand imports from rest of world

Year	Rest of world	China
2001	3.1%	14.7%
2002	2.1%	17.4%
2003	-1.7%	9.9%
2004	9.9%	18.5%
2005	6.8%	19.5%
2006	9.2%	23.1%
2007	2.8%	12.5%
2008	15.9%	15.3%
2009	-17.1%	-5.9%
2010	5.3%	11.5%

(Source: Author's calculations based on Statistics NZ, 2011b)

Table 3 shows the growth rate of NZ's total imports from China compared with the rest of the world, and we can see that the growth rate of imports from China is higher than the growth rate for imports from the rest of world, except for in 2008. In that year, the growth rate of imports from China was 15.3% and the growth rate for imports from the rest of the world was 15.9%, however, after 2008, the growth rate of imports from China was much higher than for the rest of the world, although in 2009 both growth rates decreased. The growth rate of imports for the rest of the world decreased by 17.1%, while imports from China only decreased by 5.9%.

Table 4: Top ten New Zealand imports from China for years 2000 and 2010

Year 2000		
Products	Value (NZ \$ million)	Percentage of total imports
Apparel and clothing, knitted	280.7	14.6%
Electrical machinery	261.5	13.6%
Apparel and clothing, not knitted	246.2	12.8%
Toys	137.3	7.1%
Machinery	133.6	6.9%
Footwear	110.7	5.8%
Furniture	65.2	3.4%
Plastics and articles thereof	57.3	3.0%
Articles of leather	55.9	2.9%
Textiles	52.3	2.7%
Subtotal top ten imports	1400.7	72.8%
Total imports	1924.5	
2010		
Products	Value (NZ \$ million)	Percentage of total imports
Machinery	1289.1	19.1%
Electrical machinery	1156.5	17.1%
Apparel and clothing, knitted	544.8	8.1%
Apparel and clothing, not knitted	457.6	6.8%
Furniture	322.1	4.8%
Toys	247.9	3.7%
Plastics and articles thereof	241.4	3.6%
Iron or steel articles	234.6	3.5%
Footwear	222.3	3.3%
Textiles	146.4	2.2%
Subtotal of top ten imports	4862.8	71.9%
Total imports	6762.1	

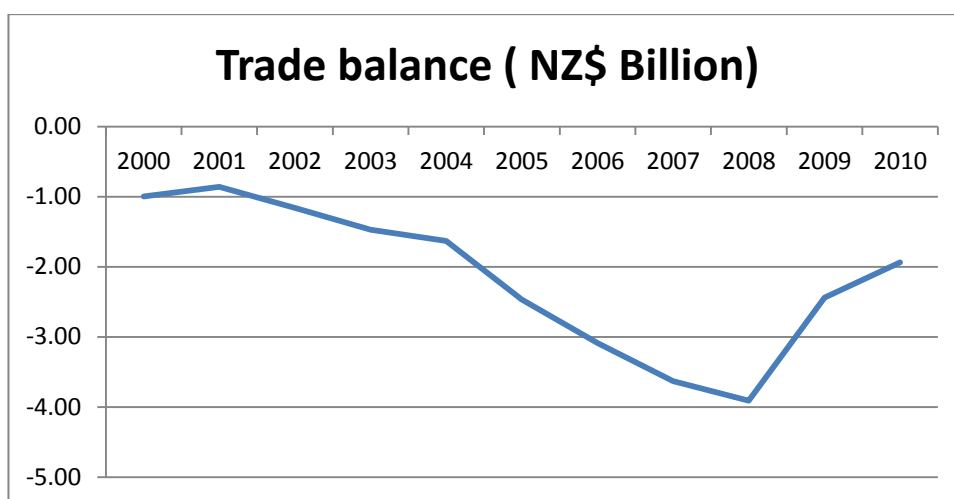
(Source: Statistics NZ, 2011b)

Table 4 shows the top ten categories of NZ's imports from China in 2000 and 2010, which can give us more information on the trade patterns and provide an in-depth understanding of the trading patterns between the two countries. We can see the major imports were machinery, electrical products, clothing, textiles, toys, footwear, and a

range of light consumer products. Electrical machinery and machinery occupies an important position and has significantly increased its share of the total of NZ's imports from China. In 2000, the value of machinery products imported was NZ \$133.6 million, while in 2010 it reached NZ \$1,289.1 million, with a 19.1% share of the total imports from China.

2.2.3 Trade balance

Figure 5: Trade balance between New Zealand and China from the year 2000 to 2010



(Source: Author's calculation based on Statistics NZ, 2011b)

Figure 5 shows the trade balance between New Zealand and China from the year 2000 to 2010. From the table we can see there was a trade deficit in NZ trade with China. From 2001 to 2008, the trade deficit increased at a significant and continuous rate. However, from 2009 the deficit has decreased, which means NZ has increased its export value to China. At the end of 2008, NZ and China signed the RTA, and some trade barriers and tariffs were eliminated. In Figure 5 we can see that NZ has increased its export share to China — this increase is especially in dairy and other agricultural products. Under the RTA, the tariff rate for agriculture including dairy was decreased, which facilitates trade and improves the trade balance in NZ's favour. The following

section will indicate some key outcomes of the NZ–China RTA, and state how this RTA will benefit both countries.

2.2.4 Trade intensity trends

The previous sections show the trends of NZ–China bilateral trade from 2000 to 2010 and shows that the two countries have strengthened their trade relationships. The total value of trade between the two countries has risen significantly from 2000 to 2010. In this section, trade intensity is used to further estimate the relative importance of China as a trading partner of NZ.

The Trade Intensity Index (TII) is often used to analyse bilateral trade linkages, since it is a relative measure of bilateral trade shares of two countries with respect to their trade with the rest of the world (Asian Development Bank [ADB], 2012). The total TII formula is:

$$TII_{ij} = (t_{ij}/T_{iw})/(t_{wj}/T_{ww})$$

Where: t_{ij} is the total trade of home country i with its trading partner country j ; T_{iw} is the total trade of home country i with the world; t_{wj} is the world trade with country j ; and T_{ww} is the total world trade (Asian Development Bank [ADB], 2012).

Table 5 shows the TII for NZ and China from 2000 to 2010. The result is obtained from the ADB, Asia Integration Centre — Integration Indicators Database. The TII is the ratio of the trade share of a country to the share of world trade with a partner. The result is between 0 and $+\infty$. A value greater than 1 indicates trade flow between countries is larger than expected given their importance in world trade.

Table 5: Trade intensity index between New Zealand and China by year

Home Country	Trading Partner	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
New Zealand	China	0.99	1.08	1.10	1.09	1.12	1.09	1.16	1.16	1.18	1.29	1.32
China	New Zealand	1.05	1.03	1.01	0.94	0.95	0.86	0.85	0.88	0.90	1.07	1.11

(Source: Asian Development Bank, Integration Indicators Database, 2012)

From Table 5 we can see there was an increasing trend in the NZ–China TII. From 2001 to 2010, the values of trade intensity for each year were all greater than 1. This indicates that trade flows between NZ and China are larger than expected given their importance in world trade.

However, the China–NZ TII decreased from 2000 to 2006, with values dropping from 1.05 (year 2000) to 0.85 (2006). This indicates that the bilateral trade flow was smaller than expected. However, there was an increase in the TII from 2007 to 2010. In 2009 and 2010, the values of the TII were greater than 1 — the TII was 1.07 in 2009 and 1.11 in 2010. This indicates that the bilateral trade flows between China and NZ were larger than expected compared with the rest of world trade. Overall, China is a more important trading partner for NZ relative to the rest of the world.

2.3 The New Zealand–China regional trade agreement: background and key outcomes

The RTA is a treaty between countries to decrease or eliminate tariffs on goods and services that intends to facilitate and liberalise trade and investment while maintaining tariffs with non-member countries.

NZ and China announced the negotiations on a bilateral RTA in November 2004. Then, after 15 rounds of negotiations, NZ and China signed the NZ–China FTA in Beijing in April 2008. The NZ–China FTA was enforced in October 2008. The intent of this agreement is to strengthen economic development and growth. The expectation by the NZ government is that the RTA will improve market access opportunities for NZ, and also Chinese, exporters. It will also reduce the compliance costs for NZ exporters. Moreover, the RTA will facilitate trade in goods and services and also investment, and encourage productive commercial partnerships. Furthermore, it will improve access to a wider range of products and services for consumers in NZ and China (NZ Ministry of Foreign Affairs & Trade, 2011a).

The NZ–China RTA is a milestone for both countries in economic and trade development: it provides mutual benefits by this agreement to remove tariffs and increase trade volumes. Moreover, this RTA is important to both China and NZ, as NZ is the first developed country to have a bilateral agreement with China. This has significant implications for China as it is recognition of China’s market place in the world stage.

The RTA is aimed to deliver the following main outcomes. Trade in goods: The NZ–China RTA is expected to eliminate tariffs on 96% of NZ’s current exports to China over the period 2009-2019. The average duty payment for NZ exports to China was NZ \$118.5 million between 2004 and 2006. After the signing of the RTA, NZ is expected to save NZ \$115.5 million in duty payments. From the first day that the RTA came into effect in October 2008, 35% of exports were expected to be duty free, and 75% of NZ’s wool exports were to be duty free from 1st January, 2009 (NZ Ministry of Foreign Affairs & Trade, 2011b). A further 31% of the current exports will be duty free in the next five years (NZ Ministry of Foreign Affairs & Trade, 2011b).

In addition, customs procedures are one of the challenges for international trade with China. The RTA has provided for cooperation in the administration of customs, and the general obligation is predictability, consistency, and transparency to facilitate trade. In general, both countries need to release the originating products within 48 hours of arrival, in the course of normal events (NZ Ministry of Foreign Affairs & Trade, 2011b). The ease of administrative procedures with regards to customs can also reduce hassles with trading and promote trading activities.

2.3.1 Rules of origin

Rules of Origin (RoO) are used to determine the country of origin of a product for international trade purposes. They are among the most important instruments in the negotiation and function of RTAs, and are designed to determine the eligibility of goods

for preferential treatment among RTA members (Estevadeordal, 2006). The RoO provide governance to trading activities. The NZ–China RTA includes rules that determine which products qualify for tariff reduction or elimination, which is referred to as RoO. Moreover, the RTA also contains rules to counter unfair trade or unexpected surges in the imported products from the other country. Under the NZ–China RTA, products must meet the RoO criteria in order to qualify for preferential tariff treatment. These rules are based primarily on a change of tariff classification (CTC)³ approach in order to facilitate trade and minimise compliance costs for exporters. Furthermore, the supplementary Regional Value Content (RVC)⁴ is also applied for some products, while CTC forms the basis for the RoO. A requirement is introduced by this agreement for the certification of origin for exports to China in order to claim preference. This certificate, which is issued by authorised bodies and approved by the NZ government, is intended to facilitate trade and provide NZ exporters with easy access to the tariff benefits of the RTA. In contrast, NZ will not require that certificates of origin accompany imports from China in order to establish long term practice (NZ Ministry of Foreign Affairs & Trade, 2011b).

2.3.2 Trade in services

The NZ–China RTA aimed to liberalise trade in services and help NZ companies to do business in China, which includes sectors such as education, tourism, construction, and transport (NZ Ministry of Foreign Affairs & Trade, 2011a). The agreement includes the four modes of service supply, which are cross-border trade, consumption abroad, commercial presence, and movement of natural persons. The NZ–China RTA establishes the general obligations of market access and national treatment in order to

³ Change in Tariff Classification is one of the criteria used to qualify a product under Substantial Transformation.

⁴ Regional Value Content: a percentage that indicates to what extent a good is produced in the producer's local region.

set out specific reservations in those services scheduled in each country. These obligations will ensure NZ service suppliers have easy access to China's market without quotas, and be able to operate in China on the same basis as domestic suppliers (NZ Ministry of Foreign Affairs & Trade, 2011b).

The NZ–China RTA also includes a reciprocal Most Favoured Nation (MFN) clause which applies in specific sectors⁵. New Zealand service suppliers will receive benefits automatically if China makes further liberal commitments in future RTAs. This will ensure NZ exporters' competitive position in the China market (NZ Ministry of Foreign Affairs & Trade, 2011a).

2.3.3 Manpower flows

New Zealand's commitments to the RTA mean it must provide temporary entry for business people, installers and servicers from China using convenient processes. Moreover, it must also provide entry to NZ for temporary employment. These commitments will provide convenient conditions for people who operate businesses between NZ and China. China normally requires visitors to apply for a visa to enter the country, and the RTA also addresses this issue, making it easier for NZ and Chinese nationals to enter each other's country temporarily, related to supply of services. China has agreed to fast-track NZ business visas and has extended the maximum stay to six months instead of 90 days. Moreover, NZ has also made two new visa facilitation commitments: firstly, to provide a decision within 10 business days on student visa applications where the applicant has an offer of a place in an NZ tertiary institution, and a commitment to create a new group transit visa for Chinese nationals. Moreover, people from China with specified qualifications as employees can apply for up to three years entry without market testing. Those quantitative and skilled seeking features in

⁵ MFN status applies to these specific sectors: environmental services, agriculture and forestry, construction, engineering, computer and related services, integrated engineering, and tourism (NZ Ministry of Foreign Affairs & Trade, 2010).

commitments, together with the specific requirement of employees to observe NZ labour market conditions, are designed to avoid NZ workers being displaced by Chinese workers (NZ Ministry of Foreign Affairs & Trade, 2011b). Further, the ease of manpower flows to NZ and long term stay in NZ will facilitate the FDI from China to NZ as businesses become more convenient to operate in NZ.

2.3.4 Investment flows

The investment principles of the NZ–China RTA address treatment and MFN non-discrimination concerns with a range of investment protection disciplines and provision for investor recourse to arbitration procedures. The RTA also provides a mechanism for the compulsory settlement of disputes between foreign investors and the host country government. If the dispute cannot be settled within six months through negotiation and consultation, the investor is able to submit the conciliation issues to the International Centre for the Settlement of Investment Disputes (ICSID) or arbitration under the rules of United Nations Commission on International Trade Law (UNCITRAL) to secure their rights (NZ Ministry of Foreign Affairs & Trade, 2011b). To promote investment between NZ and China, both countries will work together to increase the security of investment in each country. It has been agreed that both countries should treat the other country’s investors and investments as well as they treat their own investors and investments (NZ Ministry of Foreign Affairs & Trade, 2011b). Moreover, both countries also agreed to give MFN treatment to investors and investments of the other country, except in fisheries and maritime matters (NZ Ministry of Foreign Affairs & Trade, 2011b). This means if China has given a third country any better treatment, this treatment must be extended to NZ as well; the same applies to NZ. Further, the NZ–China RTA provides additional protections⁶ for NZ investment in China.

⁶ These include: unjustified expropriation; compensation for losses arising from wars, armed conflict and similar situations; provisions to allow the free transfer of investment funds; and the incorporation of

To review, the main objective and targeted outcome of the NZ–China RTA is a comprehensive agreement that will increase trading activity, liberalise service trade, and promote more investment between the two countries. Although there will be challenges faced in future, both countries have agreed to work together to improve the business environment and to open up business opportunities, and the RTA will strengthen NZ and China’s relationship and establish a cooperative framework to solve any future trading issues. Furthermore, the RTA also supports NZ with the purpose of widening the options for establishing close relationships with other Asian countries and for strengthening economic integration and regional trade (NZ Ministry of Foreign Affairs & Trade, 2011b).

2.4 Expected impact of New Zealand–China regional trade agreement on trade and investment

The NZ–China RTA, after removal of 96% of tariffs, is expected to save payments of tariff duties worth NZ \$115.5 million when exporting to China, and the bilateral trade will be facilitated through customs cooperation and electronic documents. The increasing use of electronic communications by businesses in China and NZ is improving efficiency and reducing transaction costs. Moreover, effective customs facilitation is essential to the efficient conduct of trade and movement of people across borders, which will lead to a reduction in the transaction costs of international trade. Customs cooperation will minimise any disruption to the flow of goods and people, and avoid the unnecessary costs to traders and restrictions on trade (NZ Ministry of Foreign Affairs & Trade, 2011b). The simplicity of customs procedures and the commitment to release products within 48 hours makes it much easier for trading between the two countries. Further, NZ will benefit from China’s commitments to the service industry, including the education and tourism industries. The improved procedure for movement

minimum international law standards of fair and equitable treatment and full protection and security (New Zealand Ministry of Foreign Affairs & Trade, 2011).

of manpower will give NZ more opportunities to fill the skill gap in employment and provide convenience for people who operate businesses between the two countries. Furthermore, the RTA is also expected to facilitate bilateral investment flows and stimulate FDI inflows and outflows between NZ and China. This is particularly through the MFN provision which ensures NZ will not be worse off compared to other foreign investors in China.

The economic impact of the NZ–China RTA on NZ is greater than on China, especially in the agricultural sector (Tang, 2007). New Zealand has a comparative advantage in the agricultural sector compared with China. Since agriculture plays an important role in NZ’s export earnings and China’s agricultural needs are growing fast, China is becoming an important market for NZ agricultural products.

On the other hand, China has a comparative advantage in the manufacturing sector, such as in textiles, clothing, and footwear. China also has a competitive advantage in the labour-intensive production sector, and as a result, NZ businesses benefit — since the tariff is eliminated by the NZ–China RTA.

Furthermore, a joint study was done by the NZ Ministry of Affairs and Trade on the NZ–China RTA. The report estimates that the bilateral trade between the two countries will rise significantly, and production and welfare sectors will also grow positively. From 2007 to 2027, NZ’s imports from China are expected to increase by US \$40-70 million with a growth rate of 5-11% per year. New Zealand’s exports to China are expected to grow by US \$180-280 million, with a growth rate of 20-39% per year. Moreover the NZ–China RTA is expected to contribute US \$24.7 billion of total welfare gains to China, while NZ is expected to gain US \$2.3 billion (NZ Ministry of Foreign Affairs and Trade, 2004). Therefore, the NZ–China RTA will benefit both countries’ people and economies.

2.5 Conclusion

In this chapter we first evaluated the bilateral trade trends between China and NZ from 2000 to 2010. In 2000, China was the fourth largest trading partner of NZ; however, China is now becoming NZ's second largest trading partner (WTO, 2011). New Zealand's major exports to China are agricultural products including dairy goods, and major imports from China are machinery and manufactured products. Those different characteristics make it easy for the two countries to enjoy bilateral trade. After NZ and China signed the RTA in 2008, NZ's exports to China have increased dramatically, especially in agricultural products. As the trade barriers and tariffs have decreased under the RTA, China has become a very important market to NZ. Moreover, the growing demand for agricultural products, dairy products, meat, and seafood in China has given NZ's domestic businesses further opportunities.

The second part of this chapter analysed the background and key outcomes of the NZ–China RTA. It is observed that this RTA has the potential to expand both bilateral trade and investment flows between the two countries. As FDI occupies an important position in NZ's economy, it is important to analyse the impact that this RTA may have on stimulating FDI inflows to or outflows from NZ and China. Since the RTA has only been in effect since October 2008, the post-RTA period is just three years — which provides insufficient data on which to carry out statistical time series analysis. The next chapter will therefore undertake a thorough review of the existing literature in this area to analyse whether RTAs have generally had a more significant or insignificant impact on FDI flows between the two member countries.

Chapter 3: Literature Review

3.1 Introduction

Chapter 2 evaluated the historical bilateral trade trend between NZ and China from 2000 to 2010, and key outcomes of the NZ–China RTA. The analysis suggested that there is likely to be a significant impact on the trade in goods, services, and investment between the two countries. However, before any empirical analysis is undertaken, it is important to review the existing literature in this area as there have been instances where RTAs have not stimulated bilateral FDI significantly.

In this chapter, both theoretical and empirical literatures of the impact of RTAs on bilateral FDI are reviewed. The purpose of this chapter is to use the literature to clarify and amplify salient points pertaining to key theories and issues relating to the research topic, so that a theoretical framework can be developed for the study. Key terms and theories are, therefore, critically appraised leading to the development of an *a priori* conceptual framework. In general, while the majority of studies conclude that there are positive impacts on bilateral FDI after RTAs were signed, the evidence of this is open to debate. This chapter first reviews the literature on FDI and its determinants, analysing in greater detail the role of the RTA as one of the determinants.

3.2 Determinants of FDI

FDI is defined as a category of international investment that reflects the objective of a resident in one economy (the direct investor) obtaining a lasting interest in an enterprise resident in another economy (the direct investment enterprise) (IMF, 2007).

The direct investment relationship is established when the direct investor has acquired 10% or more of the ordinary shares of an overseas enterprise. Shares of less than 10% are defined as portfolio investments and are not categorized as FDI. For

example, an American company taking a majority stake (more than 10%) in a Chinese company is considered FDI; however, if the American company buys less than 10% of shares in a Chinese company, it is not considered FDI. Furthermore, all subsequent capital transactions between the direct investor and the direct investment enterprise, and among affiliated enterprises resident in different economies, are also defined as FDI. Other than having an equity stake in an enterprise, there are many other ways to define FDI activities. These include subcontracting, management contracts, “turkey” arrangements, franchising, leasing, licensing, and production-sharing (IMF, 2007). There are some key findings regarding FDI, such as that FDI does not necessarily require control of the enterprise, as only 10% ownership is required. Foreign direct investment only involves one investor or related group of investors obtaining 10% shares. Foreign direct investment is not based on the nationality or citizenship of the direct investor; it is based on their residency. However, borrowings from unrelated parties abroad which are guaranteed by direct investors are not FDI (IMF, 2007).

According to Navaretti and Venables (2004), FDI includes equity capital, reinvested earnings, and other direct investment capitals. However, FDI is different from other portfolio investments; it is more long term oriented and difficult to relocate (Ahlquist, 2006; Jensen, 2003). Most FDI is from multinational corporations such as Coca Cola, Microsoft, Apple, IBM, and Toyota, as well as many others: they have established operations worldwide, they have factories, research centres, and distribution networks in most of the major markets in the world, and they contribute to a substantial part of the FDI (Li & Resnick, 2003).

There has been significant growth in FDI over the past decades. According to Bütte and Milner (2009), the real FDI inflows increased 17.7% from 1985 to 1999, and the growth reached its peak in the late 1990s, at around 40%. More than 90% of the FDI

flows originated from developed countries from 2002 to 2004 (Navaretti & Venables, 2004). In recent years, developing countries have been competing to acquire more FDI to help finance the development of their own countries. Foreign direct investment is more than simple financing; more importantly, it acts as a means of transferring knowledge and technology between countries. When Microsoft invests in a research centre in China, this means Microsoft will invest in, and help to develop the knowledge and skills of, Chinese employees. This transfer of knowledge and skills into China is critical for the long term sustainable development of China's economy.

There are two types of FDI, which are defined as “horizontal” and “vertical” (Büthe & Milner, 2009; Jensen, 2003; Navaretti & Venables, 2004). Horizontal FDI is also known as “market-seeking FDI”. The intention of horizontal FDI is to have production close to local consumers to avoid trade costs. For example, Coca Cola has factories in different countries to make it more efficient to distribute to the local retailers. However, the trade-off in this model is between realising economies of scale at the company level. The company forgoes the benefits of economy of scale to reduce transactional costs — sometimes this makes sense, since the shipping, tariff, and other related costs could be substantial. Therefore, the main incentives of horizontal FDI are the reduced trade costs and the size of the target market. If the target market is a big market like India or China (the trade costs for exporting to these countries can be very expensive), the company will have more incentive to build a plant in the target country and establish local presence. However, if the market is small and the cost of establishing a new plant is large, then the company will have less incentive to build a new plant near the target market (Leshner & Miroudot, 2006). New Zealand is a small developed economy and is a small market, but Coca Cola has invested heavily in NZ and has recently invested in a new plant in Christchurch. One reason is to achieve lower cost inputs — because of the remote location of NZ, the transportation costs will be higher

than establishing a local plant. Another reason is to better serve the local market. If tariffs are high, the horizontal FDI will tend to replace exports if the costs of market access through exports are higher than the net costs of setting up a local plant and operating the business in a foreign environment (Lim, 2001). As a result, this leads to a trade-off between realising economy of scale and using the “tariff jumper” strategy. If trade costs rise, exporters will tend to build a plant in the host country and sell products directly; if trade costs decrease, multi-national companies (MNCs) would benefit more from economies of scale rather than from tariff jumping strategies (Yeyati, Stein & Daude, 2003; Leshner & Miroudot, 2006). Moreover, horizontal FDI will be more likely to replace exports in large local markets. One reason is that the fixed cost for building plants in the local country will be lower per unit of output as the market is larger. Another reason is that a larger market will tend to have more local firms, which will lead to a lower price for the products because of the more intense competition (Shatz & Venables, 2000).

Vertical FDI aims to take advantage of location-specific differences such as cheaper labour and easier accessibility to natural resources, to seek efficiency (Büthe & Milner, 2009). For example, China is now the factory of the world; most large companies in developed countries have moved their manufacturing plants to China to take advantage of the labour productivity and cheap resources. Moreover, many information technology (IT) companies have outsourced their development and services to India to seek efficiency. Therefore, vertical FDI is a way for developed nations to gain efficiency by utilising relatively cheap labour and resources, and at the same time provide capital inflow to developing countries to help their country’s development. In addition, there is a trade cost and skill difference trade-off for vertical FDI. Over time, vertical FDI will increase when the trade costs decrease and the skill differences increase (Yeyati, Stein & Daude, 2003; Leshner & Miroudot, 2006). Research shows that

OECD countries, which have superior technology and skills, attract more horizontal FDI, whereas developing nations mostly attract vertical FDI (Blonigen & Wang, 2004). Thus, vertical FDI has a complementary relationship with the goods trade via a comparative advantage of trade partners pursuing efficiency production processes. This leads to the positive impact of RTAs on this type of FDI.

In summary, countries with large differences in factor endowments will lead to attracting more vertical FDI (Yeyati, Stein & Daude, 2003). Furthermore, host countries' openness to trade is also a key characteristic affecting vertical FDI. When a host country has low initial trade barriers, which makes it more open to trade, it is likely to attract more vertical FDI and less horizontal FDI (Blomstrom & Kokoo, 1997). However, the most important factors affecting horizontal FDI are trade cost and market size. The NZ Treasury (2009) has indicated that because of the small domestic market size in NZ, market seeking is more important than resource or efficiency seeking FDI for investors in NZ.

3.2.1 Economic determinants of FDI

Dunning's eclectic paradigm (1980, 1981, 1998) is probably the most comprehensive framework to explain the reasons for FDI and is treated as the main theory to explain the dominant determinants for MNCs making investments in other countries. In the last decade of the 20th century, Dunning's ownership-location-internal advantages framework was treated as the main determinant for MNCs to invest in countries other than their home countries. The theory includes three main factors that multinational corporations will consider before making an FDI decision, which are: ownership advantage (explains who will undertake FDI), location advantages (explains where FDI flows to) and internalisation advantages (explains the mode of FDI in international production).

More specifically, ownership advantage argues that a company will only invest abroad when it possesses advantages over foreign competitors. This competitive advantage is usually intangible assets such as a well-recognised brand name, patents, or superior technology. The rationale is that this competitive advantage needs to be substantial enough to overcome the costs of entering and investing in the target market. Moreover, if the firm has certain competitive advantages, it will be easier for the firm to be successful in the target market.

The second factor is the influence of location. This explains why a certain firm chooses to invest in one country over another, based on the specific location. There can be many factors influencing the decision on where to invest, and location is certainly very important. For example, in the Asia-Pacific region, many firms invest in Hong Kong and Singapore due to their tax benefits, and also because they are very business-friendly places to operate, have stable political environments, and a good pool of talent. Another important reason is tariff jumping, which means that companies will choose the market which has lower tariffs for manufacturing their products in, rather than exporting to that market. In addition, the lower labour costs, capital, resources, and other factors which give competitive advantage in their home countries could allow firms to cut their costs and encourage them to invest in the host country. Host countries that have higher trade barriers and easier market access compared with the home country, are the most common location advantages. Moreover, the target country's market size and growth potential will also impact on FDI flows. The bigger the market is, and the bigger it grows, the more it will encourage increased FDI flows.

The third factor is called internalization advantages. This factor addresses the questions of why the company chooses to engage in FDI rather than by licensing its patents to the local companies in the target country. The reason for choosing FDI may be because it can increase the company's market share and achieve a higher return.

Moreover, FDI also allows the company to best safeguard its intellectual assets, especially in developing countries.

Moreover, foreign firms generally invest in countries with large market sizes to capitalize on ownership-specific assets. Foreign firms also expect to gain valuable skills and large economies of scale by acquiring intangible assets like market knowledge and expertise (Chakrabarti, 2001). Therefore, the larger the size of the market of the host country, the more important a factor it is in attracting higher levels of FDI. In NZ's context, since NZ is a small, developed economy, NZ's FDI appears to be predominately market-seeking (NZ Treasury, 2009).

Wage rates are also an important factor affecting FDI flows. Wei and Liu (2001) indicated that a low wage rate in China was the key location factor for firms investing in China. Thus, the low wage rates in the host country can attract labour intensity and efficiency-seeking FDI.

More recently, Markusen (2002) developed the knowledge-capital model. The knowledge-capital model applies to technology of firm-fixed cost, which is characterized by: relatively low costs of geographically fragmenting headquarters and a single plant, skilled labour intensity of firm-fixed cost relative to the production, and jointness of firm-fixed costs across multiple plants. Fragmentation, skilled labour intensity, and jointness are three defining assumptions of this model. Fragmentation and skilled labour intensity motivate vertical multinationals to locate their single plant and headquarters in different countries, depending on prices and market sizes. Jointness gives rise to horizontal multinationals producing the final goods in multiple countries.

Further, Bergstrand and Egger (2007) have expanded the capital knowledge model into the three factors and three country models, which explain the decision to replicate the same activities in many locations and fragment production geographically. Based on the knowledge-capital model, the horizontal FDI is more likely to be preferred

if the countries are of similar size and trade costs are high. In comparison, vertical FDI is more likely to be preferred when countries have differences in endowments and trade costs are low.

Overall, in summary, researchers have identified four main motives for multinational corporations to undertake FDI, which includes market seeking, resource seeking, efficiency seeking, and strategic asset seeking (UNCTAD, 1998; Mallampally & Sauvart, 1999; Dunning, 2000). Moreover, during market seeking, multinational corporations focus more on the size of the market, purchase power of the local market, and the growth potential of the markets (Love & Lage-Hidalgo, 2000; Yang et al., 2000).

Rizwan and Chen (2011) investigated the strategic motivation of NZ and Australian manufacturing FDI in the international market from 1998 to 2008. The authors aimed to find out how different forms of ownership have specific advantages, for example location-specific advantages and internalisation advantages, and other strategic motives which have influenced NZ and Australian firms to invest in foreign markets. In this analysis the authors used a binomial logit model and data that was based on 136 NZ and Australian manufacturing firms undertaking FDI in 35 countries from 1998 to 2008. The results showed the location-specific advantage has influenced the ownership choice of NZ firms in foreign markets. Furthermore, the large market size and low levels of cultural distance also increase the level of NZ firms' investment in foreign markets with market seeking and/or efficiency seeking FDI. In addition, low exchange rate fluctuation will increase the probability of NZ firms' risk reduction seeking FDI.

3.2.2 Political determinants of FDI

Despite the increasing focus on the economic determinants of FDI, political factors are still very important for decision makers. There are many multinational corporations that

prefer to invest in countries with stable political environments; frequent government changes or policy changes tend to lower the investment. Moreover, some country's legal frameworks are still underdeveloped and vague; therefore there are many areas of uncertainty and all are subject to change. This is especially true for developing countries; political factors are more important to consider when creating FDI in developing countries than in developed countries. Many researchers have found that political factors are a significant determinant for FDI (Brada, Kutan & Yigit, 2005).

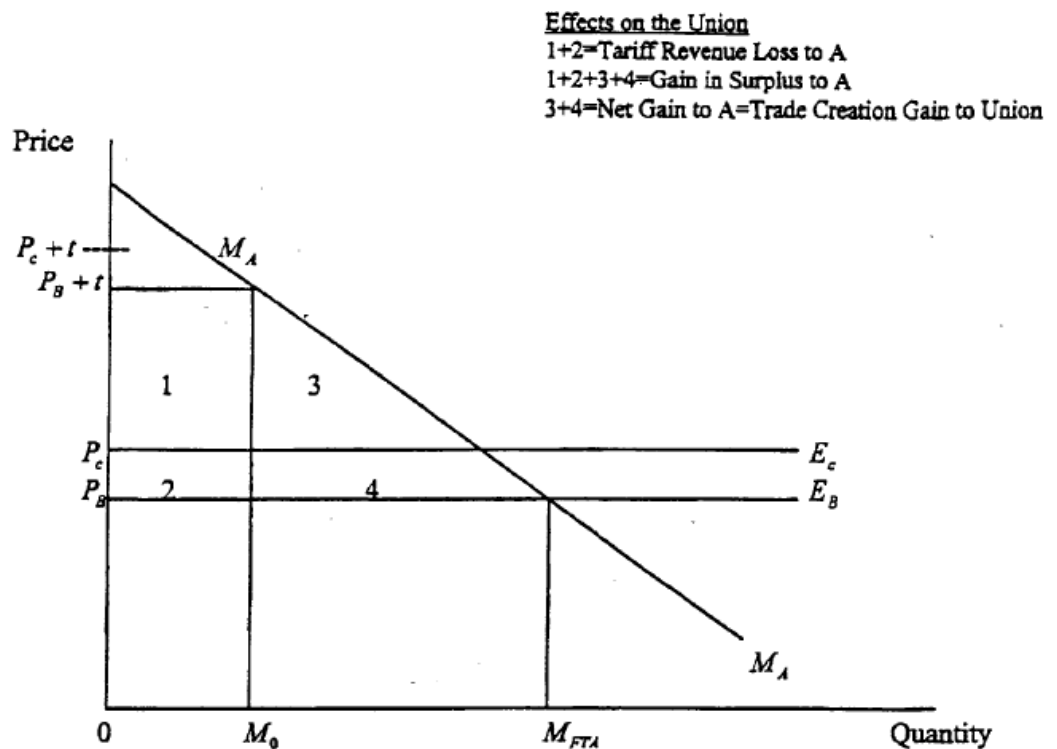
Brada, Kutan and Yigit (2005) adopted an indirect approach to quantify the effect of transition and political instability on FDI in the Commonwealth of Independent States (CIS) economies, including Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, the Kyrgyz Republic, Moldova, Tajikistan, Turkmenistan, and Uzbekistan. The paper found significant evidence that economic transition and political instability, no matter whether the origins were domestic or stemmed from international conflicts, affected the FDI inflow to the transition economies of Central Europe and the CIS. Moreover, the transition status of these countries normally enabled growth in FDI inflow and the good performance of Central European countries enabled them to receive dramatic increases in FDI inflows compared to West European countries. Furthermore, the paper indicates that the shortfall in FDI flow to CIS transition countries relative to Central European economies is attributable to regional political instability.

3.3 Regional trade agreements as a determinant of FDI

In recent years there has been an increase in RTAs. RTAs allow companies to allocate resources more efficiently, to enjoy economies of scale in production and distribution, to enjoy lower trade barriers, and to improve competition among members. Trade creation and trade diversion are used to determine the costs and benefits of an RTA, and these two effects can determine whether the RTA enhances welfare or not. Trade

creation can lead to the positive impact of an RTA, if the RTA leads to an increased proportion of supplied products with lower production costs compared with domestic producers in member countries (Viner, 1950). Figure 6 shows the case of a trade creation union with an initial non-discriminatory specific tariff, “t”. Country A imports OM_0 quantity of products from country B.

Figure 6: Trade creation union of countries A and B



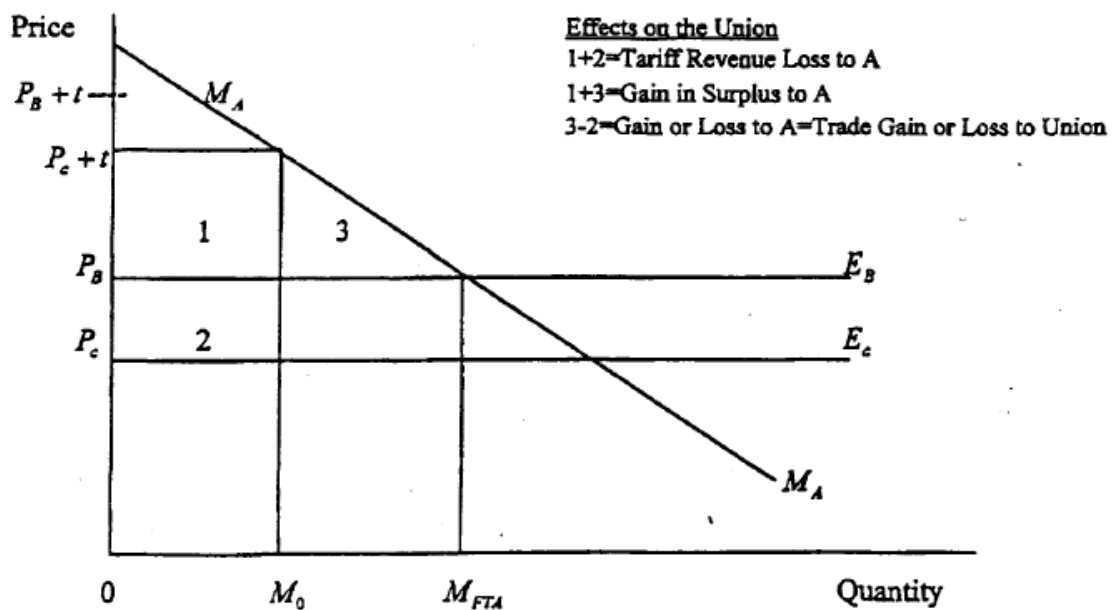
(Source : Bhagwati & Panagariya, 1996)

Areas 1 and 2 are the tariff revenues that country A raises. If A forms an RTA with country B, imports from B expand from OM_0 to OM_{FTA} . From the figure we can see that the tariff revenue disappears once the RTA is formed, but the price facing consumers declines by t ; country A's consumers capture the entire revenue in the form of increased surplus. Since B is the lower cost source of the product, there is positive trade creation without trade diversion. Areas 3 and 4 are the net gains of country A, and

to the union, which is created by the non-discriminatory RTA (Bhagwati & Panagariya, 1996).

On the other hand, trade diversion leads to the negative impact of an RTA. This occurs when the RTA diverts trade away from a more efficient supplier outside the RTA, towards a less efficient supplier within the RTA (Viner, 1950). Figure 7 shows the case of a trade diverting union.

Figure 7: Trade diversion union of countries A and B



(Source: Bhagwati & Panagariya, 1996)

In Figure 7, B is the higher cost source of the product. Country A forms a non-discriminatory tariff, then all imports come from country C. Country A imports OM_0 and gains areas 1 and 2 in tariff revenue. If A and B form an RTA, imports expand to OM_{FTA} , but the source of their supply moves from C to B. Although the reduction in A's domestic price leads to some trade creation as the increased imports lead to a displacement of some inefficient domestic production and an increase in consumption in country A, the switch to the higher cost source country B leads to a large trade diversion from C to B. Area 3 is the gains, and area 2 is the losses, to A (Bhagwati & Panagariya,

1996). From the above we can see that RTAs can lead to trade creation effects in some sectors, and also leads to trade diversion in others. Thus, by comparing trade creation with trade diversion we can see that, RTAs will likely have a positive impact if trade creation is stronger than trade diversion.

Regional trade agreements can affect the FDI — both indirectly through the trade liberalisation process, and directly through investment liberalisation under the rules of the RTAs. The direct impact on FDI is through investment liberalisation based on the rules of the RTA (Blomstrom & Kokko, 1997; Blomstrom, Kokko & Globerman, 1998; Worth, 1998). Meanwhile, trade liberalisation can diminish inside regional tariffs to form a free trade area and enlarge the intra-regional market. This will lead to attracting more FDI inflows from outsiders. However, it may also decrease the FDI to the region because of the export preferences to FDI if the external trade barriers are lowered as well.

International restriction relief provides a more attractive market for MNCs. Blomstrom and Kokko (1997) have done a thorough review of the empirical evidence on the investment effect of regional integration agreements, and indicate that RTAs can affect investments at industry and country levels. The paper summarises the findings of three regions: North-North integration such as the impact of the Canada-US Free Trade Agreement (CUSFTA) on Canada, North-South integration focusing on Mexican participation in the North American Free Trade Agreement (NAFTA), and South-South Integration such as the formation of the Southern Common Market (MERCOSUR).

Firstly, CUSFTA came into effect in 1989 to eliminate the bilateral tariffs between the US and Canada. Evidence shows that bilateral trade between the two countries become important from 1988 onward, which proves that CUSFTA improved the North American trade environment. However, there are inconsistent patterns in FDI inflows between the two countries. The authors presented the Canadian FDI data

between 1986 and 1995, and provided an overview of the FDI before and after CUSFTA. The data shows that the bilateral direction of investment was relatively stable from 1988 to 1992, the investment from the US increased substantially from 1993 to 1995, and the outward investment to the US increased in 1994 and 1995, but then the level of investment reverted back to the level experienced in the mid-1980s. Hence, Canada offers a potentially instructive case study of the impacts of an RTA on foreign direct flows for a small open economy. However, since the environmental change connected with CUSFTA was not dramatic, the increase of investment flow is unlikely to be related to CUSFTA. Moreover, the pattern of Canadian outward investment also changed after 1990, before the primary FDI was directed to the US, but after 1990 there was a reduction in the importance of the US as a destination for Canadian outward direct investment. By reviewing the data related to inward and outward FDI between Canada and the US, it is hard to find any consistent influence of the agreement.

Secondly, in December 1992, the US, Canada, and Mexico signed NAFTA, which came into force in January 1994. This RTA is the first including both developed and developing countries. It is expected that the effect of this agreement on Mexico will be significant because of Mexico's close geographical location with the US and Mexico's significant policy changes. However, the data suggests that the US FDI position in Mexico has not increased much since 1992 and Mexico's share in total US investment has decreased in the past years. In fact, much of the US companies' investments took place before the formal discussions regarding NAFTA. Moreover, the timing of increased investment in Mexico from the US suggests that NAFTA is not the main determinant, because of another important reason. This is that Mexico started a comprehensive reform of the country's FDI regulation in the mid-1980s, and this is a more important reason for the increased investment from the US to Mexico, rather than NAFTA. Even if the RTA is not the main determinant for increasing US investment in

Mexico, RTAs still have a positive impact on increasing Mexico's FDI, as the RTAs contribute to a very significant and positive environmental change for Mexico. Mexico's strong location has advantages with respect to its neighbours, as do its cheap labour and increasingly market oriented economic policies. Furthermore, author indicated that regional integration has significantly increased the inflows of FDI, especially from countries outside the NAFTA region.

The third integration reviewed by the authors is the regional integration between Argentina and Brazil in 1986 and later in 1991, extended to create a common market in the region known as MERCOSUR. There is evidence of increased liberalisation in the Southern Cone: the intra-MERCOSUR export as a share of the region's total export more than doubled during the first half of 1990. The intra-regional imports also increased significantly. Moreover, the inflow FDI into the region more than tripled between 1989 and 1993 from outside the region, and US investment in the region increased by 25% in 1995 alone. Argentina experienced the largest increase in FDI inflow before 1994; however, it is not likely that the RTAs are the main determinant causing the increase of FDI. One important reason is that Argentina's comprehensive privatisation program in the early 1990s contributed to the increase; another important factor is the country's successful economic reforms. Brazil used to lag behind Argentina in terms of FDI inflows, although its market is four times larger than Argentina; the reason is that market reform in Brazil was introduced later than in other countries. However, after Brazil's economic reform, Brazil replaced Argentina as the preferred investment location for US direct investment in 1994 and 1995. The strong location benefit of Brazil such as large market size, cheap labour, and natural resources provide backup for the medium- to long-term growth of inflow FDI to Brazil. To sum up, microeconomic stability is likely to be a more important determinant of FDI inflows

than regional integration, although MERCOSUR may have had a significant impact in stimulating investment.

Overall, the paper by Blomstrom and Kokko (1997) discussed and analysed the effect of regional RTA on FDI based on critically reviewed empirical studies and the relevant historical data. The main conclusion of the study was that even though there were other determinants that affect FDI flows rather than regional integration, regional integration still has a positive impact on FDI flows. In North-North regional integration agreements it reduced the relative importance of intra-regional FDI for both countries, but increased inter-regional FDI to Canada. Under MERCOSUR, there was a substantial expansion of inter-regional FDI, although macroeconomic stability is considered to be a more important determinant than integration. The North American Free Trade Agreement is found to have had a dramatic increase on FDI inflows, especially inter-regional FDI to Mexico. The major finding of this study is that the responses to an integration agreement largely depend on the environmental change brought by the agreements and the location advantages. Countries with better location advantages when setting up regional integration will attract more FDI aimed at serving the regional market. The stronger the environmental change by regional integration, the more likely the agreement is to attract FDI inflows. Furthermore, when regional integration agreements have coincided with domestic liberalisation and macroeconomic stabilisation in the member countries, this will result in the most important positive impacts on FDI.

Blomstrom, Kokko and Globerman (1998) studied the relationship between regional economic integration and FDI in North America, where there were two regional integration agreements signed, CUSTA and NAFTA. Similar to Blomstrom and Kokko (1997), this paper reviewed the previous literature and analysed the trend of bilateral trade in the pre- and post-1989 periods, and statistically compared the FDI

patterns between 1983 and 1995. The paper found that North America experienced a substantially more modest impact from the RTA on its intra-regional trade creation and extra-regional FDI stimulation, compared with European Union (EU) experience. Moreover, the paper confirmed the finding in the European region that trade and investment impacts will be different among countries within the integrated region. The conclusion of Blomstrom, Kokko and Globerman (1998) is different from Blomstrom and Kokko (1997) regarding the relationship between RTA and FDI in the North American region. Blomstrom and Kokko (1997) argued that increases in FDI to Mexico are unlikely to be related to the RTAs, but are more related to the country's internal economic reform. However, since both papers use similar methodology, which is more qualitative and without empirical evidence, it is difficult to make sound conclusions on the relationships by just analysing the historical trend data, and without running statistical models.

The indirect impact on FDI is through the trade liberalisation process after removal of the barriers between two countries. After relief of the investment restrictions to foreign companies, the market will become more attractive to multinational corporations. Blomstrom and Kokko (1997), and Worth (1998) argue that RTAs can impact on investments at industry and country levels. Moreover, companies will not change their level of investment if they possess an ownership advantage or internalisation advantage, since the benefits do not decrease significantly after forming a regional economic zone. However, after regional integration, the country with the best strategic location will be more attractive to FDI, which may serve the whole region. Therefore, countries with less competitive locations will experience reductions in FDI inflows, since companies will relocate their investments to better locations within the region. In this case, as NZ is geographically isolated and China has a large market size and location advantage, it is expected the NZ–China RTA will increase outward FDI in

NZ rather than inward FDI. Regional integration often affects location advantages rather than ownership and internalisation advantages.

For example, Buckley, Clegg, Forsans and Reilly (2003) investigated the impact of NAFTA and CUSFTA on European, Canadian, and Japanese companies' investment plans in North America, and pointed out that changed location attractiveness is one of the primary advantages of regional integration. The authors obtained data from the US Bureau of Economic Analysis, Department of Commerce, and included the annual inward FDI stock in the US from 1960 to 1997. From the data, the authors found that European countries are the major investors in the US, accounting for 62% of the total FDI stock in the US. Moreover, Japan's share of FDI doubled between 1985 and 1990. This paper used the parsimonious constant growth curve to model the growth in FDI: the intercept of the equation is the base natural log of FDI, and the parameter of time trend represents the growth rate of FDI. The paper added two dummy variables in the model to measure the policy effect corresponding to the time period when CUSFTA and NAFTA came into effect. The standard F test finds that the USFTA dummy variable is positive and significant for Japan, Europe, and Canada, with a relatively lower significance level to Japan, but the strength of the coefficient is higher for Japan, meaning Japanese firms reacted stronger and earlier to the regional integration. The Europe variable was also strongly related to CUSFTA, with a similar magnitude to Canada's. The NAFTA variable was not significant with Europe and Japan, but it was significant with the investment from Canada. The reason for the significance with Canada may only be related to the unique position of Canada as the only insider, as opposed to the outsider countries. Therefore, through a simple model, the paper found evidence that regional integration should have a positive impact on FDI, and outsider firms from European countries and Japan responded more via FDI to CUSFTA than to

NAFTA, because outsider firms engaged in defensive import-substituting FDI — but in this study the insider countries, such as Canada, responded more to NAFTA .

Other than the location advantage created by regional integration, RTAs can also affect multinational companies' global investment strategies. Graham and Wada (2000) compared the total sales of US affiliated firms in Mexico to the US, Mexico and other countries from 1991, and found that US MNCs tended to take advantage of establishing business operations in Mexico for the purpose of serving the whole of the North American market rather than only Mexico's domestic market, when they expected that the North American free trade area might be formed. The authors looked at US direct investment in Mexico from 1966 to 1998, and found that the level of US FDI in Mexico grew steadily from 1966 to late 1980s, and then the growth accelerated. There was a trend break in 1989, and there are things to consider about this trend break. Firstly, this happened well before NAFTA; free trade agreement negotiations started in June 1990 and it was not possible for companies to find out about negotiations before they started. Secondly, the trend break occurred right after the Mexican election in 1988 and thirdly, the trend break happened in the same year as the Mexican government announced that in order to promote Mexican investment, it would regulate foreign investment. Similar to Blomstrom and Kokko (1997)'s conclusion, the increase in FDI in Mexico is unlikely to be linked with NAFTA but instead is more related to the economic reforms in Mexico.

Moreover, there are also a number of papers that discuss the impact of RTAs on FDI by means of the three-country model (Montout & Zitouna, 2005). The studies show that the reduction of tariffs within free trade areas can encourage firms to invest in low cost member countries and to export products to other countries within the region. However, if the firms have already horizontally integrated into the member countries

then the RTA may help to diversify the investment since firms may want to concentrate production in one country to utilise economies of scale which serve the entire region.

Moutout and Zitouna (2005) aim to develop a theoretical model that can show how a firm's decision to make a foreign investment is influenced by North-South regional economic integration. The paper assumes a world with only three countries: A, B, and C, and considers that A and B are involved in an RTA, meaning there is a gradual decrease in trade barriers between country A and B, and an assumption is made that the wages in country A are greater than country B. The paper also assumes a duopoly situation: a company from country A and one from country C (which is an outsider) both produce the same goods. The insider country, A, has two strategies: the first one is to stay in the home country and pay additional labour costs. The second strategy is to invest in country B and export to the home country, the benefit of which will be lower labour costs. On the other hand, the outsider, country C, has three choices. One is to export to the home market — but this means it needs to bear transaction costs and trade barriers. Second is to invest in country A and pay fixed costs. The third is to invest in country B and pay fixed costs and transaction costs, but benefit from the cheap labour. Therefore, the authors developed the cost function for insider and outsider countries. Moreover, this paper also discussed and proved eight different propositions. Two examples are: exporting is profitable when external tariffs are below a threshold level, and the outsider prefers relocating in country B to export to country A if the internal transaction costs are below a threshold level.

Overall, the paper concludes that firstly, the tariff-jumping motive for FDI holds if transaction costs are high relative to the additional fixed costs associated with investing abroad. Secondly, the export platform strategy holds if foreign companies choose to locate in low wage countries to export. This depends on the difference between the wage and trade barrier costs — the larger the difference, the more likely the

company will use this strategy to gain benefit from the low labour costs. Thirdly, the paper found there is an eviction effect if foreign firms invest in low wage countries when local firms do not invest abroad — this effect will result in the insider relocating and reducing the cost advantage of the low wage country.

The OECD (2003) has strongly supported the positive investment creation effect of EU membership. Ozden and Parodi (2004), and Yeyati et al. (2004) found empirical evidence that there are strong investment creation and diversion effects of RTAs for MERCOSUR and Latin American Countries. Ozden and Parodi's (2004) paper aimed to investigate the effect of the formation of customs unions on production location decisions of multinational corporations and FDI inflows, with the focus on the auto industry in MERCOSUR and the sectorial agreements that govern this sector. The theoretical framework used by them is influenced by *quid pro quo* and political economic literature; the basic structure of the models is a two-stage perfect information game played between interest groups and one government. In the first stage, interest groups take an action to influence government, and in the second stage, the government chooses a specific policy to address the action taken by the interest group in the first stage and maximise the government's political objective. Moreover, the authors presented three additional games, which are of increasing complexity. The first game is a sample two-stage game between multinationals and government to determine tariff and investment levels. The second game is between multinationals and governments of two symmetric countries forming a customs union. The third game is the same as the second except that the countries are not symmetric, which means one country may have cost advantages over another country. For example, since Brazil is relatively cheaper in terms of production costs, this makes Argentina reluctant to agree to form a customs union in the first place. Therefore, it is necessary to direct some investment to Argentina and force companies to invest in both countries to enable free trade in automobiles and

realise benefits for all parties. This is why a compensated trade clause was signed in 2006; the agreement gives Argentina the assurance of the compensated trade clause. Regional trade agreements could lead to both foreign investments expansion and relocation effects. The investment expansion effect is because a larger market can be served from a single plant and fixed operational costs can be lowered. Meanwhile, some of the original investment and production is likely to be diverted to the lower cost countries from higher cost ones within the customs union.

Furthermore, Raff (2002) states that RTAs are important for investment creation. Raff (2002) uses a three-country economic model when discussing the relationship between RTAs and FDI. The model assumes a world consisting of only three countries — two of them form an RTA and the third country is an outsider. The paper focussed on pure-strategy equilibria, after setting a number of equilibria models, and discussed five propositions. The paper concludes that RTAs can lead to FDI creation and consolidation, but not FDI destruction. Moreover, if the cost advantage of potential RTAs relative to outsiders or the rest of the world is small or non-existent, RTAs may fail to induce FDI. Furthermore, if the firm has invested in both potential RTA countries, then this will lead to FDI consolidation.

Yeyati et al.'s (2004) paper is motivated by the effect of the Free Trade Area of Americas agreement (FTAA) on Latin American countries. The paper obtained data from the International Direct Investment Statistics Year Book database. The dependent variable is bilateral outward FDI stocks. The dataset is from 1982 to 1998, and includes 20 source countries, all from the OECD, and 60 host countries — which means there are in total 1,200 country pairs and 20,400 observations. The methodology is different from Ozden and Parodi's (2004), and Yeyati et al.'s (2004) model is based on the gravity model, which is a standard model used in empirical literature on the determinants of bilateral trade. The model is a simple formula that states that bilateral trade flow is

positively associated with the product of the GDP of both economies and negatively associated with the distance between the two countries. This paper uses a modified version of standard gravity model.

The first regional integration variable is the same for all RTAs, which is a dummy variable: “1” when the source and host countries belong to the same free trade area, and zero otherwise. The second integration variable is Extended Market Host, which is the log of the joint GDP of all countries to which the host has tariff-free access due to common membership in an RTA. The third integrated variable is Extended Market Source, which is the log of the joint GDP of the source country and all the countries that are partners of the RTA of the source country. This paper found that RTAs are a very important factor in FDI; it found that on average, common membership in an RTA with a source country can double the bilateral stocks of FDI. However, the gains from RTAs are unlikely to be distributed evenly because of different costs in the member countries. Similarly, Park and Park (2008) used an extended gravity model, which focused on domestic reforms as a commitment device for RTA membership. The data included the bilateral FDI stock data from the OECD’s International Direct Investment Statistics, and 24 OECD countries and 50 host countries from the period of 1982 to 1999. The final dataset contained 1,619 annual observations for 1982, 1985, 1990, 1995, and 1999, and out of all observations, 347 pairs belonged to RTAs and 613 pairs were outsiders. The paper applied two estimation techniques: random effects and fixed effects estimation. The random effects estimation assumes that each country pair’s effects are a random variable, and fixed effects estimation assumes that unobserved country-specific factors are present. The gravity model fits well with the data and explains most of the variations; the result of the fixed effect estimation is that the log of GDP, the skill level of the host country, and the openness of the host country, are all significantly positive. Moreover, the estimation shows that the RTA membership

dummy variables are positive and statistically significant, and indicates that the pair countries joined by an RTA, experience an increase of 86.1% in FDI when holding other factors constant. The dummy variable for outsiders is also positive and statistically significant, and indicates that an RTA does not divert investment from other countries that do not belong to the integrated region. The random effect estimation shows that log of distance is not statistically significant, however, the existence of a common land border and ex-colony increase the bilateral FDI. Overall, the paper finds that firstly the larger market size, more skilled labour, lower trade costs, higher trader dependence, more efficient reform efforts, and membership of RTAs attracts more FDI without causing an investment diversion effect. Secondly, there is a complementary relationship between trade and FDI. Thirdly, compared with RTA membership alone, the reform-committed participation is an important factor in determining the increase in FDI. Moreover, for the East Asian RTAs, the paper finds that for ASEAN–Japan and a Japan–Korea RTA, in terms of creating FDI, these two pairs have proven to be preferable membership combinations — however ASEAN–China RTAs are not recommended. This is because this paper puts more weight on the domestic reforms as a determinant of increased FDI. Furthermore, the paper also presents a case study on less developed countries and the authors found that the reformed, less developed countries attract more FDI, which is in addition to the investment creation effect of their RTA membership. This finding can explain why most of the current RTAs were initiated by less developed countries.

However, the impact of RTAs on FDI is still debatable. Balasubramanyam, Sapsford and Griffiths (2002) argue that the economic characteristics of the host and source countries can determine the size and direction of FDI rather than the existence of RTAs. The authors use the gravity model to attempt to answer two key questions: one is to what extent RTA formations influence inter-country flow of direct investment, and

the other is whether the insider-to-insider FDI are influenced differently to the outsider-to-outsider flows. The paper focuses on the EU and NAFTA, which are two of the most significant RTAs in the world, and fits the model with a sample of 281 bilateral inward FDI flows in 1995.

The result from this test is that FDI flows are positively and significantly associated with the level of host country GDP and negatively related to distance; both results are consistent with existing literature and within expectations. However, the result suggests that the investment flows are negatively and significantly associated with the size of the host country's population. Moreover, the authors added a dummy variable to take into account whether the flow is between countries in the integration area or from outside. From this new model, the result shows that this new dummy variable is positive and significantly different from zero at the 99% confidence level after considering the host population, income level, distance, and FDI between countries which are both members of either NAFTA or the EU, except those occurring between non-member countries. Furthermore, the paper added another factor into the model, the economic freedom index, and found the lower the index, the freer the market, and the friendlier to investors. The result shows that the economic freedom index is negatively and significantly different from zero, indicating that with all other factors equal, the freer the host country, the greater the FDI it will attract.

Then the authors add another dummy variable to capture the difference in the estimated relationship between insider-to-insider and outsider-to-outsider FDI. The result shows that this dummy variable is negative and close to being significant at the 95% confidence level. This result suggests that after controlling all other variables, geographical distance exerts a greater inverse relationship for insider-to-insider flows than it does for outsider-to-outsider flows.

The models mentioned in the above section are semi-gravitational in nature, which only takes into account host country factors but not source country's population or GDP. Therefore, the authors ran the model again to include source country factors. Then the results from the new model suggested that the RTAs' effect disappeared, and the size of the host country's population was not significant enough to affect inward FDI. However, the population of the source country has a negative and significant effect on FDI. Overall, the paper found that there is an increase in FDI between member countries, but this can be offset by an enhancement in the magnitude of the dampening effect of distance, such that RTAs can result in a decrease in FDI between countries whose capital cities are located more than 3,300 kilometres apart. However, once the model added the source country's economic factors, the effect of RTAs disappeared, indicating the characteristics of host and source country together accounts for the pattern in FDI flows.

Moreover, Vamvakidis (1999) argues that the broader liberalisation through the non-discriminatory multilateral approach is a better way to attract FDI than a discriminatory regional liberalisation. Vamvakidis (1999) used a large sample, which contained all countries with available data for the period from 1950 to 1992, to estimate the growth performance before and after the liberalisation. Moreover, the dataset also included 18 RTAs with a total of 109 member countries. The calculation used a dummy variable for participation in an RTA and therefore treats all RTAs equally. The methodology of this paper included the first simple test comparing the average real GDP per capita growth rate 10 years before and 10 years after both discriminatory and non-discriminatory liberalisation, and did not include RTAs from the 1980s.

The second test was to estimate the change in the trend of GDP per capita after liberalisation or an RTA, for every country in the sample. However, the GDP series followed a unit root which was therefore not appropriate to use, and the solution was to

use the growth rate as the dependent variable and estimate its change after the date of the RTA. The result of the first test shows that most countries grew faster after liberalisation, however, simply comparing the growth rate can be misleading since it is not clear which factor is driving the results. Therefore, the fixed effect growth model was estimated and the estimated coefficient confirmed the previous findings that lower GDP per capita, high investment share, and low population growth rate lead to faster growth if holding other factors constant. Moreover, the paper found that participating in an RTA does not foster growth — according to the evidence, the impact of the RTA is negative. The coefficient of the RTA dummy variable was always negative and statistically significant at 90% confidence.

From all the literature reviewed, the determinants that influenced the impacts of RTAs on FDI are major, and include location advantage, effective investment provision, and changeable economic environment brought by RTAs. There are three methodologies used in researching the relationship between RTAs and FDI.

The first group of papers used a qualitative method by reviewing and discussing previous literature and relevant historical trade or FDI statistics to make observations on the changes to the bilateral trade and FDI inflows (for example, Blomstrom et al., 1998; Blomstrom & Kokko, 1997; Graham & Wada, 2000). These authors looked for linkages between the RTA and FDI without any statistical testing, for example, the impact of RTAs on Mexico's inflow FDI. By looking at timing, it is unlikely that the increase in FDI was influenced by RTA. The researchers attempted to look for reasons for the increase in FDI and found it was highly likely to be linked with Mexico's economic reform, which happened the same year as the FDI inflow increased significantly.

By matching the time, event, and trend of the statistics some obvious conclusions can be drawn, but the disadvantage is that the papers can miss some hidden relationships or factors, and also cannot have statistically sound or proven evidence to

make conclusions, and the result may not be as reliable as those papers that have done statistical testing.

The second group of literature used the gravity model, or modified or extended gravity model (Balasubramanyam et al., 2002; Yeyati et al., 2004). This model is basically a multivariate regression model that includes some important determinants in the explanatory variables such as GDP and distance between countries. The researchers can add more explanatory variables to the model to facilitate the purpose of the research. For example, to examine the relationship between RTAs and FDI the researcher can add a dummy variable for RTAs to test if this variable is significant. Many researchers went beyond this and added more variables, such as insiders or outsiders. Overall, this model is very straightforward based on a multivariable regression model, and the researchers have the flexibility to extend the model to serve the purpose of their research.

The third literature group used the three-country model. Normally this assumes a world with only three countries; two of them are in an RTA and the other country is an outsider (for example, Raff, 2002; Moutout & Zitouna, 2005). This approach is very commonly used in economic and monetary policy analyses; it requires making a lot of assumptions and propositions, and then proving these propositions based on economic theories and assumptions.

From a results-oriented perspective, the conclusion about the relationship between RTAs and FDI is mixed. This can be expected because, firstly, different researchers have studied different RTAs, for example, the North American relationship may be different from the ASEAN relationship due to different political and economic environments, and different RTA terms. Secondly, RTAs might be only one of the many factors that can determine FDI. Sometimes political and economic reforms are more critical than RTAs to attract more FDI inflows. Thirdly, there are different models

used and different assumptions made in different studies, therefore, the conclusions might also be different.

3.4 Regional trading agreements as a determinant of NZ–China FDI

There is some past research related to China and NZ on RTAs. Liu (2008) has studied the impact of current RTAs on FDI in China. The gravity model was used in this paper, which was introduced by Jan Tinbergen (1963) in 1963. Moreover, three methods of measuring FDI were used. The first was to study FDI at the plant or firm level, the second was to study FDI at the industry level, and the third was to study FDI at the country level. Using the model, the author used FDI inflow as a dependent variable and economic factors as independent variables, and introduced the RTA as a dummy variable to capture the effect of RTAs on FDI.

The paper found that although the home country's GDP or GDP per capita were considered foundational for outward flow of capital to other countries, they were neither significant nor had any impact on capital flow in the study. Only the home country's investment in China was found to be positively affected by the home country's increasing GDP. Moreover, the market size and market growth factors were also found to be not significant in the study. The paper found that the host country's wage rate, interest rate, gross fixed capital formation, and home country's exports to a host country are significant determinants of FDI inflow. Furthermore, the RTA was found to be an important determinant in attracting FDI inflow in some cases. CER members tend to trade more and invest more with each other, and non-CER countries tend to increase their investment with CER members to maintain and increase their market share. From the study's conclusion, since China's participation in APEC trade and economic relationships grows, non-APEC member countries have all increased their investment in China to maintain their market share in China.

Shu and Zeng (2006) investigated the FDI flows between China and ASEAN in their research report. They indicated that both China and ASEAN members' bilateral FDI flows had significant positive growth since China started to join the ASEAN economic zone in 2002. China and ASEAN signed the Framework Agreement on China–ASEAN Comprehensive Economic Cooperation in 2002. In 2004, these two economies also signed agreements on trade in goods for the China–ASEAN FTA. In 2007, they signed agreements on the trade in services, and in 2009, they signed the FTA investment agreements.

In the past, China's FDI in ASEAN was limited. In 2003, the cumulative amount of FDI from China into ASEAN was US \$0.63 billion, which is less than 0.3% of global investment in the region. However, since China decided to open its economy and start to cooperate with the ASEAN economy, a large variety of Chinese products have been exported on a large scale into ASEAN countries, and many Chinese firms have invested in ASEAN because of the cost saving advantage, management control, and ethnic Chinese relations in Southeast Asia. As a result, this economic cooperation will facilitate and liberalise China's FDI into ASEAN.

By reinforcing this economic integration, ASEAN members hope to strengthen their economic relations with China, obtain capital from external economies, and find more market spaces. They consider that China may satisfy their needs and could be a good partner because China has large economy of scale. China also needs ASEAN, because ASEAN brings its own advantages. The Association of South-East Asian Nations group population has exceeded 0.5 billion, and its members are either industrialising or transitional economies. As a result, ASEAN has a diversified and huge market. Moreover, most ASEAN member countries are resource rich and China is a large resource consuming country. In addition, the geographic location of China is close

to ASEAN and could represent cost savings for both economies. As a result, the bilateral agreements imply that strengthening economic relations could benefit both economies.

The Association of South East Asian Nations implies that its foreign policy in the new century is to strengthen its economic links with China, Japan, India, Australia, NZ, and the Republic of Korea through agreements on economic cooperation, regular foreign minister meetings, and the ASEAN Summit. The main purpose is to attract more FDI from those relevant countries (Shu & Zeng, 2006).

Furthermore, Liu (2006) investigated the impact of RTAs on the changes in FDI between China and Australia. A model with FDI was considered as the dependent variable and economic factors were considered as independent variables, by introducing RTAs as a dummy variable to investigate whether there is a relationship between the formation and implementation of an RTA and FDI into China and Australia. Australia's FDI data was from 1984 to 2002 and China's data period was from 1985 to 2003. In addition, data analysis was grouped by three periods: 1984-1988, 1989-1991, and 1992-2002 for Australia. For China it was grouped as 1985-1988, 1989-1991, and 1992-2002.

The economic factors include the host country's relative and absolute GDP and GDP growth rate, which can be partly influenced by the trade liberalisation process, and can affect FDI flows. Moreover, there are some other factors, such as gross fixed capital formation, population, and distance between the two countries, exports, import tariffs, interest rates, and wages that can also affect the FDI flows. In addition, the author introduced five RTAs as dummy variables in the model. These were: CUSFTA, the EU, ASEAN, Australia-NZ Closer Economic Relations (CER) Trade Agreement, and APEC.

Results showed that RTAs have had an important impact on the changes of FDI stocks in Australia and China. Most RTAs have had a positive impact, increasing intra-regional direct investment and decreasing investment outside the region. In Australian and NZ bilateral free trade and economic integration, CER had a positive impact on direct investment from NZ to Australia.

In the past few years, ASEAN countries have significantly increased their FDI flows. Especially from 2000 to 2007, ASEAN FDI increases were much greater than the rest of the world's 30% FDI growth, reaching 156% . Singapore, Thailand, and Malaysia are the main FDI recipients. Moreover, new joint members such as Indonesia, the Philippines, and Vietnam are also becoming major recipients. Moreover, their FDI flows have more than tripled between 2004 and 2007 since they have joined ASEAN (Piyaarekul & Peridy, 2009).

Furthermore, the authors mentioned above, introduced a theoretical framework model to empirically test FDI flows from the US to five ASEAN countries: Singapore, Malaysia, Thailand, Indonesia, and the Philippines, over the period of 1995 to 2007 for 15 industries, to test the relationship between FDI and regional integration. The results showed that regional integration has had a significant positive impact on FDI in ASEAN countries, especially for vertical and complex vertical FDI.

In his 2005 study, Sen analysed the indirect impact of RTAs on FDI by estimating the trend of bilateral investment flows between NZ and Singapore over the period of 1997-2003. The agreement between NZ and Singapore for a Closer Economic Partnership (ANZSCEP) was signed in 2001, and Sen concludes that it has succeeded to a limited extent in liberating investment flows between the two countries. New Zealand investors seem not to have fully utilised the potential benefits of the regional

environment. However, the investment linkage between Singapore and NZ is predicted by the author to grow more significantly in the future under the NZSCEP agreement.

The investment relationship between NZ and China is relatively small when compared with other NZ investment relationships. However, there is a growing relationship between NZ and China. The market size and enlarging economy of scale brought by RTAs is an important determinant to increase China's FDI flows (Liu, 2008; Shu & Zeng, 2006). In the NZ–China context, as China has a large economy of scale and market size compared with the small market in NZ, NZ intends to increase the outward FDI to China by fully utilising RTA advantages. Further, the elimination of tariffs brought by the NZ–China RTA could have a positive impact on FDI flows between China and NZ during the trade liberalisation process. Under the liberalisation process, when tariff barriers have been eliminated, this will result in a positive impact on vertical FDI in the intra-region. Countries with initially low tariffs will attract more vertical FDI. Thus, in this situation, NZ will attract more inward FDI from China since the RTA has been signed. The increased size of the economy of scale will result in an increasingly horizontal FDI. However, RTAs may lead to a negative impact on horizontal FDI as well, since horizontal FDI is influenced by economy of scale and cost. If trade cost is lower than establishing a plant in the host country after the RTA has been signed, and the factor endowments between countries are similar, the investors may choose to move back to the home country to realise RTA advantages (Blomstrom & Kokko, 1997).

Investment provision is also considered as a major determinant of the impact on FDI by RTAs (Brada, Kutan & Yigit, 2005). The commitments of MFN and post-establishment national treatment together with provisions on investment protection and investor arbitration should contribute to an increase in investor confidence in the

investment regime between China and NZ (Ministry of Foreign Affairs & Trade, 2011a). This will lead to a positive impact on both NZ outward and inward FDI. However, the investment provision does not compromise NZ's regulatory environment and NZ's investment screening regime under the Overseas Investment Act 2005, which will continue to apply to investment from China.

Cremer and Ramasamy (2005) discussed the economic and business relationship between NZ and China. They stated that initially, investment into China occurred mainly in labour-intensive industries. More recently, FDI into China has focused on the capital- and technology-intensive sectors as well. Manufacturing and real estate were two main sectors and their combined total accounted for more than 80 % of FDI utilisation in 2002. New Zealand's direct investment in China and vice versa take up only a small proportion of the two nation's total investment. In 2004, New Zealand was China's 23rd FDI destination country. China's total investments in New Zealand were mainly in the forestry and manufacturing sectors, as well as the commercial construction sector. After a survey of 191 NZ firms in China, the authors indicated that the big market size of China and earning returns from the competitive advantage were the two most important motives for NZ firms to invest in China. However, legal, political, financial, operational and human resources issues are the main challenges for NZ firms investing in China. New Zealand investors in China must be able to adapt to a different cultural environment and be able to accept differences in work practices in China to make business successful. Furthermore, the authors also predicted that the NZ-China RTA will liberalise bilateral FDI growth between China and NZ.

Zhu Ying (2006) indicated that the NZ-China RTA will produce positive effects on goods trade, service trade, and investment — especially for China, because the free trade area will help China to break US, EU and other countries' restrictions on China's imports. As a result, this will lead to positive inward FDI into NZ's economy.

Table 6: Literature review summary

Authors	Research Synopsis	Methods	Main findings
Raff (2002)	Discussing the relationship between RTAs and FDI	Three country economic model	RTAs are important for investment creation
Blomstrom and Kokko (1997)	Analyzing the effect of RTA on FDI in NAFTA	Critical empirical studies review and relevant historical data analysis	There were other determinants that affected FDI flows rather than regional integration
Blomstrom, Kokko and Globerman (1998)	Relationship between regional economic integration and FDI in North America	Critical literature review and historical trend analysis	North America experienced a substantially modest impact from the RTA on its intra-regional trade creation and extra-regional FDI stimulation
Yeyati (2004)	Investigating the effect of the FTAA on Latin American countries	Gravity model	RTAs are a very important factor in FDI
Balasubramanyam, Sapsford and Griffiths (2002)	Arguing that the economic characteristics of the host and source countries can determine the size and direction of FDI rather than RTAs in EU and NAFTA	Gravity model	The investment flows are negatively and significantly associated with the size of the host country's population. Further, RTAs can result in a decrease in FDI between countries whose capital cities are located more than 3300 kilometres apart
Liu (2008)	Impact of current RTAs on FDI in	Gravity model	The RTA was found to be an important determinant in

	China		attracting FDI flows
Shu and Zeng (2006)	Investigate the FDI flows between China and ASEAN	Historical trend analysis	Both China and ASEAN members' bilateral FDI flows had significant positive growth since China started to join the ASEAN economic zone in 2002
Liu (2006)	Investigate the impact of RTAs on the changes in FDI between China and Australia	Gravity model	RTAs have had an important impact on the changes in FDI stocks in Australia and China. In Australia and NZ bilateral free trade and economic integration, and the CER had a positive impact on direct investment from NZ to Australia.
Piyaarekul & Peridy (2009)	Investigate FDI determinants in ASEAN countries	Knowledge capital model	Regional integration is a significant determinant of FDI in ASEAN countries
Sen (2005)	Investigate the impact of an RTA on FDI between NZ and Singapore	Historical trend analysis and FDI intensity investigation	This RTA has succeeded to a limited extent in liberalising investment flows between NZ and Singapore

3.5 Conclusion

Most of the studies reviewed in this paper have concluded that RTAs can affect the movement of FDI by trade liberalisation processes and investment rules under RTAs,

but there are also other factors that can affect the significance of RTAs in relation to FDI inflows such as the size of the market, the location, the cost of labour, and the natural characteristics of the countries.

The above analysis reviews both theoretical and empirical literature. Some studies believe RTAs will result in a significant positive impact, attracting FDI between countries. However, some studies argue that RTAs may not have a significant positive impact to attracting FDI. In the context of the NZ–China RTA, this is expected to have a positive impact on bilateral FDI. Because of NZ’s isolation and small market size, the outward FDI to China will be greater than inward FDI from China.

In the following chapter, the historical FDI data will be reviewed to analyse the impact of the RTAs on FDI between China and NZ.

Chapter 4: Trends in New Zealand–China FDI

4.1 Introduction

The previous chapter analysed the existing theoretical and empirical literature on RTAs and observed that RTAs have some important implications concerning NZ–China bilateral FDI. Those implications are that RTAs can affect FDI through trade liberalisation processes and investment rules under RTAs (Blomstrom & Kokko, 1997; Blomstrom, Kokko & Globerman, 1998). In this chapter, historical data will be analysed to estimate the impact on NZ’s FDI from and into China since the signing of the NZ–China RTA. Because NZ’s inward FDI stock from China Data is unavailable from NZ⁷, the analysis on NZ’s inward FDI from China relies on Chinese outward FDI stock into NZ, data from 2003 to 2010 provided by the Ministry of Commerce, People’s Republic of China (MOFCOM). NZ’s outward FDI stock into China is analysed from 2006 to 2010, as data is not available for earlier years. Data on NZ’s outward FDI into China was collected from the OECD.

4.2 Trends in New Zealand’s inward FDI from China

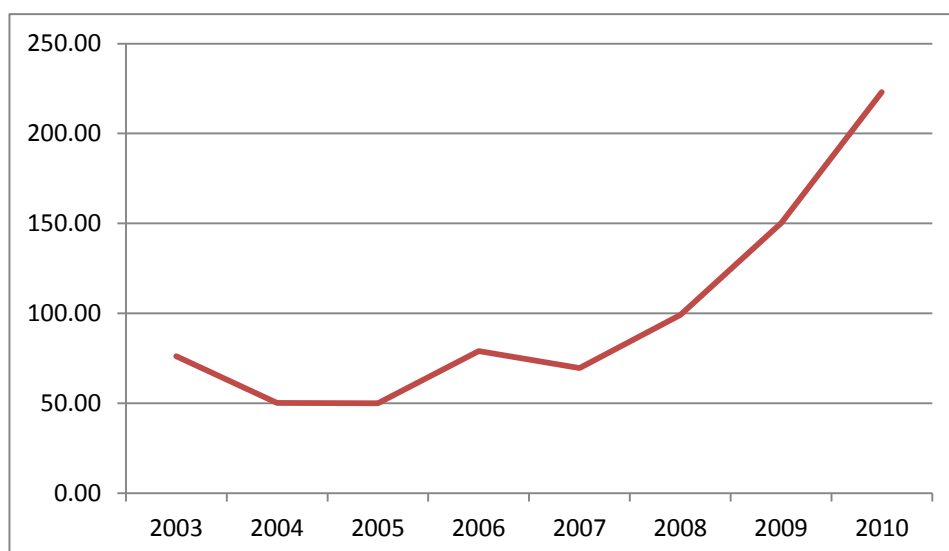
Chapter 3 suggests RTA can affect the FDI through trade liberalisation process and investment rules under RTAs (Blomstrom & kokko, 1997; Blomstrom, Kokko & Globerman, 1998; Worth, 1998). It is now worth analysing whether NZ’s inward FDI from China has been increasing in the post-RTA period.

Figure 8 shows China’s total outward FDI into NZ from 2003 to 2010 which approximates the trends in NZ’s inward FDI from China. As shown, China’s outward FDI stock into NZ rose overall from 2003 to 2010. In 2003, the total inward FDI stock was NZ \$76.2 million, which increased to NZ \$79.06 million by 2006. In 2008, NZ and China signed the RTA. China’s outward FDI stock into NZ also increased continuously

⁷ Contacts were made with Statistics NZ, NZTE and MFAT, however, they were unable to provide related data as the data is scarce or confidential.

over this post-RTA period from 2008 to 2010. In 2008 the inward FDI stock was about NZ \$99.11 million, which increased to NZ \$223.07 million by 2010.

Figure 8: China’s outward FDI stock into New Zealand (NZ \$ million)



(Source: MOFCOM, 2012)

4.2.1 Growth and Shares of NZ’s inward FDI

Table 7: Growth rate of New Zealand’s inward FDI stock from main investment partners, including China

Country	Year						
	2004	2005	2006	2007	2008	2009	2010
China ^{*8}	-34.21%	-0.35%	58.26%	-11.91%	42.32%	51.51%	48.56%
US	31.34%	19.91%	-7.37%	18.66%	10.88%	7.09%	-3.74%
UK	-21.00%	-11.78%	12.37%	-21.35%	2.57%	-28.78%	10.05%
AU	38.93%	16.42%	16.89%	16.39%	5.74%	-2.47%	3.44%
Total	18.18%	6.85%	3.98%	13.79%	2.89%	3.27%	1.32%

Key: US, United States; UK, United Kingdom; AU, Australia.

(Sources: Author’s calculation based on Statistics NZ, 2012 and MOFCOM, 2012)

Table 7 shows the growth rate of NZ’s inward FDI stock from China and compares with NZ’s main investment partners (the US, Australia, and the UK). From Table 7 we can see that from 2004 to 2007 there was a decrease in NZ’s inward FDI stock from China.

^{*8} This data is based on China’s outward FDI.

In 2006, NZ's inward FDI stock from China increased significantly to 58.26%, which was much greater than NZ's total inward FDI stock from its main trading partners (US, -7.37%; UK, 12.37%; and Australia, 16.89%). In 2007 the growth rate of NZ's inward FDI stock from China had decreased to -11.91%, while for the US it was 18.66%, and for Australia it was 16.39%, respectively. NZ's total inward FDI stock's growth rate was 13.79%. The author observes that before the NZ–China RTA was signed, the growth rate of inward FDI from China did not show a significant increase.

However, the growth rate of NZ's inward FDI stock from China increased significantly over the post-RTA period of 2008-2010. This was a substantial increase compared to previous years, and could perhaps be interpreted as an indication of the NZ–China RTA's success in expanding Chinese FDI into NZ. In 2008, the growth rate of NZ's inward FDI stock from China was 42.32%, greater than that from the US, the UK and Australia combined. New Zealand's total inward FDI from China was also growing faster than that of NZ's total inward FDI from the rest of the world. In 2009 and 2010, the growth rate of NZ's inward FDI stock from China still remained at about 50%, while for the other countries it was less than 10%. From this we can see that after the NZ–China RTA was signed, the growth rate of NZ's inward FDI stock from China increased significantly and was much greater than NZ's inward FDI from its main investment partners and the rest of the world.

Furthermore, the CAGR formula is not only used to calculate the overall growth rate of a trade area as mentioned in Chapter 2; it also can be used to help calculate the overall growth rate of the investment area. After calculation, the growth rate of China's total outward FDI into NZ from 2003 to 2010 was about 14.37%. In addition, by using the CAGR formula, we can break the time period into two parts to see how the growth rate changed since the RTA was signed. The time periods are 2005-2007, and 2008-2010.

After calculation, the growth rate for China’s total outward FDI stock into NZ was about 11.71%. From 2008 to 2010, the growth rate was about 31.05%. From this we can see that the CAGR was almost triple in the post-RTA period than in the pre-RTA period. From this we can say that after the NZ–China RTA was signed, the growth rate of China’s outward FDI into NZ increased significantly compared with the pre-RTA period.

Table 8: Shares of New Zealand’s total inward FDI by major investment country

Country	Year							
	2003	2004	2005	2006	2007	2008	2009	2010
China*	0.13%	0.07%	0.07%	0.10%	0.08%	0.11%	0.16%	0.24%
US	10.23%	11.37%	12.76%	11.36%	11.85%	12.77%	13.24%	12.58%
UK	10.92%	7.30%	6.03%	6.51%	4.50%	4.49%	3.09%	3.36%
AU	36.32%	42.70%	46.53%	52.30%	53.50%	54.98%	51.92%	53.01%

Key: US, United States; UK, United Kingdom; AU, Australia. (Sources: Author’s calculation based on Statistics NZ 2012 and MOFCOM, 2012)

From Table 8 we can see the total share of inward FDI from China was relatively small compared to NZ’s other investment partners, even in the post-RTA period. However, the shares of inward FDI from China more than doubled from 0.11% in 2008 to 0.24% in 2010, when the NZ–China RTA came into force. New Zealand’s inward FDI from its main trading partners accounted for a decrease in FDI shares from 2008 to 2010. The reason for this reduction was the world financial crisis which occurred in 2008 (OECD, 2009). The impact of this financial crisis has had negative impact to NZ’s economic growth and investment. As NZ and Australia joined in a CER agreement in 1982, the China-NZ RTA has facilitated NZ’s inward FDI from Australia well. From the above we can see that although there was a significant increase in NZ’s inward FDI from China, the share of NZ’s total inward FDI was still relatively small compared with NZ’s main trading partners. This may indicate that the NZ–China bilateral FDI is just starting to increase, and Chinese investors have ventured into NZ

more aggressively for investment opportunities since the NZ–China RTAs was signed. However, the increases in investment shares do not reflect the extent of changes in the bilateral linkages between NZ and China relative to the rest of the world. As a result, it is essential to estimate a measure of bilateral FDI intensity to understand the extent to which NZ and China regard each other as bilateral investment destinations, relative to the rest of the world, which is carried out in Section 4.4.

4.2.2 Recent developments of Chinese investment in New Zealand

In the four years since the NZ–China RTA has been operating, bilateral investment has focussed on the agricultural sector. New Zealand is a leading country in the agricultural sector with comparative and competitive advantages. Since the NZ–China RTA was signed, the tariff on agricultural products has decreased, which will attract Chinese investors to invest in NZ and then export NZ products back to China as NZ brands. If a Chinese company can produce milk within NZ, process it, then brand it and sell it in China as NZ milk, this could be a highly lucrative business. Due to these reasons, Chinese companies are starting to buy NZ dairy farms and processing companies.

In 2010, Bright Dairy, one of China’s leaders in consumer dairy production, invested NZ \$82 million into the NZ milk processing company Synlait Milk, to create a partnership to drive Synlait’s value-added export strategy (Synlait, 2012). Furthermore, Agria Corporation, a China-based agriculture company, has invested in and owns 50.01% equity in PGG Wrightson (PGW), NZ’s largest agriculture services company (Agria, 2012).

Recently, the sale of 16 farms (which belong to Crafar Farms) to China’s Shanghai Pengxin corporation was approved by the NZ government. However, the NZ High Court refused the application that was approved by the government and required a revision of Pengxin’s investment application. The investment into Crafar required re-

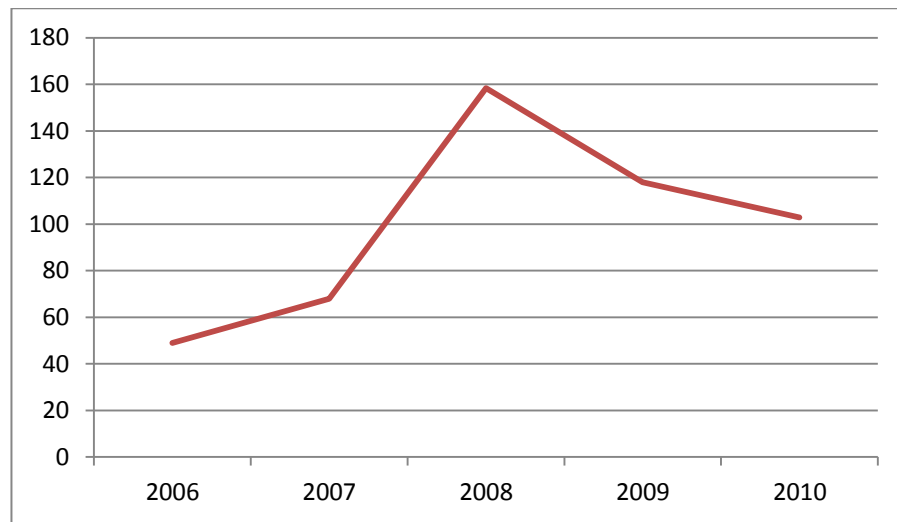
application and review due to the overseas investment restriction in NZ (Kurt, 2012). This action will lead to a negative impact on attracting overseas investment in NZ.

From the above we can see there has been an expansion of NZ's inward FDI from China, especially in the agricultural sectors, since tariffs have decreased under the NZ–China RTA. This situation explains why the NZ inward FDI stock from China has been increasing quickly since 2008, as seen in Figure 8. As Chinese investors increase their investment in NZ (mainly in agriculture, specifically the dairy industry because the tariff rates were decreased under the NZ-China RTA in 2008), it is obvious that NZ's inward FDI stock from China is increasing significantly as well. Cremer and Ramasamy (2005) further stated that China's total investments in New Zealand were mainly in the forestry sector and manufacturing and commercial construction sectors. However, the investment restrictions, isolated location, and nature of the small developed economy of NZ will have a negative impact on liberating China's investment into NZ as well. The Investment Act could be the main reason for the limited success of the RTA in expanding Chinese investment into NZ. As we indicated in the Crafar case above, NZ refused the investment of the Chinese company, Pengxin; this will lead to a decrease in the Chinese investors' confidence to invest in NZ. As a result, the expansion of inward FDI from China could be limited as well.

4.3 Trends in NZ's outward FDI stock into China

As predicted in past studies on NZ's outward FDI to China, China's big economy of size seems to have had a positive impact on NZ's outward FDI into China after the RTA was signed. In addition, Cremer and Ramasamy (2005) further stated that the big market size of China and earning returns from competitive advantage are the two most important motives for NZ firms investing in China.

Figure 9: Value of New Zealand's outward FDI stock into China (NZ \$ million)



. (Source: OECD, 2012)

Figure 9 shows NZ's FDI into China from 2006 to 2010, as earlier years' data is not available. From Figure 9 we can see NZ's FDI into China has increased significantly from 2006 to 2008. Direct investment flows into China more than tripled from NZ \$49 million in 2006 to NZ \$158 million in 2008. However, after the NZ–China RTA came into force in 2008, the stock of FDI into China decreased significantly. In 2009, the value of direct investment into China was NZ \$118 million and in 2010 the value was about NZ \$102.9 million. As discussed in Chapter 3, the NZ–China RTA has provided measures to liberalise, facilitate, and protect bilateral investments between the two countries, especially for NZ's investments into China, because of China's large economy. However, after the RTA was signed, the value of NZ outward FDI to China decreased. This is not consistent with the literature review predictions made in in this study. The cause of this decrease might be the global economic crisis which had a negative impact on the ability of NZ's investors to invest overseas. The OECD (2009) investigated the impact of the financial crisis on NZ, and found that in the early period of the financial crisis, NZ seemed well positioned to escape the worst effects. However, NZ would not escape a deeper recession, and in early 2009 macroeconomic indicators

deteriorated significantly. To further determine the impact of the RTA on NZ's outward FDI to China, we need to analyse other data also, such as the growth rate of NZ's outward FDI to China compared with NZ's main trading partners, and shares of outward FDI to China compared with NZ's main trading partners.

4.3.1 Growth and Share trends of NZ's outward FDI

Table 9: Growth rate of New Zealand's outward FDI stock to its main investment partners

Country	Year			
	2007	2008	2009	2010
US	51.45%	152.14%	27.95%	-37.50%
UK	-2.29%	34.89%	-9.01%	-14.71%
AU	14.76%	4.97%	3.47%	-8.97%
China	38.78%	132.79%	-25.46%	-12.80%
total	6.34%	10.38%	9.34%	-18.61%

Key: US, United States; UK, United Kingdom; AU, Australia. (Sources: Author's calculation based on OECD 2012 and Statistics NZ, 2012)⁹

Table 9 provides the growth rate of NZ outward FDI stock to China compared to main investment destinations. It is observed that while the growth rate of NZ's FDI to China was about 132.79% in 2008, it registered a significant decline thereafter. In 2009, the growth rate was -25.46%. Indeed, compared to the US, the UK, and Australia (NZ's major investment partners), NZ's direct investment into China declined much more than the others. In 2010, NZ's total outward FDI stock declined -18.61%, while outward FDI to China only declined -12.80%. Meanwhile, NZ's FDI into the US declined -37.50% and into the UK declined -14.71%. New Zealand's direct investment into Australia only declined -8.97%, which was a better result than for its FDI into China. The above indicates on a comparative basis, that NZ's direct investment into China declined the most compared with the other major trading partners. Further, it is also indicates that in

⁹ NZ's FDI stock from China obtained from OECD, While US, UK and AU from Statistics NZ.

2008, the first year the RTA was signed, NZ's outward FDI into China increased significantly.

Table 10: Shares of New Zealand's total outward FDI stock

Country	Year				
	2006	2007	2008	2009	2010
US	5.98%	8.51%	19.45%	22.76%	17.48%
UK	4.67%	4.30%	5.25%	4.37%	4.58%
AU	50.14%	54.10%	51.45%	48.69%	54.46%
China	0.25%	0.33%	0.69%	0.47%	0.50%

Key: US, United States; UK, United Kingdom; AU, Australia.

(Source: Author's calculation based on Statistics NZ, 2012 and OECD, 2012)

From Table 10 we can see the share of NZ's outward FDI into China decreased from 0.69% in 2008 to 0.47% in 2009. In 2010, the share increased to 0.50%. New Zealand's main trading partners showed a similar pattern; share of FDI into the UK decreased from 5.25% to 4.37% in 2009 and increased back to 4.58% in 2010. And in 2008, NZ's share of FDI into Australia accounted for 51.45% of total FDI. Then it decreased to 48.69% in 2009 and increased back to 54.46% in 2010. This situation can further help to determine the financial crisis' negative impact on NZ's outward FDI stock, not only to China, but also to other countries. Thus, although the RTA was expected to have a positive impact on NZ's outward FDI to China, the impact of the financial crisis makes our analysis unclear. Furthermore, from Table 10 we also can see that the share of NZ's outward FDI into China was relatively small compared with its main trading partners. In 2010, the share of NZ's outward FDI to China was 0.5%, while for the US it was 17.48%, for the UK it was 4.58%, and for Australia it was 54.46%. These results indicate that NZ investors have only just started to show their interest in China recently, and have not fully utilised the investment potential created by the RTA with China. Moreover, the shares of NZ's outward FDI into Australia also

stand in a strong place with 54.46% in 2010. This indicates that the NZ-Australia CER has facilitated NZ's outward FDI into Australia well.

4.3.2 Recent development in New Zealand's outward foreign direct investment in China

Fonterra, a leading dairy corporation in NZ, has considered the big market potential in China especially in dairy; as a result, Fonterra invested into China, cooperating with China's leading dairy company (Sanlu Group) in 2005. However, the Sanlu milk scandal¹⁰ happened in 2008, and made a terrible impact on Fonterra's investment. The joint venture company was bankrupted in 2009 by this event. Fonterra has lost about NZ \$0.2 billion as a result of this situation. Fonterra moved its investment back to NZ in 2009 (Fonterra, 2012). This could be a reason behind the observed reduction of NZ's outward FDI to China.

New Zealand Trade and Enterprise (NZTE) (2012a) has established a "Beachheads" programme with China since the NZ-China RTA was signed, with the aim of utilising the market potential in China and helping NZ investors to further understand the different situation and culture in China. New Zealand Trade and Enterprise considers that the different cultures in China and NZ do have influences on NZ-China bilateral investment. However, the "Beachheads" programme seems to undermine the efforts of the NZ-China RTA, and NZ has failed to take opportunities that arise from the NZ-China RTA. The reason for this failure is the lack of government support from NZ and New Zealand investors' lack of concern regarding cultural factors (Audrey, 2011).

Furthermore, NZTE (2012b) indicated the big business culture and business environment differences between China and New Zealand are the biggest challenges for New Zealand investors investing in China. Moreover, New Zealand and China are also

¹⁰ The 2008 Chinese milk scandal was a food safety incident in the People's Republic of China, involving milk and infant formula, and other food materials and components that were adulterated with melamine.

markedly different in size, culture, politics, geography, history and economic structure. Those factors could limit the success of NZ investors investing in China.

However, although there are some factors, such as the financial crisis impact and cultural differences, which have had a negative impact on NZ's outward FDI into China, NZ investors still believe the RTA will bring more benefits to them in the long run. For example, although Fonterra sustained big losses in China with the impact of the Sanlu scandal, there is a large potential market in China, especially in the growth of dairy products, and this market is supported by the benefits created by the NZ-China RTA. Thus Fonterra has re-invested in China in 2010, and is willing to enlarge their investment shares in the future (Fonterra, 2012). Further, this could see the outward FDI stock picking up in the post-RTA period as well.

Furthermore, New Zealand's Prime Minister John Key stated, "China is a country that has become very important to NZ. We want to expand our links further to grow trade and other opportunities between our two countries" (National Party, 2012). The NZ government has released the NZ Inc China Strategy to open doors to Chinese investment. This strategy will further help to deliver greater prosperity, security, and opportunity for NZ businesses to develop and grow in China. There are five strategic goals under the NZ Inc China Strategy. The first one is to retain and build a strong and resilient political relationship with China. The second is to double the bilateral goods trade with China to NZ \$20 billion by 2015. The third is to grow services trade with China. The fourth is to increase bilateral investment to levels that reflect the growing commercial relationship between China and NZ. The last is to increase high quality science and technology collaborations with China to generate greater commercial opportunities (NZ Ministry of Affairs & Trade, 2012). From those goals and actions we can see that the NZ government has considered the big market potential in China since the RTA was signed, and intends to enact more government focus and support to

increase bilateral trade and investment between the two countries. Furthermore, as we predicted in the literature review section, RTAs can affect FDI through trade liberalisation processes and investment rules. The big market size and large economies of scale in China and the removal of tariffs will also result in a positive impact on FDI in NZ. Thus, NZ's outward FDI into China will be expected to increase significantly in the near future.

4.4 FDI Intensity index

The FDI intensity index was derived from the trade intensity index, and is used to determine whether the value of bilateral FDI inward stock between two countries is greater or smaller than expected on the basis of their importance in attracting world FDI stock (Sen, 2005).

The calculation is as follows:

$$FDI_i = (FDI_{ij}/FDI_{iw}) / (FDI_{jw}/FDI_w - FDI_{iw})$$

and defines the share of one country's FDI stock going to a partner country divided by the share of world stock of the partner, where FDI_{ij} and FDI_{wj} express the values of country i 's inward FDI stock from country j , and of FDI inward stock of the world in country j . FDI_{iw} and FDI_w are country i 's total inward FDI stock and total world inward FDI stock, respectively.

An index of more than "1" indicates a bilateral FDI stock that is larger than expected, given the partner country's importance in the world's total inward FDI stock. It also indicates that bilateral investment linkages between these two countries are stronger than the FDI from the rest of the world.

The bilateral FDI intensity indexes for both NZ and China versus the rest of the world are computed from 2006 to 2010 to track any possible changes due to the RTA. After calculation, the results are shown in Table 11:

Table 11: Investment intensity index between New Zealand and China

Home country	Investment partner	Year				
		2006	2007	2008	2009	2010
New Zealand	China	0.149	0.105	0.112	0.103	0.147
China	New Zealand	0.012	0.017	0.028	0.016	0.013

(Source: Author's calculation based on OECD 2012, Statistics NZ, 2012 and MOFCOM, 2012)

From Table 11 we can see that FDI intensities were stronger from China versus NZ, although both of their levels were much less than “1”. This indicates that even after the RTA, bilateral investment linkages haven't strengthened significantly between the two countries relative to the rest of the world. Although NZ's bilateral FDI intensities have increased after the RTA was signed, the levels are very much similar to the pre-RTA period. This may indicate that the NZ–China RTA has only had limited success in expanding bilateral investment with China, because investment restrictions in NZ have not been removed by the NZ-China RTA. In addition, small, developed economies neither attract inward FDI on the basis of low cost labour as countries such as China or India do, nor they attract it by virtue of critical mass or markets, as might be the case of the United States (Scott-Kennel, 2007). NZ's location is isolated — the only nearby large economy is Australia — and as a result, compared with China's position, NZ does not have the big market size needed to attract more FDI from China.

However, from FDI intensities we can see Chinese investors in NZ are more aggressive than NZ's investors in China. As we predicted in Chapter 3, China has big market size and economies of scale, therefore NZ's outward FDI to China should be more than NZ's inward FDI from China. Studies already cited indicate that the reasons for this inconsistency are cultural differences and less government support to help NZ investors understand and access Chinese markets. Further, FDI in China is concentrated

in the manufacturing sector, however, NZ's most outward investment are mostly based in the service sector (Cremer & Ramasamy, 2005).

4.5 Conclusion

This chapter analysed the data of NZ's FDI stock from and into China for both pre- and post-RTA periods. By analysing the historical data on NZ's inward FDI stock from China, the results show that the NZ–China RTA has indeed facilitated NZ's inward FDI from China. Since the NZ–China RTA was signed, Chinese investors have enjoyed the benefits of the regional trade environment and utilised the investment potential of NZ, and as a result, they have increased their direct investment into NZ. However, compared with NZ's inward FDI from the UK, US, and Australia, the share of NZ's inward FDI from China is still relatively small. In addition, the small investment intensity index also shows that investment restrictions have limited the degree of success Chinese investors have had in expanding their investment in New Zealand.

By analysing the historical data on NZ's outward FDI to China from 2006 to 2010 compared with NZ's main investment partners, the impact of the NZ–China RTA on NZ's FDI into China is ambiguous. After the RTA was signed, NZ's FDI stock into China has declined. Compared with NZ's main investment partners, NZ's FDI into China declined most in 2009; however, in 2010 the situation with China compared equably with the other main trading partners. Overall, compared to the US, the UK and Australia, NZ's outward FDI into China has been rather negligible in magnitude. Thus, NZ investors may not have fully utilized the investment potential of China as a regional investment gate into Asia, and perhaps the NZ–China RTA has had only a limited degree of success in expanding NZ's investment in China. One possible reason for this result may be the world financial crisis in 2008 which slowed NZ's economic development. Moreover, the difference in cultures between China and NZ has also had a

negative impact on NZ's outward FDI into China. Furthermore, direct investment in China is mainly in the manufacturing sector (Cremer & Ramasamy, 2005), while NZ outward FDI is mainly based on the service and technology sectors. The different characteristics of investment focus are also reasons that can be used to explain why NZ's outward FDI into China is limited. However, in the future it is expected that NZ's outward FDI into China will be increased significantly by more government support, such as NZ's government "Opening Doors to China" strategy.

Chapter 5: Conclusions

5.1 Introduction

This research has attempted to analyse the impact of the NZ–China RTA on the two countries’ bilateral FDI. The emerging trends in NZ–China bilateral merchandise trade and an overview of the NZ– China RTA were analysed in Chapter 2, and suggested that NZ exports mainly agricultural and dairy products to China and imports mainly manufactured products from China, thus complementing each other. The signing of the RTA has had positive impact by liberating the two countries’ bilateral trading with each other. Chapter 3 reviewed both theoretical and empirical literature on the impact of the RTA on FDI, and the country-specific determinants for NZ have been summarised. These determinants include scale and size of economy, geographical and cultural distance, cost advantages, and investment agreements. Chapters 4 analysed the trends of NZ’s inward FDI stock from China and outward FDI stock into China and analysed the impact of the RTA on NZ’s FDI with China. The findings suggest that Chinese investors were more aggressive in seeking investment opportunities in NZ than NZ investors were in China in the post-RTA periods. However, since the NZ–China RTA was signed just four years ago, the impact of the NZ–China RTA on FDI between NZ and China is evolving and likely to be clearer after 2013, when at least five years will have passed since the signing of the RTA.

The purpose of this chapter is to succinctly review what has been found in this study, what has been learnt, what new questions have been raised, and to consider future research directions.

5.2 Main findings

The NZ –China RTA has been in force since October 2008, and is the first bilateral RTA to be signed by China with a developed economy. The NZ–China RTA is

expected to liberalise the bilateral FDI between NZ and China by lowering tariffs and enlarging scales of economy and investment provisions. Although it has only been in force for about four years, available data indicates that the NZ–China RTA is likely to have had a positive influence on the expansion of NZ’s inward FDI stock from China; this could be particularly so in agricultural sectors, particularly the dairy sector, which experienced immediate tariff elimination under the RTA. However, there is no direct evidence to suggest that the RTA has also facilitated expansion of NZ’s outward FDI stock into China. Both NZ’s inward FDI from China and outward FDI stock into China are relatively small in magnitude compared with NZ’s other FDI, and the impact of the RTA on NZ’s FDI stock with China is not significant. New Zealand’s investment restrictions and isolated geographical location might explain some of these observed trends. The world financial crisis, limited government support, and cultural differences are also reasons to explain why NZ’s outward FDI into China is not increasing as significantly as expected.

On a comparative basis, the analysis suggests that NZ investors may not have fully utilised the investment potential of China after the NZ–China RTA, while Chinese investors have ventured into NZ more aggressively for investment opportunities, after the RTA provided greater certainty in the business environment for their investments. The literature review suggests that NZ’s FDI into China should increase more than the inward FDI from China, but analysis of historical data in NZ and China’s FDI suggests that the trends are at variance with the theoretical predictions in the literature. This could possibly be due to unforeseen events such as the global financial crisis of 2008 - 2009 and cultural differences between China and NZ that make it difficult for NZ investors to understand and access Chinese markets. Further, major investment in China are based in the manufacturing sector, however, the manufacturing sector is not NZ’s major investment area. In addition, the share of both NZ’s inward and outward FDI with

China and the investment intensity index shows the NZ–China bilateral FDI is still relatively small compared with the rest of the world. This indicates that in the initial years of the NZ–China RTA, it has succeeded to a limited extent in enhancing investment flows. Overall, this research has shown that the NZ–China bilateral FDI has not been significantly influenced by the NZ–China RTA since it was signed, and its impact is not yet clear, as the RTA was signed as recently as 2008. The impact of the NZ-China RTA on FDI between NZ and China is evolving and likely to be clearer after 2012, when at least five years will have passed since the signing of the RTA.

In addition, the NZ-Australia CER has had significant positive impact on liberalising both NZ's inward and outward FDI stock from and into Australia, as the shares of FDI from and into Australia are over 50% of total NZ's FDI in 2010. Further, Liu (2006) has also indicated NZ-Australia CER has had a positive impact on direct investment from NZ into Australia. As a result, the creation of CER in general in the NZ context has led to growth in inward and outward bilateral FDI, but it is hard to ascertain whether RTAs in general lead to growth of FDI in the NZ context.

The investment linkages between NZ and China are predicted to grow more significantly with the liberalisation of investment rules under the NZ–China RTA. Under the NZ government's Open Doors to China strategy, the government will give more support for both NZ and Chinese investors to encourage bilateral investment, and this might explain NZ's outward FDI into China.

5.3 Contributions to literature by this research

This study on the effects of RTA on FDI between NZ and China is particularly important to NZ since China has become its second largest trading partner in the world in 2010.

This research has attempted to contribute to an initial understanding of NZ-China RTA and their effects on bilateral FDI flows. This study focused on the impact of the RTA on FDI between NZ and China, an area where there have been no previous studies. Further, this study summarises the determinants of the RTAs' impacts on FDI from past studies, and then relates this to the NZ-China context, which has also never been attempted before in previous studies. Finally, this study evaluates trends in NZ-China bilateral FDI and finds that, within the first three years of signing the RTA, NZ seems to be attracting more inward FDI from China compared with NZ investment into China. This prompts the study to conclude that since the NZ-China RTA has been signed, Chinese investors have enjoyed the benefits of the regional trade environment and have utilised the investment potential of NZ, while New Zealand investors may not have fully utilised the investment potential of China after the NZ-China RTA, which has important policy implications. However, it emerges from this study that legal and political issues, financial, operational and human resources considerations are the main barriers for NZ firms to invest in China.

5.4 Policy implications

Since the legal and political issues, financial, operational and human resources considerations are the main challenges for New Zealand firms to invest in China, New Zealand investors in China must be able to adapt to the different cultural environment and be able to accept differences in work practices in China in order to make business successful (NZTE 2012b). Furthermore, NZ's government need to provide more support for both NZ and China's investors to encourage bilateral investment, to help NZ's investors in China to adapt to the differences between the two countries. NZTE has launched a "China Benchheads" programme since the NZ-China RTA has been signed, with the aim of utilising the market potential in China and helping NZ investors

to further understand the different situation and culture in China (NZTE, 2012a). However, this programme has not operated successfully to encourage New Zealand investors to invest in NZ; NZ has failed to take opportunities that arise from the NZ–China RTA. The reason for this failure is the lack of government support from NZ and New Zealand investors’ lack of concern regarding cultural factors (Audrey, 2011).

In addition, the investment provision is also considered as a major determinant of the impact on FDI by the NZ-China RTA. However, the investment provision does not compromise NZ’s regulatory environment and NZ’s investment screening regime under the Overseas Investment Act 2005, which will limit the investment potential for Chinese investors to invest in NZ. The NZ government should consider this negative impact on liberalising the investment from China and consider removing the investment screening regime in order to encourage Chinese investors to invest in NZ.

5.5 Limitations of this research

There are several limitations to this research. The main limitation is the lack of data gathered related to the NZ–China bilateral FDI, both at the sectorial and at the country level¹¹. As a result, the bilateral FDI data period is short and not testable statistically. New Zealand’s inward FDI stock from China therefore has to be analysed on the basis of China’s outward FDI stock instead. The statistical formulae used to calculate the FDI data are different between China and NZ, and this might have contributed to discrepancies when analysing the NZ’s inward FDI data from China. Analysing the sectorial bilateral data would have helped significantly to further investigate the impact of the RTA. This study is based largely on a critical literature review and supplements it by analysing historical FDI data, subject to limited data availability. The gravity model

¹¹ Contacts were made with Statistics NZ, NZTE and MFAT, however, they were unable to provide related bilateral FDI data as the data is scarce or confidential.

is the model used by many researchers to investigate the impact between RTA and FDI, but this would have required longer time spent analysing bilateral FDI trends. Analysing data with multiple methodologies will help to make the results more appropriate and clear in the near future, involving a longer time period post-RTA through an econometric framework.

Moreover, the study argues that although the NZ–China RTA may have partially succeeded in expanding the investment linkages of NZ, it is too early to expect this result since the RTA was signed just over four years ago. It may still be a few years before one can analyse the actual impact of the NZ–China RTA on FDI in NZ, using standard statistical analysis.

5.6 Directions for future research

As noted in previous sections, this research was conducted by critically reviewing previous literature and analysing historical data. There is a need for further research to examine the effect of the RTA on FDI between NZ and China using an econometric framework in a more detailed manner. Moreover, further study could also include sectorial data of NZ's FDI into and from China when data is made available. And finally, since investment restrictions and the world financial crisis are factors which may have influenced the impact of the RTA on NZ–China FDI, it is necessary to further investigate the impact of investment restrictions on NZ's inward FDI from China and investigate the impact of the financial crisis on NZ's outward FDI into China as well.

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