Trade, growth, and global connectivity in the New Zealand context

NZ Trade Consortium working paper no 34

June 2005

The New Zealand Trade Consortium

in association with the

New Zealand Institute of Economic Research (Inc)
Preface

NZIER is a specialist consulting firm that uses applied economic research and analysis to provide a wide range of strategic advice to clients in the public and private sectors, throughout New Zealand and Australia, and further afield.

NZIER is also known for its long-established Quarterly Survey of Business Opinion and Quarterly Predictions.

Our aim is to be the premier centre of applied economic research in New Zealand. We pride ourselves on our reputation for independence and delivering quality analysis in the right form, and at the right time, for our clients. We ensure quality through teamwork on individual projects, critical review at internal seminars, and by peer review at various stages through a project by a senior staff member otherwise not involved in the project.

NZIER was established in 1958.

Authorship

This report has been prepared at NZIER by Chris Nees and reviewed by Chris Nixon. The assistance of Sarah Spring is gratefully acknowledged.
Executive Summary

Intended as a contribution to the debate on the sources of New Zealand’s export growth, this paper seeks to examine the persistence of New Zealand’s trade in commodity products, which have historically made up a large portion of the nation’s export receipts. Despite periodic discussion surrounding export strategies such as exhorting exporters to add more value or the need to develop a ‘knowledge economy’, an important part of New Zealand’s export returns and New Zealand’s income continues to be sourced from bulk commodities.

Background

The world has changed dramatically since the 1960s. The stylised facts of world trade point to a decline in agricultural trade and prices and the rise of the services trade as one of the fastest growing exports. Services exports, from New Zealand, are expected to grow strongly as global demand soars. New Zealand has done particularly well from the “new” services trades, such as tourism and education.

When examining New Zealand’s trading patterns it is important to consider the wide ranging liberalisation programmes which increased New Zealand’s exposure to world markets while tariff and subsidy removal effectively forcing firms to compete at prices set in world markets. Learning by doing in a liberalised domestic environment and improving the skills and education of the workforce have become important strategies for export success and are invaluable for new and existing export sectors alike.

Export concentration and competitiveness/openness of markets

With the use of an adapted Herfindahl index and Portfolio theory to analyse the trends and changes in New Zealand’s commodity exports, we find that New Zealand has diversified both its export markets and its exported goods since 1964. Once highly concentrated in food and live animal exports sent to the British market, New Zealand now spreads its exports more evenly among its top twenty export destinations and its categories of commodity exports. Under the Herfindahl index criteria, New Zealand’s exports can no longer be deemed to be concentrated in either markets or commodity types.

New Zealand’s competitiveness/openness of export markets index, as measured by the ratio of nominal exports to GDP, suggests the nation has maintained its level of export returns since 1964 despite large falls in commodity prices and greater competition in global markets. Furthermore, if we follow Portfolio theory, we would have expected that a diversification in export products and markets would reduce the risk of volatility to New Zealand’s export returns but cause a reduction in the average returns earned by exporters. Our results show that New Zealand’s competitiveness and the degree of openness of world markets have held up despite market diversification.
Looking forward

The importance of commodities to New Zealand’s export returns is likely to continue as New Zealand’s supply side comparative advantage in the production of agricultural products carries on even as the economy diversifies its exports.

New Zealand is in a good position to benefit from future liberalisation in world trade (albeit slowly), strong demand for commodities from Asia, and experience gained from doing business in competitive world markets.
Contents

1. Introduction .................................................................................................................. 1

2. Background .................................................................................................................. 2
   2.1 World trade stylised facts ......................................................................................... 2
       2.1.1 Reduction in transport and communication costs .............................................. 2
       2.1.2 The importance of trade growth ........................................................................ 3
       2.1.3 Services trade growth ....................................................................................... 3
       2.1.4 Intra-company trade ....................................................................................... 5
   2.2 Domestic NZ issues ................................................................................................. 6
       2.2.1 Doing business in a competitive marketplace ................................................. 6
       2.2.2 New Zealand’s talent and skills ....................................................................... 6
       2.2.3 The importance of experience ........................................................................ 8
       2.2.4 ICTs role ....................................................................................................... 8

3. Market shares ................................................................................................................. 10
   3.1 Historical trends ..................................................................................................... 10
   3.2 The applied Herfindahl Index ................................................................................. 11
       3.2.1 Country concentration .................................................................................. 13
       3.2.2 Commodity concentration ............................................................................. 13
   3.3 Portfolio Theory and a Competitiveness Index ...................................................... 15

4. Looking forward ............................................................................................................ 20
   4.1 Platform for further work ....................................................................................... 21

5. References ...................................................................................................................... 22

Appendices

Appendix A: New Zealand’s top twenty export destinations ....................................... 26
   A.1 Trends through time ............................................................................................... 26
   A.2 Major export markets in 2003 .............................................................................. 33
Figures

Figure 1: Transport and Communication Costs 1930-2000 ............................2
Figure 2: World export growth and world GDP growth 1994-2004 ....................3
Figure 3: Value of New Zealand’s trade in services 1994 to 2008 .......................4
Figure 4: Goods exports by commodity type ....................................................10
Figure 5: Country concentration of exports among New Zealand’s major markets ....................................................................................................13
Figure 6: Concentration of selected commodities among New Zealand’s export markets 1964-2003 .................................................................15
Figure 7: Concentration of selected commodities among New Zealand’s export markets 1964-2003 .................................................................15
Figure 8: Competitiveness and Herfindahl indices for selected commodity group exports ..............................................................................................17
Figure 9: Competitiveness and Herfindahl indices for selected commodity group exports ..............................................................................................17
Figure 10: Competitiveness/openness & concentration of exports among New Zealand’s top twenty export markets ............................................19
Figure 11: Goods exports by destination .............................................................26
Figure 12: New Zealand’s top twenty export partners 1964-2003 ....................28
Figure 13: Trade with Australia: exports and imports 1860-2000 ....................33
Figure 14: Share of New Zealand’s total exports sent to the United States 1975-2003 .................................................................................................35
Figure 15: Share of New Zealand’s total exports sent to Japan 1975-2003 ..........37
Figure 16: Share of New Zealand’s total exports sent to the United Kingdom 1975-2003 .........................................................................................41

Tables

Table 4 Shares of services export trade by sector .............................................5
Table 2: Number and percentage growth of students and awards in public tertiary institutions 1996-2002 .................................................................7
Table 2: New Zealand’s top twenty export destinations in 2003 ...................29
Table 3: Summary Country Analysis .................................................................30
1. Introduction

The New Zealand Growth and Innovation Framework (GIF) aims to deliver the long-term sustainable growth necessary to improve the quality of life of all New Zealanders (MED, 2005). To achieve this goal, New Zealand is reliant on the external sector for export earnings to increase income levels and to provide the goods and services it cannot produce competitively in the domestic market. What has been the general pattern of New Zealand’s exports – in terms of both their type and makeup and their destination and why have these patterns occurred? By shedding light on these issues, we will be in a better position to further understand the interconnection between growth and trade in the New Zealand context. In this paper, we examine:

- The stylised facts of world trade and their implications for New Zealand’s trade overtime. These include the massive reduction in global transport and communication costs, world trade growth outpacing world economic growth and the rise of intra company trade.

- Domestic developments that have been an important factor in explaining New Zealand’s export patterns. The economic reforms of the 1980’s and 1990’s, the talent and skills of the New Zealand population and the importance of exporters learning by doing and the effect these have on export patterns.

- The historical trends in the make-up of New Zealand’s commodity exports show the dominance of bulk agricultural products such as wool, meat, and dairy products. Exports of primary commodities accounted for 50 percent of New Zealand’s trade by 2000; this is much lower than highs of over 85 percent in the 1960’s, but still continues to be an important share of New Zealand’s total exports.

- Using the Herfindahl index concept and aspects of Portfolio Theory, we analyse the changes in the concentration of New Zealand’s exports among both markets and commodity types. Combined with a measure of competitiveness/export market openness we examine the relationship between the market spread of New Zealand’s merchandise exports and commodity groups and the changes in the international competitiveness and export returns of the nation.¹

¹ We have avoided the use of services trade data in this analysis because of the unavailability of historical data in this area.
2. Background

2.1 World trade stylised facts

2.1.1 Reduction in transport and communication costs

Over the past century the costs of global transport and telecommunications services have fallen dramatically. As a result of rapid advances in information and communications technology (ICT) and the digital revolution in communications technology, the speed in which sophisticated business transactions can be carried out has exponentially increased.

Figure 1 illustrates this point, there have been large decreases in transport and communication costs since 1930 where the real cost of a three minute phone call from New York to London has fallen by 99.9 percent, while shipping and airfreight costs have fallen by nearly half since 1950 (Busse, 2002). The greater availability of satellite communications combined with their rapid fall in cost has assisted New Zealand firms in conducting business globally in ‘real time’ and facilitated the growth in world trade.

Figure 1: Transport and Communication Costs 1930-2000
Base year 1990 (US dollars)

Notes:  
(1) Average ocean freight and port charges per short tonne of import and export cargo  
(2) Average air transport revenue per passenger mile  
(3) Cost of a three minute telephone call from New York to London

Source: Busse, M.
2.1.2 The importance of trade growth

Since the 1950’s, real world Gross Domestic Product (GDP) has grown at an average of 4 percent annually. Over the same period world trade in goods and services has grown at more than double this rate.\(^2\) Figure 2 compares the growth in world exports with world GDP. Apart from 2001, export growth has consistently out-performed GDP growth.

As growth in trade continues to outstrip GDP growth, the importance of the external sector cannot be over emphasised. Because of the limitations of the domestic market due to a small population it is through exports that New Zealand has the opportunity expand its own growth and standards of living.

\[
\text{Figure 2: World export growth and world GDP growth 1994-2004}
\]

\[
\begin{array}{c}
\text{Annual percentage change} \\
\end{array}
\]

Source: WTO, press release 373, 2004

2.1.3 Services trade growth

International trade in services has been growing rapidly since the 1970’s and was valued at US$1.8 trillion in 2003 (WTO, 2004). Services represent the fastest growing sector of the global economy and WTO (2003, p33) figures show they “account for 60 percent of global output, 30 percent of global employment and nearly 20 percent of global trade”. It is estimated that in 1900, the service sector made up one third of GDP in a typical industrial country, while in 2000 services made up around two-thirds of GDP in industrial countries (Mussa, 2000). Examples of these services include transport, travel, communications, insurance, education, and construction services.

\(^2\) The volume of trade grew from one tenth of world GDP in 1950 to close to one third of world GDP in 2000 (Mussa, 2000).
Following the global trend, New Zealand’s trade in services has grown considerably in the past ten years (see Figure 3). The service sector itself accounts for 67 percent of economic output, one quarter of export receipts, and 1.3 million jobs (Ballingall and Stevenson, 2004, p29). Thus the service sector makes up a vital part of the New Zealand economy and further growth in the trade of services could provide New Zealand with higher export returns and correspondingly, higher rates of economic growth.

**Figure 3: Value of New Zealand’s trade in services 1994 to 2008**

March years, $M

![Graph showing value of New Zealand’s trade in services from 1994 to 2008](image)

*Source: Statistics New Zealand & NZIER forecasts*

New Zealand’s services export profile has diversified in recent years (see Table 1). Transport, travel, and education, have declined slightly in terms of their contribution to services exports. This is not to say that export growth in these sectors has been easing. On the contrary, it has been growing strongly. However, other components of services exports have grown at a faster rate, increasing their share slightly of overall services exports.

Unlike many other developed countries, New Zealand’s services export profile is dominated by tourism. In the 2003 calendar year, international travellers contributed $6.4 billion to the New Zealand economy (Tourism Research Council, 2004). The contribution of tourism to New Zealand’s economy has been growing in recent years and is forecast to continue to grow strongly.
Table 1 Shares of services export trade by sector
March year, Percent of total services exports (1)

<table>
<thead>
<tr>
<th>Service Category</th>
<th>1995</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport, travel, and education</td>
<td>85.4</td>
<td>82.4</td>
</tr>
<tr>
<td>Finance and Insurance</td>
<td>0.4</td>
<td>1.0</td>
</tr>
<tr>
<td>Computer and Information</td>
<td>0.8</td>
<td>1.5</td>
</tr>
<tr>
<td>Merchant services</td>
<td>0.7</td>
<td>2.2</td>
</tr>
<tr>
<td>Personal, cultural, and recreational</td>
<td>0.7</td>
<td>1.1</td>
</tr>
<tr>
<td><strong>Miscellaneous and other business services:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication(2)</td>
<td></td>
<td>2.7</td>
</tr>
<tr>
<td>Construction(2)</td>
<td></td>
<td>0.4</td>
</tr>
<tr>
<td>Legal, accounting, management consultancy and PR</td>
<td>1.0</td>
<td>2.2</td>
</tr>
<tr>
<td>Advertising, market research</td>
<td>0.4</td>
<td>0.3</td>
</tr>
<tr>
<td>Research and Development</td>
<td>0.4</td>
<td>0.5</td>
</tr>
<tr>
<td>Architectural, engineering and other technical services</td>
<td>1.2</td>
<td>1.3</td>
</tr>
<tr>
<td>Agricultural, mining and on-site processing services</td>
<td>&lt; 0.1</td>
<td>&lt; 0.1</td>
</tr>
<tr>
<td>Other miscellaneous services(2)</td>
<td>4.3</td>
<td>1.5</td>
</tr>
<tr>
<td>Total miscellaneous and other business services</td>
<td>7.0</td>
<td>6.9</td>
</tr>
</tbody>
</table>

Notes:  
(1) Data available by sector for earlier years is not comparable with recent data.  
(2) In 1995 miscellaneous included communications & construction.

Source: Statistics New Zealand, Infometrics

There have been recent attempts to liberalise global trade in services by reducing barriers that restrict the importation of these services negotiated through the WTO which resulted in the General Agreement on Trade in Services (GATS). Further negotiations are continuing through the WTO, and it is estimated that New Zealand will benefit by between US$257 million and US$700 million per annum from future liberalisation (Ballingall and Stevenson, 2004, p23). Unfortunately, because of the difficulty in obtaining accurate services trade data over time we have not included the services trade in our analysis.

2.1.4 Intra-company trade

Intra-company trade has grown significantly since the 1980s, contributing strongly to overall growth in merchandise world trade. This form of trade occurs when one firm operates within two or more countries. By sending products between locations it engages in international trade. A common example is that of
a multi-national enterprise (MNE) that produces one of its inputs in a certain country then exports this intermediate good to another factory overseas where it manufactures the final good. This form of transaction would be recorded on the balance of payments schedule of both nations, thereby contributing to world trade.

Intra-company trade is estimated to account for one third of total global trade (WTO, 1996), with the majority occurring between US and Japanese parent companies and their subsidiaries in other countries. The fact that this form of trade accounts for a significant portion of world trade has implications for governments trying to promote growth through the external sector as some MNEs use intra-company trade to reduce their tax burden.3

2.2 Domestic NZ issues

2.2.1 Doing business in a competitive marketplace

Prior to 1984, New Zealand’s economy was highly regulated. Government interventions in the economy were common, contributing to a partially distorted market for goods and services. There were significant restrictions facing firms doing business in the external sector such as high levels of tariff protection for domestic industries, strict import licensing, and foreign exchange controls. Many of these arrangements had been in place since the 1920’s and this meant New Zealand business, particularly those selling exclusively on the domestic market, had relatively little or no experience of doing business in liberalised global markets.

The inevitable reform process began in the early 1980s including a programme of trade liberalisation “[which] exposed producers of tradable goods to genuine world market competition for the first time” (Bollard 1991, pX).

After a significant period of adjustment the reform of the economy has seemingly provided long run benefits for New Zealand. Without these changes the manufacturing and agriculture sectors are likely to have faced great constraints to future growth due to a lack of international competitiveness. The economy is now in a position to take advantage of further liberalisation in international trade as exporters have more knowledge and experience of operating in internationally competitive markets without government supports.

2.2.2 New Zealand’s talent and skills

The successful implementation of any trade growth strategy is reliant on the talent and skills of the nation’s population for innovation and development. Education plays a vital role in this process by enhancing the skills of the nation and creating a vibrant and dynamic workforce. A skilled population creates growth through higher productivity and greater participation in the labour force. Talent and skills

3 It is asserted that this ‘transfer pricing’ hurts developing countries with high tax rates by reducing government revenue and deteriorating the terms of trade (Appleyard & Field p216).
allow higher utilisation of labour resources and facilitate the use of new technology, which improves New Zealand’s international competitiveness.

Quality education at all levels is critical for advancing the skill and knowledge levels of the population and developing a flexible and innovative workforce. During the past seven years there has been considerable growth in both the numbers of students enrolling at public tertiary institutions and the completion rates of qualifications as shown in Table 2. This is indicative of the higher demand for further education from students and employers as well as government initiatives to raise the skill level across the population (Ministry of Economic Development (MED) 2003). However, with 20 percent of New Zealand’s working age population lacking any kind of formal qualification (MED 2003) there is plenty of room for improvement.

### Table 2: Number and percentage growth of students and awards in public tertiary institutions 1996-2002

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of students</th>
<th>Growth in student numbers (%)</th>
<th>Number of awards</th>
<th>Growth in awards (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>47,623</td>
<td></td>
<td>49,589</td>
<td></td>
</tr>
<tr>
<td>1997</td>
<td>54,325</td>
<td>14.1</td>
<td>56,000</td>
<td>12.9</td>
</tr>
<tr>
<td>1998</td>
<td>57,594</td>
<td>6.0</td>
<td>59,465</td>
<td>6.2</td>
</tr>
<tr>
<td>1999</td>
<td>60,098</td>
<td>4.3</td>
<td>62,711</td>
<td>5.5</td>
</tr>
<tr>
<td>2000</td>
<td>60,645</td>
<td>0.9</td>
<td>63,487</td>
<td>1.2</td>
</tr>
<tr>
<td>2001</td>
<td>64,408</td>
<td>6.2</td>
<td>67,796</td>
<td>6.8</td>
</tr>
<tr>
<td>2002</td>
<td>78,447</td>
<td>21.8</td>
<td>82,376</td>
<td>21.5</td>
</tr>
</tbody>
</table>

Notes: (1) Awards are given for completed qualifications only, for example degrees (both undergraduate and post graduate), diplomas, certificates


The number of enrolments in tertiary institutions is only one crude indicator of the state of the workforce. On the job training is an important component of up-skilling the workforce, especially once formal education has been completed and in some cases it is the only way for employees to gain the skills needed for particular jobs. New Zealand was ranked the highest among OECD nations for the number of hours of job related education and training undertaken by adults aged 16-65, averaging over 110 hours per year per adult, and nearly 140 hours if all types of continuing education are included (OECD, 2000).

The New Zealand Porter report (Crocombe et al. 1991) concluded that New Zealand’s human resources were poor in terms of their ability to improve the
country’s international competitiveness. Areas of specific weakness included the lack of appropriate industry training, low rates of participation in education, and an inadequate vocational focus in education. Table 2 indicates that participation and completion rates at tertiary institutions have improved significantly since 1996, and combined with New Zealand topping the OECD average for hours of continuing adult education, and the introduction of modern apprenticeship schemes, there is strong evidence that New Zealand has been up-skilling its workforce since this report’s publication in 1991.

2.2.3 The importance of experience

Learning by doing is integral component of improving New Zealand’s competitiveness in the international marketplace. One of the best ways to learn about the particular demands and tastes of foreign markets is to conduct market research and actually be engaged in exporting to those markets, thus gaining ‘local’ knowledge about the nature of doing business overseas. This type of experience is invaluable to New Zealand businesses, because both successes and failures contribute to the stock of experience that in the long run will boost growth through greater trade.

While some businesses have had a long history of exporting, notably the meat, wool, and dairy sectors, others are only comparatively new to exporting. This is for a variety of reasons, including:

- They are comparatively new businesses. Relative to the traditional sectors even the kiwifruit and deer industries are new.
- The reforms of the early 1980s forced them to look to exporting to survive. This is particularly so for manufactures, and
- Trade agreements such as CER and the Uruguay GATT agreement have opened up new possibilities.

These businesses have taken time to understand how to operate in a competitive world market and develop the systems that allow them to compete consistently at world’s best practice.

2.2.4 ICTs role

New Zealand is a small and geographically isolated nation; therefore effective communication links with the outside world are critical for allowing firms to do business around the world and to keep abreast of new developments in the marketplace. Exporters need to be aware of their customers needs all times to ensure their satisfaction and their continued business. An ability to communicate more quickly and effectively is likely to have more of a positive impact on New Zealand because of its isolation, relative to our competitors.
New Zealand has relatively high levels of ICT installation, which provide fast and reliable links with these foreign markets. New Zealand ranks favourably among OECD nations in terms of the number of households with access to a computer and the internet, as well as the number of Internet Service Providers (ISP’s), although the uptake rate of broadband services is less than half the OECD average (OECD 2003). The further expansion of ICT throughout New Zealand will only enhance international linkages and increase opportunities for global business and trade.
3. Market shares

3.1 Historical trends

New Zealand’s exports have traditionally been dominated by primary products, especially wool, meat and dairy products. Since 1970, this pattern has begun to change as exporters have diversified into new markets and products and global demand has shifted away from bulk agricultural products. Figure 4 shows the dominance of bulk commodities which is particularly apparent in the period prior to 1975.

![Figure 4: Goods exports by commodity type](image)

The gold rush of the 1860s and 1870s resulted in gold dominating New Zealand’s exports in the early period of the nation’s trading history. By 1880, gold exploration and recovery had declined and wool became New Zealand’s most important export. However, the introduction of refrigerated shipping in 1882 meant that meat and dairy exports began to make inroads into wool’s dominance.

By 1921 the dairy industry had become New Zealand’s biggest export earner when it peaked at 46 percent of total exports, although wool briefly regained its dominance in the 1950s and 1960s due in part to the Korean War increasing demand for woollen products.

Over the ‘long expansion period’ between 1930 and 1960 exports were dominated by bulk wool, meat and dairy products. After this time, these products began to decline in importance relative to other exports although they still made up the largest share of total exports.

By 2000 there had been large diversification in exports, ‘other exports’ made up 50 percent of total exports, meat and dairy exports accounted for smaller and almost equal shares (14 and 19 percent respectively), while the share of forestry exports has increased steadily since 1950. The share of wool in total exports has
declined dramatically, making up only 3 percent of exports in 2000. Despite this diversification, commodity products still account for half of all New Zealand’s goods exports and their importance to the New Zealand economy looks set to continue for the foreseeable future.

### 3.2 The applied Herfindahl Index

The Herfindahl index is a framework used by competition authorities when evaluating possible mergers to examine the size of firms in relationship to the rest of an industry and to indicate the amount of competition between them (Wikipedia, 2004).

In a trade context we adapt the Herfindahl index to New Zealand’s trade data since 1964 to determine changes in the patterns of export concentration in both commodities and countries. The aim is to examine the rate at which New Zealand has diversified its export markets and the composition of these exports since 1964 and allow us to gain a greater understanding about why New Zealand’s export patterns behaved as they have over time. (For the second part of this process see Appendix A for market profiles of New Zealand’s main export destinations over time)

The adapted Herfindahl index showing the concentration of commodities among New Zealand’s exports is calculated by the sum of the squares of the value of exports of each commodity group sent to New Zealand’s major export partners in 1964, 1973, 1983, 1993 and 2003 divided by the value of New Zealand’s total exports for each respective year.

The formula for 1964 is as follows:

\[
HI_{1964} = \sum \left[ \left( \frac{\theta_i}{z_1/X_{1964}*100} \right)^2 + \left( \frac{\theta_i}{z_2/X_{1964}*100} \right)^2 + \ldots + \left( \frac{\theta_i}{z_{10}/X_{1964}*100} \right)^2 \right]
\]

where; \( HI_{1964} \) is the Herfindahl index for commodity concentration in 1964

\( \theta_i \) is the value of exports of commodity \( i \)

\( z_i \) is New Zealand’s top export market for commodity \( i \), in 1964

---

4 It is a powerful tool because it provides a way of determining how concentrated a particular market is in terms of the size and market power of each firm. The index is a figure between 0 and 10,000 where zero illustrates that no firm dominates the market (i.e. perfect competition) and 10,000 shows one firm entirely dominates the market (i.e. a monopoly). We can classify market concentration into three broad categories; Herfindahl indices below 1000 show low concentration, indices between 1000 and 1800 are considered to be moderately concentrated while indices above 1800 are said to be concentrated (Wikipedia, 2004).

5 As defined by Statistics New Zealand: Food and live animals, Beverages and tobacco, Crude materials, inedible, except fuels, Mineral fuels, lubricants and related materials, Animal and vegetable oils and fats, Chemicals, Manufactured goods classified chiefly by material, Machinery and transport equipment, Miscellaneous manufactured articles, Commodities & transactions not classified according to kind.

6 We have data sources from UN Comtrade data and Statistics NZ.
z₂ is New Zealand’s second most important market for commodity, in 1964

z₁₀ is New Zealand’s tenth most important market for commodity, in 1964

X₁₉₆₄ is the value of New Zealand’s total commodity exports in 1964

This process is repeated for all ten commodity groups in 1964 and then for all ten groups in the years 1973, 1983, 1993, and 2003.

The adapted Herfindahl index showing the concentration of exports among New Zealand’s major export partners is evaluated by the sum of the squares of the market share of New Zealand’s major export partners for the same periods divided by total exports for each respective year.

The formula for 1964 is as follows:

\[ HI_{1964} = \sum \left[ \left( \frac{\beta_1}{X_{1964} \times 100} \right)^2 + \left( \frac{\beta_2}{X_{1964} \times 100} \right)^2 + \ldots + \left( \frac{\beta_{20}}{X_{1964} \times 100} \right)^2 \right] \]

where;  

\( HI_{1964} \) is the Herfindahl index for country concentration in 1964

\( \beta_1 \) is the value of total commodity exports sent to New Zealand’s top export destination by value in 1964

\( \beta_2 \) is the value of total commodity exports sent to New Zealand’s second most important export destination by value in 1964

\( \beta_{20} \) is the value of total commodity exports sent to New Zealand’s twentieth most important export destination by value in 1964

\( X_{1964} \) is the value of New Zealand’s total commodity exports in 1964


As with the standard Herfindahl index, for each index we obtain a figure between 0 and 10,000 where zero indicates low concentration i.e. exports are spread among many commodities or countries while 10,000 indicates complete concentration with one country or commodity dominating New Zealand’s exports.

We will use the previously established criteria to classify export concentration into the same three broad groups.⁷

---

⁷ In the case of commodity concentration we have used data for New Zealand’s top ten export partners. In most cases exports to these top ten nations account for at least 80 percent of all exports of the respective commodity group. In the case of country concentration we are limited to data covering the top twenty export destinations; however this covers at least 80 percent of New Zealand’s merchandise exports for the respective years.
3.2.1 Country concentration

The concentration of exports among New Zealand’s major export destinations has fallen considerably over time. Figure 5 shows the marked diversification in New Zealand export markets between 1964 and 2003. The high concentration of export markets in 1964 indicates the dominance of the British market as an export destination when it accounted for half of New Zealand’s total exports (see Figure 12).

The 1964 Herfindahl index value is 2690 or ‘concentrated’ using the standard classification system. By 1983, the Herfindahl value has fallen to below 1000 to what is considered to be a low level of concentration, indicating a more even spread of New Zealand’s exports among its top twenty export partners.

In 2003, Australia was New Zealand’s biggest export market with its share of exports at 25 percent. The increase in importance of Australia as an export market since the signing of CER is reflected in the very slight upward trend of the index after 1983. Australia’s share of New Zealand’s exports is still much smaller than the 53 percent share sent to Britain in 1964 when export markets were highly concentrated, thus the Herfindahl index corresponds with the general trend of diversification in New Zealand’s export markets that has taken place since the 1960s.

![Figure 5: Country concentration of exports among New Zealand’s major markets](image)

Source: NZIER

3.2.2 Commodity concentration

Applying the Herfindahl index to data on New Zealand’s exports by commodity type we can obtain a measure of the concentration of these commodities among the country’s exports. Figure 6 and Figure 7 show changes in the concentration of the export of these commodities between 1964 and 2003 and reveal some interesting patterns.
As shown in Figure 6 there has been a marked reduction in the concentration of food and live animal exports since 1964, with a Herfindahl index value of 99 (low concentration) in 2003 indicating that these commodities no longer dominate New Zealand’s exports as they once did in 1964 when they held a Herfindahl index of 1430 showing moderate concentration. Crude materials also show this trend of falling export concentration over time. Although a 1964 Herfindahl index figure of 236 shows this commodity by no means dominated New Zealand’s exports, its concentration has continually fallen over the decades and in 2003 had a Herfindahl value of 15 which indicates very low concentration. Manufactured goods and machinery and transport equipment have trended slightly upwards in their concentration reflecting the increasing importance of these commodity groups among New Zealand’s exports. However, the increase in concentration has been very small and with both categories having Herfindahl indices of just 30 in 2003 they are still at very low concentrations among New Zealand’s exports.

Figure 7 shows that with the exception of animal and vegetable oils, the remaining commodity groups; beverages and tobacco; mineral fuels; chemicals; miscellaneous manufactures and other commodities have all more than doubled in concentration between 1964 and 2003. It is important to note however that these groups all started with Herfindahl values of less than one in 1964, and had not risen to any value greater than nine by 2003 thus they remain at extremely low concentrations among New Zealand’s exports.

Thus we can observe that since 1964, New Zealand’s exports of food and live animals have become less concentrated amongst total exports, and no longer dominate export earnings as they once did. By 2003, food and live animals were still New Zealand’s biggest commodity export group, but export earnings had become more evenly spread over all ten categories of commodity exports. All commodity groupings could be classified as having low levels of concentration under the Herfindahl index criteria and no individual group could be said to dominate New Zealand’s exports.
3.3 Portfolio Theory and a Competitiveness Index

Portfolio theory, pioneered by Markowitz (1952) describes how and why portfolio managers reduce risk. Markowitz described the relationship between expected return on investment portfolios and the risk of owning these portfolios and determined investors hold a variety of assets within their portfolios with the aim
of diversifying away as much risk as possible. In such a model, risk averse investors would hold low risk, high quality assets while investors more tolerant of risk would hold lower quality assets with higher expected returns (Chambers & Lacey 1994).

We have adapted the Portfolio Theory framework to examine the relationship between different levels of export concentrations in both commodities and markets and the returns associated with these levels by examining New Zealand’s export data since 1964. As a proxy for the measure of the return from exports at a particular time in New Zealand’s history, we use the value of New Zealand’s commodity exports for a particular year over the value of New Zealand’s GDP for the same year (nominal values).

As a small open economy, New Zealand relies on exports to provide incomes and goods and services that it could not provide competitively in autarky, thus the ratio of commodity exports to GDP provides us with a proxy to measure how competitive New Zealand is within the international marketplace as it competes with other nations to sell its exported products. The previously discussed adapted Herfindahl index is used to provide a measure of risk associated with exports, where high concentration of products or markets indicates a relatively higher risk compared to a diversified range of export markets or commodities.

Figure 8 and Figure 9 show the combination of the adapted Herfindahl index for commodity exports by type and the competitiveness proxy for the years 1964 to 2003. The Herfindahl commodity indices are the same as discussed previously in Section 3.2. The competitiveness proxy shows no strong trend as it increases slowly between 1964 and 1983 and then falls back to almost the 1964 level by 2003 and it moves within a very small range – which is just 0.029. By this measure, the data suggests New Zealand’s competitiveness or export returns have not changed significantly over the period surveyed.

The figures would suggest there is no strong relationship between the diversification and lower concentration of New Zealand’s exports amongst more commodity products and the country’s international competitiveness. The Herfindahl indices clearly show the effect of New Zealand reducing its export concentration in certain commodity groups since 1964. Following the general framework of Portfolio Theory, by diversifying exports among more commodities and reducing the reliance on one or two main commodities (i.e. risk reduction through a diversified portfolio) we might expect export returns and New Zealand’s competitiveness (commodity exports as a proportion of GDP) to worsen.

---

8 And also openness of New Zealand’s export markets.
However, these figures suggest this has not occurred as the competitiveness index has remained static and the concentration of exports among all commodities is very low. This suggests New Zealand has been able to maintain its competitiveness and its export returns despite the diversification in exported products and the dramatic decline in commodity prices.

On this basis, we can conclude New Zealand has done well to maintain its competitive position while reducing its concentration of exports in certain commodity groups and spreading any risks to its export returns.
Figure 9: Competitiveness and Herfindahl indices for selected commodity group exports

Notes: (1) Left hand axis: competitiveness index (exports/GDP)
(2) Right hand axis: adapted Herfindahl Index (H-I)
(3) Note Herfindahl index scale does not run to 10,000 due to relatively small figures calculated

Source: NZIER

Figure 10 graphs New Zealand’s competitiveness/openness index and the concentration of exports among New Zealand’s major export markets. Once again following the adapted Portfolio Theory, we might expect New Zealand’s competitiveness to trend downwards as its exports become less concentrated in one or two main markets and its earnings are spread more evenly among the top twenty export destinations. However, this has not occurred – while New Zealand’s exports have become less concentrated among its major markets as Britain’s dominance faded, competitiveness has remained relatively unchanged. Thus there does not seem to be any clear or strong relationship between reducing export market concentration and the export returns or competitiveness of New Zealand over this time period. This is also of benefit to New Zealand as it is able to reduce the risks of relying on one or two main markets for the bulk of its export returns without necessarily reducing its returns through diversifying.
Figure 10: Competitiveness/openness & concentration of exports among New Zealand’s top twenty export markets

Decadal data

Notes: (1) Left hand axis: competitiveness/openness index (exports/GDP) (2) Right hand axis: adapted Herfindahl Index (H-I)

Source: NZIER
4. Looking forward

The importance of trade and the external sector is only likely to increase in the future. Increasing trade is a key source of growth for the New Zealand economy, not only is it desirable, it is essential for the future prosperity of the nation. New Zealand is in a position to take advantage of the rapid growth in world trade, many of its industries are already export focused and internationally competitive because this has been a prerequisite for survival after extensive tariff reductions and exposure to world prices since the 1980s.

The trading world has changed dramatically over the past 50 years. The rapid rise in value of global trade and the growth of services trade has been facilitated by large reductions in transport and communications costs. These developments have been important for New Zealand because of its geographical distance from important export markets means it relies on frequent and low cost sea, air, and communications services to be competitive in the global trading environment.

New Zealand has been forced to reform its trade and domestic economic policies since the 1980’s as they became unsustainable in the face of rapid changes in the world economy. New Zealand has become one of the most open and liberal trading economies in the world and after two decades of facing world prices for tradable goods, exporters have generally adapted well to doing business in competitive markets.

There are positive signs that New Zealand has gone some way towards meeting the competitive challenge by improving the skills and education of the labour force, expanding into new export markets while learning from past mistakes as well as improving the nations ICT links and infrastructure.

The Herfindahl indices show a remarkable reduction in the concentration of New Zealand exports among major markets and to a lesser extent in commodity types over the period 1964-2003. As we would expect, the category of food and live animals has seen the largest reduction in concentration as other commodity groups such as manufactures began to account for a greater share of New Zealand’s export earnings. The Herfindahl indices also indicate the changes in the makeup of New Zealand’s export partners, with Britain moving from a 50 percent share in 1964 to 6 percent in 2003, while Australia’s share of exports has risen from 4 percent to 25 percent in the same period.

The competitiveness/export openness index shows New Zealand’s export returns have remained constant through this upheaval – this is despite falling world agricultural prices and New Zealand’s continuing reliance on commodity exports to earn a large part of the nation’s overseas income. This suggests that commodity exports may not be as bad as they have been painted. New Zealand has continued to maintain its supply side comparative advantage in the production of agricultural commodities with its relatively abundant and fertile land resource and a climate...
suited to crop and pasture growth, backed by a highly influential agricultural research and extension sector

The experience of operating within a deregulated market means that exporters are in a good position to take advantage of further liberalisation in agriculture and could well capitalise on the demand shocks as the Chinese and Indian economies grow. This has been supplemented by the strong services export growth particularly in tourism and education exports.

4.1 Platform for further work

This paper presents a first look at trade and growth in a New Zealand context and through the application of some simple economic techniques, we have shown the extent of export market diversification and the resilience of commodity exports in the New Zealand economy.

A number of research options for future work are possible. An interesting parallel piece by Sundakov & Steel, (1998) uses gravity modelling to help explain New Zealand’s trade patterns between 1990 and 1996. This could be extended over our 1964-2003 time series, while other potential areas of work include extending the calculation of Herfindahl and competitiveness indices for New Zealand’s trading partners for comparative purposes as well as modelling variance in export earnings.
5. References


Fonterra, *Fonterra Around the World*, accessed from: http://www.fonterra.com/content/aboutfonterra/fonterraworld/default.jsp


OECD, (2004), *Learning for Tomorrow’s World: First results from PISA 2003*, Paris, accessed from: [http://www.oecd.org/document/55/0,2340,en_32252351_32236173_33917303_1_1_1,00.html](http://www.oecd.org/document/55/0,2340,en_32252351_32236173_33917303_1_1_1,00.html)


OECD, (2003), ‘Broadband access in OECD countries per 100 inhabitants’ *Information and communication technologies*, June 2003, accessed from:


Appendix A : New Zealand’s top twenty export destinations

A.1 Trends through time

Historically, New Zealand has depended on one or two main export markets, the largest and most important being the United Kingdom. Since the 1960s this situation has altered dramatically and Figure 11 shows this massive sea change in export diversification by destination. From depending largely on one market for close to eighty percent of export sales from 1880 to 1950, New Zealand has since developed a wide range of export destinations around the Pacific Rim and further a-field to the point where the largest market (Australia) takes one quarter of New Zealand’s exports.

![Figure 11: Goods exports by destination](image)

Source: Briggs (2003) p65

Briggs (2003, p65) presents some stylised facts about New Zealand’s export destinations which help to describe the changes in the main export markets since the 1860’s:

- Australia was New Zealand’s first major export market. While some goods were trans-shipped through Australia to other nations, the bulk were consumed in Australia.

- The advent of refrigeration increased the share of exports to the United Kingdom as New Zealand became Britain’s farm. Refrigeration allowed New Zealand producers to match production of perishable goods with strong United Kingdom demand.

- Between 1870 and 1940 70 percent of New Zealand’s exports were destined for the British market. Since the end of the Second World War the share of
exports sent to Britain has been falling, this trend was accelerated by British entry into the EEC in 1973.

- Trade with the USA has increased since the Second World War reflecting the need to find new markets for New Zealand’s exports.
- Trade with Japan increased sharply between 1960 and 1980.
- Exports to Europe (other than the UK) have been relatively constant over the past 40 years.
- The share of total exports going to other regions (particularly East Asia) have increased from under 10% to just under 40% of total New Zealand trade.

Figure 12 further illustrates the large diversification of New Zealand’s export markets during the period 1964 to 2003. The United Kingdom accounted for more than 50 percent of New Zealand’s exports in 1964, however this share has fallen every decade since and made up only six percent in 2003. The share of exports sent to the United States remained relatively static over the period surveyed, while there has been marked growth in trade with Australia – increasing from four percent in 1964 to become New Zealand’s biggest market in 2003, accounting for 25 percent of exports.

There has also been a shift away from traditional European export markets towards Asian markets. In 1964 exports to Asian markets among New Zealand’s top twenty export destinations accounted for 5.7 percent of exports. This included just three Asian nations and was dominated by the Japanese market with a 5 percent share. In 2003, Asian countries in the top twenty made up 31 percent of New Zealand’s exports and this share was spread among at least ten Asian countries although Japan still dominated this group, accounting for a 13 percent share. In contrast, European markets in the top twenty excluding Britain took a 20 percent share of New Zealand’s exports in 1964, however by 2003 this had fallen to 8 percent.
Figure 12: New Zealand’s top twenty export partners 1964-2003
Percent of total value of commodity exports

Notes: (1) The export shares of the top ten countries are shown while ‘other’ indicates the export shares of the remainder of the top twenty destinations.

Source: NZIER
New Zealand’s top twenty export markets in 2003 are shown in Table 3 below. It is notable that ten of these destinations are Asian countries, while six are European and our biggest trading partner by a large margin is Australia. New Zealand thus has a relatively eclectic range of export partners albeit dominated by the top three export destinations which account for more than half of New Zealand’s exports to the top twenty destinations.

**Table 3: New Zealand’s top twenty export destinations in 2003**
NZ$ 000 year to 31 December

<table>
<thead>
<tr>
<th>Country</th>
<th>Exports (fob)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>5,553,084</td>
</tr>
<tr>
<td>United States of America</td>
<td>4,017,102</td>
</tr>
<tr>
<td>Japan</td>
<td>3,110,821</td>
</tr>
<tr>
<td>China</td>
<td>1,361,408</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>1,328,807</td>
</tr>
<tr>
<td>Republic of Korea</td>
<td>988,345</td>
</tr>
<tr>
<td>Germany</td>
<td>728,810</td>
</tr>
<tr>
<td>Taiwan</td>
<td>621,427</td>
</tr>
<tr>
<td>Belgium</td>
<td>621,110</td>
</tr>
<tr>
<td>Hong Kong (SAR)</td>
<td>543,564</td>
</tr>
<tr>
<td>Canada</td>
<td>539,709</td>
</tr>
<tr>
<td>Malaysia</td>
<td>538,242</td>
</tr>
<tr>
<td>Philippines</td>
<td>487,218</td>
</tr>
<tr>
<td>Italy</td>
<td>439,655</td>
</tr>
<tr>
<td>Mexico</td>
<td>407,221</td>
</tr>
<tr>
<td>Indonesia</td>
<td>377,560</td>
</tr>
<tr>
<td>France</td>
<td>367,172</td>
</tr>
<tr>
<td>Thailand</td>
<td>329,719</td>
</tr>
<tr>
<td>Singapore</td>
<td>278,295</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>271,550</td>
</tr>
</tbody>
</table>

Source: Statistics New Zealand

Table 4 briefly summarises the nature of New Zealand’s top twenty export markets before more details are given in section A.2. The top four exports are given, followed by the time period where each market became important for New Zealand and the critical issues for the future of the bilateral trade.
<table>
<thead>
<tr>
<th>Country</th>
<th>Main merchandise exports by value</th>
<th>Major trade</th>
<th>Critical issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Timber, gold, crude petroleum and cheese.</td>
<td>NZ’s main market between 1860 and 1870, but not again until CER was signed in 1982.</td>
<td>Extension of CER into tax and business law harmonisation.</td>
</tr>
<tr>
<td>USA</td>
<td>Frozen beef, casein, sheep meat and timber.</td>
<td>Post World War Two the US became a major export market for NZ.</td>
<td>Protecting current access to US markets and a possible FTA.</td>
</tr>
<tr>
<td>Japan</td>
<td>Aluminium, fresh fruit, cheese and logs.</td>
<td>After 1960 with aluminium exports creating a large increase.</td>
<td>Improving access to Japan’s highly protected agricultural markets.</td>
</tr>
<tr>
<td>China</td>
<td>Milk powder, wool, logs and wood pulp.</td>
<td>Trade began to flourish after 1973 when NZ re-established diplomatic relations with China.</td>
<td>Negotiations towards a FTA are beginning shortly and would provide large benefits for NZ exporters.</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>Sheep meat, wine, apples and wool</td>
<td>Became NZ’s largest export market from the late 1870’s</td>
<td>Improving access to this important EU market is most likely to occur through WTO negotiations.</td>
</tr>
<tr>
<td>Republic of Korea</td>
<td>Logs, frozen beef, wood pulp and sheep skins.</td>
<td>The late 1970’s and early 1980’s saw the development of Korea as a major export market.</td>
<td>Achieving a reduction in the high trade barriers to primary exports is the most important issue for NZ’s trade with Korea.</td>
</tr>
<tr>
<td>Germany</td>
<td>Sheep meat, casein venison and wool.</td>
<td>The 1960’s saw Germany become a small but significant market for NZ commodity products.</td>
<td>Reforming the EU’s agricultural polices may allow NZ primary exporters to increase their sales to this large market.</td>
</tr>
<tr>
<td>Taiwan</td>
<td>Frozen beef, milk</td>
<td>Exports to Taiwan</td>
<td>A reduction of high</td>
</tr>
<tr>
<td>Country</td>
<td>Products</td>
<td>Description</td>
<td>New Zealand’s Trade Policy Notes</td>
</tr>
<tr>
<td>--------------</td>
<td>------------------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Belgium</td>
<td>Butter, sheep meat, cheese, and wool.</td>
<td>An important entry port for NZ exports in the 1950’s and 1960’s and has consistently been one of NZ’s top twenty export destinations.</td>
<td>Belgium’s importance as a point of entry into the EU will only grow as it expands into Eastern Europe making it even more valuable for NZ exporters.</td>
</tr>
<tr>
<td>Hong Kong (SAR)</td>
<td>Crustaceans, kraft paper, milk powder and leather.</td>
<td>An important and growing market for NZ goods since the mid 1970’s.</td>
<td>Restarting CEP talks is important if NZ wishes to grow its exports to Hong Kong.</td>
</tr>
<tr>
<td>Canada</td>
<td>Frozen beef, sheep meat, milk powder and agricultural machinery.</td>
<td>Has accounted for close to two percent of NZ’s exports since the mid 1970’s.</td>
<td>High barriers on agricultural exports especially dairy make greater access difficult.</td>
</tr>
<tr>
<td>Malaysia</td>
<td>Milk powder, frozen beef, sheep meat and offal.</td>
<td>Has been one of NZ’s top twenty export destinations since 1964.</td>
<td>A FTA study is underway and is likely to grow NZ exports to Malaysia.</td>
</tr>
<tr>
<td>Philippines</td>
<td>Milk powder, cheese, veneer and butter.</td>
<td>An important trade partner since the 1970’s</td>
<td>Continuing ODA may provide long term opportunities to increase NZ’s exports.</td>
</tr>
<tr>
<td>Italy</td>
<td>Leather, wool, raw skins and sheep meat.</td>
<td>The late 1950’s and 1960’s saw Italy become an important export destination.</td>
<td>Improving access to Italy’s protected agricultural markets.</td>
</tr>
<tr>
<td>Mexico</td>
<td>Milk powder, casein, butter and cheese.</td>
<td>A top twenty export destination since the 1990’s</td>
<td>CEP negotiations, currently stalled would allow greater access for NZ exports.</td>
</tr>
<tr>
<td>Indonesia</td>
<td>Milk powder, meat and fish meal, wool pulp and frozen beef.</td>
<td>A significant market for NZ’s exports since the 1980’s.</td>
<td>A huge underdeveloped market with large...</td>
</tr>
<tr>
<td>Country</td>
<td>Main Exports</td>
<td>Potential for NZ Exporters</td>
<td>Access to France's highly protected agricultural markets is extremely difficult.</td>
</tr>
<tr>
<td>-------------</td>
<td>-----------------------------------</td>
<td>------------------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>France</td>
<td>Sheep meat, fish fillets, medical instruments and aluminium.</td>
<td>A large market for NZ products in the 1950's and 1960's but its share has declined.</td>
<td></td>
</tr>
<tr>
<td>Thailand</td>
<td>Milk powder, butter, butter milk and timber.</td>
<td>A growing market for NZ exports since the early 1990's.</td>
<td>Implementation of a CEP in 2005 will have significant benefits for NZ exporters.</td>
</tr>
<tr>
<td>Singapore</td>
<td>Milk powder, crustaceans, butter and fresh milk.</td>
<td>Has accounted for an important share of NZ's exports since the 1970's.</td>
<td>Discussions on a three way CEP with Chile are underway.</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>Milk powder, cheese, sheep meat and butter.</td>
<td>NZ's largest market in the Middle East and an important destination since the late 1980's.</td>
<td>A large and growing market with potential for export growth in forestry and dairy products among others.</td>
</tr>
</tbody>
</table>

Notes: (1) Main exports are for the year ended June 2004.
Source: NZIER, Statistics New Zealand
A.2 Major export markets in 2003

This section of the paper discusses in greater detail the make up of New Zealand’s top twenty export markets in 2003. New Zealand’s trade with each country is discussed in terms of the history of this trade, the composition of exports to each country, the underlying factors or drivers of trade and the critical issues for the future of trade between New Zealand and these export partners.

A.2.1 Australia

A.2.1.1 History of trade

New Zealand and Australia currently enjoy one of the most open and liberal trading partnerships in the world, however this has not always been the case.

As shown in Figure 13 the early trading relationship was very strong with exports to Australia making up at least 20 percent of New Zealand’s total exports until 1880. After this period, with the advent of refrigeration the two countries became competitors, both seeking to export generally bulk agricultural commodities to the United Kingdom and New Zealand’s exports to Australia dropped to below 5 percent between the 1920’s and 1960’s as both nations looked to Europe rather than to each other.

![Figure 13: Trade with Australia: exports and imports 1860-2000](source: Nixon & Yeabsley (2002))

The 1960’s saw the beginnings of a more mature trading relationship between the two nations with the signing of the 1965 New Zealand Australia Free Trade Agreement (NAFTA). Despite initial optimism, the agreement made relatively little progress in removing trade barriers and after nearly two decades of exasperation, the two nations agreed to comprehensive trade talks with every aspect of the relationship open for negotiation.
The result was Closer Economic Relations (CER), signed in 1983 which led to the removal of virtually all tariffs and quotas by 1989. Of special importance was that the agreement was outward-looking, thus either of the countries could unilaterally extend the trade liberalisation to other nations rather than requiring agreement from the other participant as in customs union arrangements. Figure 13 shows some of the impact of CER with exports and imports to and from Australia steadily increasing from 1980.

A.2.1.2 Composition of exports

Until the CER agreement in 1983, New Zealand’s exports to Australia were dominated by commodities such as meat, skins, cheese and timber (NZOYB 1966, 1976, 1984). Post-CER, there has been an increase in the levels of manufactured goods exported to Australia due to the removal of tariffs on such items, however in 2001 crude oil, gold and timber made up the largest proportion of exports by value to Australia.

A.2.1.3 Underlying factors

The main driver of trade between New Zealand and Australia is the CER agreement. Exports to Australia have been growing at an average rate of 9 percent per annum over the past decade (MFAT 2004) which is in a large part due to the removal of trade barriers between the nations.

Geographical and cultural proximity are also important factors that have assisted in increasing trade. Both countries share a similar heritage, society and market structures, thus firms are able to produce for both countries largely without having to alter their product to suit different tastes and preferences.

A.2.1.4 Critical issues

With virtually all barriers to trade between New Zealand and Australia removed, discussions about the future of the relationship between both countries have turned towards tax harmonisation, business law co-ordination as well as the idea of a complete customs and currency union. These proposals essentially seek to smooth away remaining transaction costs of conducting business on either side of the Tasman. A currency and customs union possibly similar to that in the European Union would be the final step in eliminating these costs and creating a common market. The Foreign Affairs, Defence and Trade Select Committee report on *New Zealand’s economic and trade relationship with Australia* (2002) found that a currency union would not provide significantly greater benefits than greater tax and business law harmonisation. It also found that Australia would be unlikely to be willing to give up the Australian dollar thus the only way a currency union would happen was if New Zealand was to adopt the Australian dollar. While it would seem a currency union is currently some way off, tax and business law harmonisation efforts are proceeding as New Zealand and Australia continue to enhance their close economic ties.
A.2.2 United States

A.2.2.1 History of trade

The United States has been an important market for New Zealand exporters since the end of the Second World War, and it has occupied a relatively static (10-15 percent) share of the export market since 1964 (see Figure 11). It has also been one of New Zealand’s top three export destinations throughout this period. Figure 14 shows the proportion of total exports sent to the United States since 1975 and also confirms this share was generally between 10 and 15 percent and although a decline over the 1987-1997 period can be seen this had been reversed by 2003.

Figure 14: Share of New Zealand’s total exports sent to the United States 1975-2003
Percentage of total exports by value

[Graph showing the share of New Zealand’s total exports sent to the United States 1975-2003]

Source: NZIER, NZOYB 1974-2004

A.2.2.2 Composition of exports

New Zealand’s exports to the United States are primarily commodity based; beef (22 percent), casein (9 percent), sheep meat (6 percent), timber (6 percent) and cheese (4 percent) made up the top five exports for the year ended June 2004 (Statistics New Zealand 2004 p95). However yachts, medical equipment and whiteware are also important exports that have come to the fore in recent years. The value of New Zealand’s merchandise exports in the same period was $4.3 billion while the merchandise balance of trade was $365 million in New Zealand’s favour.

A.2.2.3 Underlying factors

Investment by United States firms in New Zealand is a significant contributor to trade between the two countries. Firms such as Disney, Lockheed Martin, EDS and Heinz have New Zealand investments and facilitate trade by increasing business links and intra firm and intra industry trade.
Tourism is an important factor in United States-New Zealand trade. The United States is New Zealand’s third largest source of tourists which provides large foreign exchange earnings as well as the opportunity to expand links to the United States.

Trade is constrained by US protection of its meat and dairy markets, although New Zealand does get preference over South American nations with a fixed meat quota.

A.2.2.4 Critical issues

New Zealand has been active in protesting the protectionist policies of the United States towards domestic firms. A case in point is the attempt by the Bush administration to impose tariffs on all steel imports in March 2002. New Zealand was a member of the group of complainants to the WTO in 2003 who eventually ruled against the United States and forced a back down on the implementation of tariffs. This decision was important for the New Zealand-United States trade relationship as New Zealand exporters can feel relatively secure in the knowledge unfair protectionist policies can be overturned and access to the crucial United States market cannot be removed without consequence.

A possible Free Trade Agreement (FTA) with the United States has been discussed frequently in New Zealand over the past few years and has intensified since Australia successfully negotiated such an agreement in 2004. Longer term, a successful conclusion to the WTO Doha Round could see improved access for dairy products, however meat producers will face stiffer competition from Latin American producers.

A.2.3 Japan

A.2.3.1 History of trade

Japan and New Zealand have a long history of trade and this relationship has developed to the extent that Japan is now New Zealand’s third most important export market.

In 1928, New Zealand signed its first trade deal with Japan which established most favoured nation (m.f.n) status between the countries. However, at this time the level of trade between New Zealand and Japan was very small and generally restricted to wool and casein exports by New Zealand and silk and carpet imports from Japan.

From the 1950’s onwards, New Zealand’s trade with Japan began to increase significantly although it was at first seen as a “regrettable necessity” by the New Zealand government (Singleton 1997). When Britain’s bulk purchasing of New Zealand commodities ended in 1954 and it became clear she was looking towards Europe rather than the Empire, New Zealand began negotiations with Japan towards a Free Trade Agreement which were concluded in 1958. The agreement gave New Zealand limited access to Japanese agricultural markets, while it was
committed to abolishing discriminatory non tariff barriers on Japanese imports and ensure m.f.n tariff levels on these imports. Since this time exports to Japan have been increasing and Japan has become a valuable export destination. Figure 15 shows the increasing share of exports sent to Japan between 1975 and 1990. Since this time, Japan’s share has been declining, albeit slowly and in 2003 it still accounted for 11 percent of New Zealand’s exports. The main reason for this has been the stagnation of the Japanese economy.

Figure 15: Share of New Zealand’s total exports sent to Japan 1975-2003

Percent of total exports by value

Source: NZIER

A.2.3.2 Composition of exports

New Zealand’s main exports to Japan in 2003 included wood products (17 percent), aluminium (16 percent), dairy products (9.1 percent), fruit (5 percent) and meat (3.77 percent) (Statistics New Zealand, 2004 p96). While dominated by commodity products aluminium has become a significant export earner since the 1971 opening of the Tiwai Point smelter.

Services exports to Japan have also become very important. In 2003, tourism exports were worth $620 million, education $169 million and other services $30 million, making Japan a crucial market for these products (MFAT 2004).

A.2.3.3 Underlying factors

Strong Japanese investment in New Zealand has contributed to the important economic relationship between both countries and reflects the composition of trade flows. Japanese firms have invested heavily in timber processing facilities, as well as vehicle and electronics distribution firms. Large shareholdings in Sealords by Nissui have created the largest fishing conglomerate in the world, and Japanese companies provide employment for more than 9,000 New Zealanders
(MFAT 2004). This type of investment has facilitated the growth trade between New Zealand and Japan and is likely to determine future patterns. The importance of aluminium exports to Japan has been increased after Sumitomo Chemical obtained a minority shareholding in the smelter to guarantee a source of high purity aluminium for its chemicals division.

Tourism, education and cultural exchanges have helped to foster closer links between New Zealand and Japan and by raising awareness about New Zealand they have provided New Zealand exporters with knowledge about Japanese markets and opportunities to expand into these markets.

A.2.3.4 Critical issues

New Zealand’s access to Japanese markets is hampered by highly restrictive import barriers on most primary products. As the second largest economy in the world, Japan is a large market for dairy, forestry and seafood products but New Zealand’s market share in these sectors is limited because of these import restrictions. Non tariff barriers such as strict sanitary requirements also inhibit New Zealand’s exports and are seen as unjustifiably harsh in comparison to international standards. The removal or reduction of these barriers would significantly boost export opportunities especially for primary producers.

Key to further trade will be the state of the Japanese economy and the ability of its politicians to carry out further reform. The inability of successive Japanese governments to press home promised reforms has led to an economic malaise that has stunted growth.

A.2.4 China

A.2.4.1 History of trade

New Zealand has a long history of contact with China. The 1850s and 1860s saw Chinese immigration to New Zealand as a result of the West Coast gold rush, while trade links were strong during the republican era of 1912-1949. The establishment of a communist regime in 1949 saw a break in diplomatic relations that was not re-established until 1973, since this time however New Zealand and China have had a friendly relationship. New Zealand strongly supported China’s accession into the WTO in 2002 and in April 2004 was the first developed nation to recognise China as a market economy (China Daily 2004). In 2003, China was New Zealand’s fourth largest export market taking 4.9 percent of all New Zealand exports.

Traditionally wool was New Zealand’s main export to China; however there has been significant diversification recently with exports including telecommunications products, methanol, and LNG.
A.2.4.2 Composition of exports

Primary products and commodities dominate New Zealand’s main exports to China. Milk powder, wool, logs, offal and sheep skins are New Zealand’s top five exports making up 18 percent, 10 percent, 9 percent, 5 percent and 4 percent respectively of New Zealand’s exports to China in 2003 (Statistics New Zealand 2004, p97).

A.2.4.3 Underlying factors

The Chinese market is a source of untapped potential for New Zealand exporters. It is currently the sixth largest economy in the world and is growing rapidly, averaging over 7 percent per annum since 1978 and has become the biggest importer of commodities in the world which has helped to increase demand for New Zealand’s exports.

Thus China’s demand has considerable implications for commodity prices and as a large exporter of such products and an international price taker, China’s demand helps New Zealand exporters to increase their returns in all markets by pushing up global commodity prices.

Investment is an important part of New Zealand’s trade relationship with China. There is considerable Chinese investment in the New Zealand forestry sector as well as the property, meat processing and electronics industries, while New Zealand firms such as Lion Nathan, Fonterra and AFFCO have significant investment in China. This investment helps to facilitate trade growth between China and New Zealand as Chinese investors seek a source of raw materials and other products for their domestic markets and New Zealand firms aim to expand their operations and business links in China.

Regular high level talks between China and New Zealand have helped to progress the trade relationship. A visit to New Zealand by President Hu Jintao in 2003 resulted in an agreement on reducing technical barriers to trade and a China-New Zealand Trade and Economic Co-operation Framework to expand dialogue on trade issues.

New Zealand gives $1.25 million to China annually in Official Development Aid (ODA) for work on public health programmes and poverty alleviation. This has also enhanced the New Zealand-China relationship, raised New Zealand’s profile in China and in the long term by helping China develop, it is hoped to increase demand for New Zealand products in China.

A.2.4.4 Critical issues

There is considerable goodwill towards New Zealand in China which New Zealand should be able to use to further extend its trading relationship with this nation. This is evident in China’s willingness to negotiate a FTA with New Zealand on which a feasibility study has just been completed. It is expected that a
FTA between New Zealand and China would benefit New Zealand exporters by between $260 million and $400 million per year for twenty years, which is equivalent to an increase in exports of between 20 and 30 percent (MFAT 2004).

The FTA would provide New Zealand exporters with an opportunity to significantly expand their operations in China. New Zealand is likely to face some downsizing in its own textile and apparel industries where tariffs are as high as 46.5 percent (MFAT Joint Study, 2004, p35) and these sectors must be taken into account when negotiating the agreement. Despite this, the comparative advantage of each nation is seemingly in different industries. New Zealand consumers have benefited from cheap Chinese manufactured goods while New Zealand land based industries have established sizeable markets in Chinese provinces.

Two crucial factors for New Zealand are the:

- Ability of firms to secure property rights in China and seek redress for trading infringements, and
- Sustainability of Chinese economic growth. While current rates persist, trade is likely to grow, benefiting both nations.

A.2.5 United Kingdom

A.2.5.1 History of trade

After the advent of refrigerated shipping in 1882 the United Kingdom (UK) quickly became New Zealand’s biggest export market with dairy produce, meat and wool making up the majority of these exports. Guaranteed prices during World War One meant exporters produced as much as possible to maximize their returns in the UK market.

However economic problems in Britain in the 1920s and the Great Depression in the 1930s saw export prices fall dramatically and the rise of protectionist policies. The 1932 Ottawa Conference resulted in preferential access for New Zealand exports to Britain continuing until Britain’s entry into the European Community in 1973. This was a watershed in Britain-New Zealand relations, and although New Zealand was still given special access to the British market, no longer could it rely on commodity exports to a single market to provide the nation’s wealth.

Figure 12 illustrates graphically the diversification away from the British market since 1973 when 27 percent of New Zealand’s exports went to the UK compared to just 6 percent in 2003. This diversification is also illustrated in Figure 16 which shows a consistent downward trend in the proportion of total exports sent to the United Kingdom, most markedly between 1975 and 1989. Nevertheless, Britain is still a crucial market for New Zealand products, it was the largest European market and the fifth most important export destination in 2003.
A.2.5.2 Composition of exports

In the year ended June 2004 New Zealand’s main exports to the UK were sheep meat (38 percent), wine (8 percent), apples (7 percent), wool (7 percent) and cheese (4 percent). New Zealand’s merchandise exports to the UK were worth $1.45 billion while the merchandise balance of trade was $358 million in New Zealand’s favour (Statistics New Zealand, 2004). While agricultural products still account for much of these exports, other products such as wine, transmission apparatus, aircraft parts and medical instruments have become important traded goods indicating the export diversification that has occurred since the 1960’s and 1970’s.

A.2.5.3 Underlying factors

New Zealand’s close historical and cultural bonds with Britain are still an important factor in determining trade patterns today. New Zealand still exports meat and dairy products under limited tariff free agreements negotiated at the time of Britain’s entry into the EU, albeit with some modifications. New Zealand products are held in high regard in Britain for their quality which has allowed new sectors such as the wine industry to use this reputation as a way of promoting its product and then to build on it by ensuring it meets the high standards achieved in other industries.

Cultural similarities and a long history of trade make it easier for firms to conduct business in both the UK and New Zealand and enhance trading opportunities as both markets tend to be complementary. In 2003, Britain was New Zealand’s second largest source of tourists and the second largest source of investment. The
large expatriate population in both countries creates opportunities for firms in both countries to expand.

A.2.5.4 Critical issues

The United Kingdom provides New Zealand exporters with a large market and a door into the EU. While barriers to New Zealand’s exports are unlikely to be lowered quickly, New Zealand’s best chance of gaining greater access to the British market is through multilateral WTO discussions where it is able to side with other nations in negotiating greater access to EU markets in general. It will only be with a successful Doha Round conclusion that New Zealand is able to gain further access to the British food market.

A.2.6 Republic of Korea

A.2.6.1 History of trade

New Zealand’s relationship with Korea began with its involvement in the 1950-53 Korean War and the establishment of diplomatic relations in 1962. Development assistance programmes were an important feature of the early relationship with 300 Koreans studying in New Zealand in the 1960s and 1970s under the Colombo Plan. As Korea began to experience high and rapid economic growth, New Zealand’s exports also grew. Korea’s share of total New Zealand exports increased from 0.04 percent in 1964, to 3.5 percent in 2003 (6th most important trading partner).

A.2.6.2 Composition of exports

New Zealand’s top five exports to Korea in 2004 were made up of agricultural products: logs (26 percent), beef (16 percent), wood pulp (5 percent), sheep skins (5 percent) and cheese (4 percent). Two of the few non primary products to feature among the top twenty exports were aluminium and velvet both of which earn significant export dollars but are well outweighed by the prevalence of primary commodities.

A.2.6.3 Underlying factors

While New Zealand’s trade with Korea doubled between 1990 and 2000, the 1997/98 Asian Crisis caused a drop in the value of New Zealand’s exports to Korea. It has since recovered to stand at $1.1 billion in 2003 but the Asian crisis illustrates the vulnerability faced by New Zealand when important trading partners experience recession.

Korea is New Zealand’s third largest market for education services which has strengthened linkages between the two countries. Auckland University has a strong Korean language programme developed in association with Korean universities, while governmental level visits are frequent and have promoted New
Zealand’s forestry, tourism and education industries. These factors help to build and enhance business and trade relationships between the two countries.

A.2.6.4 Critical issues

While Korea’s trade barriers on manufactured goods are relatively low, its agricultural sector is still highly protected. With the majority of New Zealand’s exports falling into this category this is an area in which liberalisation would benefit New Zealand. Korea also maintains extremely high sanitary and phytosanitary standards, particularly on fruit and vegetables which act as a barrier to New Zealand exports. The New Zealand government is working with Korea in this area in an attempt to improve access for New Zealand’s agricultural products and a positive outcome would further benefit exporters.

A successful conclusion to the Doha Round will be pivotal in guaranteeing further access to the Korean market.

A.2.7 Germany

A.2.7.1 History of trade

Germany has been an important export market for New Zealand’s products since the early 20th Century and has consistently been one of the top ten export destinations. Since 1964, exports to Germany have accounted for two to three percent of New Zealand’s total, proving it to be a small but important purchaser of New Zealand products.

While agricultural products dominate trade with Germany, manufactured goods have begun to feature among the top twenty merchandise exports. Exports such as medical equipment, radar apparatus and industrial machinery show that New Zealand has diversified its exported goods away from solely primary products.

A.2.7.2 Composition of exports

In 2003 New Zealand’s main exports to Germany were sheep meat (39 percent), casein (15 percent), venison (10 percent), wool (5 percent) and seafood (4 percent) (Statistics New Zealand, 2004, p99). The exact values of these exports are likely to be higher than records show because many of New Zealand’s exports to Germany are transhipped through Belgium or the Netherlands, however in 2003 the value of New Zealand’s merchandise exports to Germany was $709,854,000 (Statistics New Zealand 2004 p99).

A.2.7.3 Underlying factors

German membership of the EU governs New Zealand’s economic relationship. While most German goods can enter New Zealand with small or no tariffs, agricultural produce from New Zealand entering Germany is strictly regulated.
through the Common Agricultural Policy (CAP). Further reform of the CAP will be necessary before further significant trade developments can occur.

Where tariffs and quotas are not an issue, the relatively weak position of the New Zealand producers (relative to the large German wholesalers) means that it is difficult for New Zealand producers to control the volumes, prices, and the way product is presented. This hampers the ability of New Zealand producers to extract the best possible price out of the market.

Tourism is an important part of New Zealand’s trade with 54,000 Germans visiting in the year ended February 2004 (MFAT, 2004).

Important also, is the health of the Germany economy. The current recession in Germany has had a major impact on the ability of the economy to absorb New Zealand imports.

A.2.7.4 Critical issues

Reform of the CAP is the critical issue for New Zealand. Germany is the largest economy in Europe and therefore has the potential to take an even larger share of New Zealand’s exports than it does already.

An eventual reform of the EU agricultural policy could provide significant benefits to New Zealand exporters if restrictions on key products such as dairy and meat are lifted or reduced. Expansion in the size of the EU makes this reform more likely; however it is still a long term goal, and the expansion may hurt New Zealand exporters if preference is given to new members who have primarily agriculture based economies.

A.2.8 Taiwan

A.2.8.1 History of trade

Taiwan has become an important trade partner for New Zealand over the past twenty years. In 1964, just 0.006 percent of New Zealand’s exports were sent to Taiwan but this has increased over time as the Taiwanese economy has grown. In 1973, Taiwan took 0.5 percent of New Zealand’s exports, this grew to 1 percent in 1987 and 2.6 percent in 1993 and dropped slightly to 2.3 percent in 2003 (NZOYB 1966-2004).

A.2.8.2 Composition of exports

New Zealand’s top five exports to Taiwan for the year ended June 2004 were beef (23 percent), milk powder (18 percent), sheep meat (7 percent), fresh fruit (5 percent), and butter (4 percent). They are dominated by primary products but other exports making up the top twenty included aluminium, diodes, and transistors. The value of merchandise exports to Taiwan was $661 million and the
The merchandise balance of trade was -$0.07 million in Taiwan’s favour (Statistics New Zealand, 2004 p102).

### A.2.8.3 Underlying factors

Although New Zealand has no formal diplomatic relations with Taiwan, New Zealand operates an Office of Commerce and Industry in Taipei through which it holds annual informal economic consultations with the Taiwanese government. Thus despite the lack of political recognition, both nations are able to partake in a strong trading relationship.

New Zealand has a vibrant Taiwanese community which has helped to develop links between the two nations and improve trade and business relationships by increasing the information available about each nation. Taiwan is also an important market for New Zealand’s tourism and education sectors with 3,200 Taiwanese studying in New Zealand in 2001 (MFAT, 2004).

Managing the China – Taiwan political and economic relationship is also important for New Zealand. This has become even more important as the Chinese economy has grown.

### A.2.8.4 Critical issues

Taiwan has placed high tariffs on New Zealand products in the past, especially on primary products such as fruit with tariffs at levels of 40 to 50 percent. Since Taiwan’s entry into the WTO in 2002 there have been some reductions in these levels of protection but they are still a significant factor in restricting New Zealand’s access to the Taiwanese market. In forthcoming WTO negotiations, New Zealand will be seeking to reduce tariffs in the areas of agriculture, fisheries and the service sector.

### A.2.9 Belgium

#### A.2.9.1 History of trade

New Zealand’s relationship with Belgium has been strong since the First World War. Belgium has been an important market for New Zealand exports, consistently appearing as one of New Zealand’s top ten export markets since 1964, however the data is somewhat inflated because a great deal of New Zealand’s exports to the EU enter through Belgium and are then re-exported to other countries. In 1964, Belgium received 3.3 percent of total New Zealand exports, it fell to 2.4 percent in 1973, and 1.2 percent in 1993 before recovering to 2.3 percent in 2003.

Belgium has imported mainly agricultural products from New Zealand, especially wool which supplies much of Belgium’s large carpet manufacturing industry. More recently, there has been a change in the composition of these exports with wine and telecommunications equipment now among the top twenty exports.
A.2.9.2 Composition of exports

New Zealand’s key exports to Belgium to the year ended June 2004 were butter (35 percent), sheep meat (26 percent), cheese (10 percent), wool (8 percent) and milk powder (8 percent). Total merchandise exports were worth $638 million and the merchandise balance of trade was $312 million.

A.2.9.3 Underlying factors

New Zealand exporters use Belgium’s strategic location as an entry point into the rest of Europe. The ports of Antwerp and Zeebrugge act as a hub with the necessary distributional infrastructure to send exports all over Europe. For this reason New Zealand companies such as Fonterra, Meat New Zealand, Richmond Europe, Zespri International Europe and Tourism Holdings Ltd all have offices based in Belgium.

While the use of Belgium as a base for trade with the rest of Europe is a key factor explaining the nature of New Zealand-Belgium trade, Belgium is also in its own right an important market for sheep meat and butter.

A.2.9.4 Critical issues

As the EU continues its expansion programme, Belgium will become an even more important market for New Zealand exporters by providing entry into a larger common market. It is therefore important that New Zealand maintains close bilateral links with Belgium, and a 2004 reciprocal working holiday scheme is one example of close co-operation between governments.

A.2.10 Hong Kong (SAR)

A.2.10.1 History of trade

New Zealand’s trade with Hong Kong has grown considerably since 1964 when it received 0.2 just percent of all New Zealand’s exports. By 1973 this had increased to 1 percent, to 1.2 percent in 1983, and to 2.3 percent in 1993 before dropping slightly to 2 percent in 2003 and was New Zealand’s tenth biggest export market. This trade growth has mirrored the development of Hong Kong’s economy.

A.2.10.2 Composition of exports

New Zealand’s main exports to Hong Kong in the year ended June 2004 were seafood (23 percent), paper (6 percent), milk powder (5 percent), leather (4 percent) and live horses (4 percent) (Statistics New Zealand, 2004 p110). Total merchandise exports were worth $555 million and the merchandise balance of trade was $395 million in New Zealand’s favour. Diodes, transistors, and steel products are also included among New Zealand’s top twenty exports indicating that Hong Kong is a significant market for more than just commodity and agricultural products.
A.2.10.3 Underlying factors

Hong Kong has a very liberal trade policy with no import tariffs and few barriers to trade. New Zealand is therefore able to export primary products without restrictions that are found in most other nations. Strong interest in New Zealand’s racing industry has seen the recent purchase of racehorses by Hong Kong businesspeople (because of the weak New Zealand dollar) for what is an extremely popular pastime in Hong Kong.

New Zealand’s trade with Hong Kong has been enhanced by strong education, tourism and migration links. Hong Kong was New Zealand’s largest source of business migrants between 1991 and 2001 which has helped to create and strengthen business networks between the two countries.

A.2.10.4 Critical issues

In 2000, New Zealand and Hong Kong agreed to begin talks on a possible bilateral CEP covering goods, services, and investment. However negotiations stalled in 2002 when agreement could not be reached over a process that defined how rules of origin would be measured and applied. Further growth of the Hong Kong market for New Zealand goods will depend on the nature and demand of growth of China and Hong Kong’s role in that growth.

A.2.11 Canada

A.2.11.1 History of trade

As a fellow member of the Commonwealth, Canada has always been and important export destination for New Zealand products and the two nations have enjoyed a strong trading relationship. In 1964, 1.3 percent of New Zealand’s merchandise exports were sent to Canada. This figure has hovered close to 2 percent ever since; at 2.7 percent in 1973, 2 percent in 1983, 1.7 percent in 1993 and 1.9 percent in 2003 (UN Comtrade).

A.2.11.2 Composition of exports

Canada is New Zealand’s third largest export market for beef which made up 18 percent of total exports to Canada in the year to June 2004. Other important export items are sheep meat (16 percent), milk powder (13 percent), agricultural machinery (5 percent) and butter (5 percent). Total merchandise exports to Canada were worth $477 million while the merchandise balance of trade was -$256 million (Statistics New Zealand, 2004, p105).

A.2.11.3 Underlying factors

Despite Canadian membership of the Cairns Group, Canada’s stance on free trade has been ambivalent. Canada has been willing to push for liberalisation and trade reform abroad, but refuses to engage in the same process at home. This limits the market penetration of New Zealand’s goods into the Canadian market.
The 1982 Trade and Economic Co-operation Agreement ensures regular governmental consultations between New Zealand and Canada and acts as a forum for the discussion of trade issues. The Uruguay Round of WTO negotiations gave New Zealand exporters greater access to the Canadian market with specific quotas for beef and dairy products, however this access has required ongoing discussion with Canada to ensure the levels of access are at least maintained.

Strong investment between New Zealand and Canada has also benefited the trading relationship. CanWest and McCain’s are notable Canadian companies with large investments in New Zealand and have helped to build business and trade links between the two countries.

Tourism is also an important part of New Zealand’s trade with Canada with tourist numbers increasing 24 percent between 1996 and 2001 and contributing $137 million to the New Zealand economy in 2001 (MFAT, 2004).

A.2.11.4 Critical issues

Canada’s agricultural sector is highly protected from foreign imports with an OECD study in 2002 estimating farmers received 21 percent of their income from government subsidies, while this figure was less than 1 percent for New Zealand farmers (MFAT, 2004). It is therefore in New Zealand’s interests to negotiate a reduction in these subsidies which act as a barrier to the competitiveness of its exports. New Zealand has had recent success in this area when a WTO investigation in 2002 found Canada’s Commercial Export Milk scheme acted as a subsidy to Canadian dairy exporters and the scheme was ended as a result of the decision.

There have been suggestions of a Closer Economic Partnership between New Zealand and Canada but such an agreement does not look likely in the short term because of strong objections in the Canadian dairy sector. New Zealand’s best prospects of gaining greater access to this market are through multilateral trade liberalisation under the auspices of the WTO.

A.2.12 Malaysia

History of trade

New Zealand and Malaysia have enjoyed close relations since the 1950’s when New Zealand troops helped to defend Malaysia from Indonesian aggression, and also with Commonwealth links and assistance from New Zealand with education under the Colombo Plan. Malaysia was New Zealand’s twelfth most important trading partner in 2003, and there has been a slow but steady increase in the share of New Zealand’s exports sent to Malaysia over time: 0.47 percent of merchandise exports in 1964, 1 percent in 1973, 1.5 percent in 1983, 2 percent in 1993 and 1.9 percent in 2003 making Malaysia New Zealand’s tenth largest export market (UN Comtrade).
A.2.12.1 Composition of exports

Dairy products form the majority of New Zealand’s merchandise exports to Malaysia with milk powder making up 45 percent of the total, beef accounts for 5 percent, sheep meat for 5 percent offal for 3 percent and butter for 3 percent in the year ended June 2004 (Statistics New Zealand, 2004, p103).

Services have become an increasingly important part of exports to Malaysia. In 2004, it is estimated that service exports will generate $115 million for New Zealand (MFAT 2004).

A.2.12.2 Underlying factors

There has been a desire at official levels of both countries to enhance trading arrangements. As well as Trade and Economic Consultations, a bilateral trade agreement between New Zealand and Malaysia was signed in 1997 and was implemented from January 1998.

Investment has also been an important factor in trade between New Zealand and Malaysia. More than 20 New Zealand companies have large investments in Malaysia covering the telecommunications, electronics and food technology sectors, while Malaysian businesses have invested in the hotel, property and forestry sectors of New Zealand. The establishment of joint business councils has also improved this relationship, providing the opportunity for discussions on further investment and co-operation.

A.2.12.3 Critical issues

Malaysia and New Zealand are currently discussing the possibility of a bilateral FTA and are undertaking a feasibility study which is expected to be completed by February 2005 after which negotiations will begin. Such an agreement would provide large benefits for New Zealand exporters as Malaysia has stiff tariffs on many products, for example, exporters of yoghurt, carpets, dishwashers and kiwifruit face tariffs of 40 percent, 30 percent 25 percent and 15 percent respectively. A FTA would give New Zealand exporters access to a market of 25 million people with an economy growing at 5.2 percent in 2003 (MFAT, 2004), thus the opportunities for export growth are huge and a FTA is likely to boost New Zealand’s exports to Malaysia significantly.

A.2.13 Philippines

A.2.13.1 History of trade

New Zealand’s exports to the Philippines were worth $487 million for the year ended June 2003, making it New Zealand’s thirteenth largest export destination (MFAT 2004). Exports to the Philippines have grown steadily since 1964 accounting for 0.27 percent of total exports in 1964, 1.06 percent in 1973, 1.18
percent in 1983, 1.08 percent in 1993 and 1.74 percent in 2003 (NZOYB 1965-2004).

A.2.13.2 Composition of exports

Commodities dominate New Zealand’s exports to the Philippines with milk powder accounting for 48 percent, cheese 8 percent, veneers 6 percent, butter for 5 percent and fresh milk for 5 percent of total commodity exports in the year ended June 2004 (Statistics New Zealand, 2004, p111). Iron and steel products and processed frozen vegetables are among the few non-commodities in New Zealand’s top twenty exports to the Philippines.

A.2.13.3 Underlying factors

The misfiring economy of the Philippines has meant that trade between New Zealand and the Philippines has not grown has fast as other Asian nations. Fonterra’s offices and manufacturing plants in the Philippines are a major reason for the dominance of dairy products among New Zealand’s exports and this trend is likely to continue for the foreseeable future as bulk dairy products are exported then processed to Filipino standards and market requirements.

New Zealand and the Philippines have no direct air links which inhibits the rapid transport of goods between the countries. It is also the only APEC nation not to have an air services agreement with New Zealand. Despite this however, the Philippines is still an important export destination.

New Zealand exporters face some tariffs on products sent to the Philippines however the Filipino government recently raised the tariff rates on over 450 products to give local industries protection from foreign competition. Tariffs on imported finished goods will be raised between 5-15 percent from 3-7 percent starting 2004-2007. This may affect some processed New Zealand exports such as steel products but will have a lesser effect on bulk dairy products.

The Philippines receives $3.3 million annually in Official Development Aid (ODA) from the New Zealand government, primarily to assist with poverty alleviation. This has been a long standing aid agreement and has helped to maintain close links between the Philippine and New Zealand governments and promote New Zealand’s interests in the Philippines in a positive light.

A.2.13.4 Critical issues

The Philippines has a large population of 80 million people and potentially huge markets for New Zealand exporters. However with 50 percent of the population below the poverty line and continuing civil unrest it is difficult for New Zealand exporters to make significant headway into the market. Continuing New Zealand’s ODA contribution will help to increase economic growth and potentially for New Zealand products but this is very much a long term process.
A.2.14 Italy

A.2.14.1 History of trade

New Zealand and Italy have had close links since the end of the Second World War. New Zealand’s exports to Italy were valued at $451 million in the year ended June 2003 (MFAT 2004) making it New Zealand’s fourteenth most important trading partner. In 1964, New Zealand’s exports to Italy made up 3 percent of total merchandise exports, but have fallen to almost half this value since at 1.6 percent in 1973, 1.8 percent in 1983, 1.1 percent in 1993 and 1.6 percent in 2003.

A.2.14.2 Composition of exports

In 2004, New Zealand’s top five exports to Italy were: leather (27 percent of total trade), wool (18 percent), raw hides and skins (10 percent), sheep meat (9 percent), and fresh fruit (6 percent) (Statistics New Zealand, 2004, p104). Notable non-commodity exports to Italy in 2004 were aluminium, dishwashing machines and clothing, however even combined they made up only 2 percent of total exports.

A.2.14.3 Underlying factors

Italy’s membership of the European Union (EU) places large restrictions on New Zealand’s ability to export agricultural products to Italy due to large subsidies and preferential trade agreements among member nations.

The trade in kiwifruit is underlined by a joint venture by Zespri to grow Kiwi Gold kiwifruit in Italy. Merino New Zealand also has partnerships with Italian fashion firms, which has helped to develop exports of high value merino wool clothing to Italy.

A.2.14.4 Critical issues

After the Italian’s Prada Challenge in the 2000 Americas Cup there was heightened interest in Italy about New Zealand, especially in industries such as boat building, and exports to Italy increased by 38 percent from 2000 to 2001. However, the increase from 2000 to 2003 was much smaller at 6 percent which may indicate the surge was only temporary. New Zealand firms will have to reinvigorate their image if they wish to continue to expand their opportunities in the Italian marketplace.

Agricultural reform in the EU, especially of the Common Agricultural Policy (CAP) would provide opportunities for exporters to increase their sales to Italy, however the reform process has been extremely slow with regard to agriculture, and future liberalisation will not be easy to achieve.
A.2.15 Mexico

A.2.15.1 History of trade

New Zealand first established diplomatic relations with Mexico in 1973, this was largely with the aim of finding new markets for dairy products at a time when Britain was entering the EEC. Exports to Mexico have grown from 0.15 percent of total exports in 1973 (NZOYB 1976) to 1.5 percent in 2003 placing it at number 15 in the top twenty export destinations.

A.2.15.2 Composition of exports

New Zealand currently sells between $400 and $500 million worth of goods to Mexico, of which 75 percent are dairy products while sheep meat and beef make up most of the remaining 25 percent (Tipping, 2004).

A.2.15.3 Underlying factors

The fact that trade with Mexico has been mainly in dairy products was highlighted by Fonterra’s large presence there until December 2004. Its offices and manufacturing plants employed approximately 2500 people and it ran its entire Western Hemisphere operations from Mexico City. It controlled the largest share of the cheese market and the third largest share of the butter/spreads market. In December 2004 Fonterra sold its New Zealand Milk processing plant as a going concern and will therefore have little or no presence in the Mexican dairy consumer market but retains its ingredients business which exports bulk dairy products to Mexico (Fonterra website 2004). The impact of this sale on dairy exports to Mexico and the Central American region is uncertain but any significant changes will be noticed in 2005.

A.2.15.4 Critical issues

There is a fair possibility of a Closer Economic Partnership (CEP) being negotiated between New Zealand and Mexico as the process was started in 2002 when a feasibility study was carried out. However, the results have not yet been published because the Mexican government has asked for a pause in the negotiations while it reviews its entire trade policy. There has also been concern in the Mexican private sector that trade liberalization has been progressing at too rapid a pace. New Zealand would stand to gain from such an agreement simply because of the large number of CEP’s Mexico already participates in. New Zealand would gain access into market where is currently faces tariffs of 20 percent on products such as kiwifruit and wine while other nations like Chile already enjoy duty free access. The future of this agreement depends on the Mexican government’s ability to garner support for its liberal trade policies.
A.2.16 Indonesia

A.2.16.1 History of trade

In the year ended June 2004, New Zealand’s exports to Indonesia were worth $368 million (Statistics New Zealand, 2004, p109). There has been steady growth of exports to Indonesia since 1964 where they accounted for less than 0.01 percent of total exports, to 0.25 percent in 1973 but this growth has since flattened out as Indonesia’s share remained at 1.3 percent in 1983, 1993 and 2003, making it New Zealand’s sixteenth largest export market in 2003. Throughout this period, exports have been dominated by dairy, meat and forestry products.

A.2.16.2 Composition of exports

For the year ended June 2004, New Zealand’s main exports to Indonesia consisted of milk powder (30 percent), meat and fish meal (12 percent), wood pulp (10 percent), frozen beef (9 percent) and butter (4 percent) (Statistics New Zealand, 2004, p109).

Education exports to Indonesia were worth $20 million to the New Zealand economy in 2002 with 746 students studying in New Zealand, while Indonesian tourists contributed $29 million in the year ended June 2003 (MFAT 2004).

A.2.16.3 Underlying factors

Indonesia has few import barriers facing New Zealand products however this has not been the main factor in limiting exports, rather the 1997 Asian Crisis caused a massive drop in Indonesian incomes and GDP fell by 13 percent in 1998. There has been some recovery but per capita GDP was $US671 in 2000, still not close to 1996 levels of $US1150 per capita (MFAT 2004). This drop in incomes has limited Indonesia’s ability to pay for exports and caused New Zealand export sales to drop or stagnate rather than continue their trend of higher sales year by year.

The political situation in the East Timor area did not help New Zealand’s relationship with Indonesia when its government failed to stop rioting and violence by militia opposing East Timor’s independence in 1999. However since this time the relationship has improved and a subsequent visit to New Zealand by Indonesian President Wahid in 2001 helped to enhance links between the nations.

New Zealand also provides considerable ODA to Indonesia, amounting to $8 million in 2003/2004 which is New Zealand’s largest single allocation in the Asian region.

A.2.16.4 Critical issues

Indonesia has a hugely diverse population of 211 million people, is relatively close to New Zealand in comparison to other large markets and has no significant trade barriers to New Zealand’s main exports. Thus there is likely to be massive
unexploited potential in the Indonesian market for New Zealand firms. Of course demand for New Zealand products is dependent on Indonesia’s successful and peaceful development through economic growth and given the challenges of governing a large multi ethnic nation spread over a wide area, achieving this goal it will certainly be difficult. New Zealand can assist in Indonesia’s development by continuing its support with ODA and contributing to poverty reduction and the democratisation process which in the long term will increase income levels and demand for New Zealand products.

A.2.17 France

A.2.17.1 History of trade

France has been one of New Zealand’s most important trading partners since 1964, however its share of New Zealand’s merchandise exports has been declining; from 6.1 percent in 1964 to 2.6 percent in 1973 to 1.6 percent in 1983, 1.2 percent in 1993 and 1.4 percent in 2003.

Political links between New Zealand and France were strained over nuclear testing in the Pacific and the Rainbow Warrior bombing in 1985 and threatened to boil over and damage trade relations. However, the relationship has been much smoother since the end of nuclear testing in 1996.

A.2.17.2 Composition of exports

Primary products have historically dominated New Zealand’s main exports to France and while they are still an important part of the trade, there has been some diversification. In the year ended June 2004, the top five exports were sheep meat (67 percent), seafood (7 percent), medical instruments (4 percent), aluminium (4 percent), and venison (3 percent). New Zealand’s merchandise exports to France were worth $358 million, while the merchandise balance of trade was -$772 million in France’s favour (Statistics New Zealand, 2004)

A.2.17.3 Underlying factors

The complementary nature of the New Zealand and French economies has seen an increase in French investment in New Zealand. Firms such as Danone, and Deutz have stakes in the food processing and viticulture industries respectively which has expanded trade in those sectors.

New Zealand’s ability to produce high quality primary products at a low cost has enabled its exporters to have success in the French market. Strict trade restrictions make it difficult for producers of some goods, especially dairy products, to sell as much as they would wish to, but New Zealand’s comparative advantage in the industry is the basis for much of its trade with France.
A.2.17.4 Critical issues

In February 2004 New Zealand negotiated year round access for venison exports to the French market which were initially restricted to between September and February. This will provide significant opportunities for venison exporters to increase their market share in France.

France’s highly protected agricultural sector prevents greater levels of New Zealand primary exports, thus any moves to reform the area would be welcomed by New Zealand. While New Zealand has little influence over the direction of French agricultural policy as a single nation, it is hoped that its work through the WTO will eventually bring about greater access.

A.2.18 Thailand

A.2.18.1 History of trade

New Zealand’s links with Thailand go back to 1950 when the relationship was based on the SEATO defence alliance. However, from this period forward the association has been firmly based on trade ties and the two countries have a history of working together in AFTA/CER, APEC and the WTO. New Zealand has also been a generous aid donor to Thailand in the past and through the Colombo Plan student exchange programmes, links between the nations were strengthened. Thailand has slowly become more and more important to New Zealand as a trading partner. It received 0.01 percent of New Zealand’s merchandise exports in 1963, 0.54 percent in 1973, 0.59 percent in 1983, 1.1 percent in 1993 and 1.2 percent in 2003 (NZOYB 1966-2004 and UN Comtrade).

A.2.18.2 Composition of exports

In 2004, dairy products made up 59 percent of New Zealand’s exports to Thailand, with milk powder alone contributing to 46 percent of total exports. Forestry is also an important export with timber making up 4 percent of merchandise exports while frozen fish accounts for 3 percent. Thailand is New Zealand’s eighteenth largest export market and was worth $346,708,000 to exporters in 2004 (Statistics New Zealand 2004, p114). Despite commodity products making up much of New Zealand’s exports to Thailand there is some diversity among the top twenty including transmission apparatus, telephone equipment and vacuum pumps.

A.2.18.3 Underlying factors

Exports to Thailand have been dominated by dairy products because domestic Thai producers are unable satisfy local demand. Despite this, there are significant barriers to New Zealand exports with high tariffs and quotas, with $33 million worth of tariffs levied on New Zealand products in 2003 (Clark 2004). However at the 2003 APEC conference the launch of negotiations working towards a Closer Economic Partnership between the countries were announced. As a result of the
successful conclusion of these talks in December 2004 it is expected that trade will be significantly boosted and ties between both countries will be further strengthened.

Another significant factor in trade between the two countries is education exports. Thailand has become New Zealand’s largest source of foreign students in South East Asia with nearly 4500 students studying in New Zealand in 2003 contributing $66 million to the economy (MFAT 2004).

**A.2.18.4 Critical issues**

The implementation of the CEP from July 2005 is likely to dominate relations between New Zealand and Thailand until 2025 when all tariffs and import restrictions on New Zealand exports to Thailand will be removed. New Zealand will remove all tariffs on Thai imports by 2015 which is not expected to impact significantly on the New Zealand economy due to its already relatively high level of openness. From the implementation date Thailand will eliminate tariffs and quotas on 52 percent of New Zealand exports. As only 4 percent of exports are duty free to Thailand this will bring considerable benefits to New Zealand exporters trying to break into the Thai market. For example, fruit and vegetable exports currently attract duties of 40 percent; however these tariffs will be removed from July 2005.

The CEP is also seen as a step towards the ASEAN/Australia/New Zealand free trade initiative potentially creating a large free trade area in South East Asia and the Pacific.

**A.2.19 Singapore**

**A.2.19.1 History of trade**

New Zealand’s ties with Singapore can be dated back to 1955 when the first defence links were formed, and enhanced through the Five Power Defence Arrangements in 1971. Singapore has been an important market for New Zealand exports since 1973 and since this time has received 1 to 1.5 percent of New Zealand’s merchandise exports and been consistently ranked among New Zealand’s top twenty export destinations. In 2003, Singapore was New Zealand’s fourteenth largest trading partner, although exports fell by 18 percent since 2002 in part due to the SARS epidemic restricting economic growth (MFAT 2004).

Tourism, education and investment links have also been strong between the nations and there have been numerous high level visits from politicians of both countries.

**A.2.19.2 Composition of exports**

New Zealand’s main exports to Singapore in 2004 included milk powder (18 percent), seafood (6 percent), butter (5 percent) fresh milk (3 percent) and chilled
beef (3 percent). Total exports to Singapore were worth $331 million in the year to June 2004, while the merchandise trade balance was - $495 million for the same period (Statistics New Zealand, 2004, p112).

A.2.19.3 Underlying factors

In January 2001, a CEP was signed between the two nations after a year of negotiations. The CEP allows duty free trade between the signatories and covers goods, services and investment and is New Zealand’s most comprehensive free trade agreement outside of CER with Australia. Since 2001, the Singapore Economic Development Board has made eight investment promotion missions to New Zealand while the number of New Zealand companies incorporated in Singapore has risen from 97 in 2001 to 135 in 2003, these include engineering, travel and ICT firms. These business links help to facilitate trade by increasing contact between New Zealand and Singaporean firms and by developing new opportunities to sell products in each countries market.

Singapore is one of New Zealand’s most important sources of foreign investment totalling $1.073 billion in the year ended March 2003 (MFAT 2004). Singapore is also an important investment location for New Zealanders, receiving 1 percent of New Zealand’s total direct investment abroad in 2002.

Education has become an important New Zealand export to Singapore with 200 students studying in New Zealand contributing $7.6 million to the economy. This link has been strengthened by a Work Exchange Programme in 1999 for tertiary students and recent graduates allowing students to work for up to six months in either country. Education links are also important for future trade developments as students may create strong ties while in New Zealand that lead to further business opportunities when they return to Singapore.

A.2.19.4 Critical issues

After the success of the CEP between New Zealand and Singapore, there has been recent discussion about a three way agreement including Chile in the free trade area. The first round of negotiations working towards this Pacific Three (P3) agreement were announced at the APEC Leaders Summit in October 2002 and are expected to be concluded in April 2005. Such an arrangement could provide New Zealand with significant benefits as the agreement is expected to include trade liberalisation for most goods and services thus providing new markets for New Zealand exporters in Chile.

Having said that, the long term economic benefits from a CEP are not as important as further reform through the multilateral round of the WTO.
A.2.20 Saudi Arabia

A.2.20.1 History of trade

New Zealand’s trade with Saudi Arabia has grown slowly from less than 0.01 percent of total exports in 1963 to 1.3 percent in 1993 before dropping back to 1 percent in 2003 and is now New Zealand’s main export market in the Middle East. New Zealand’s profile in Saudi Arabia was enhanced by political and humanitarian commitments during the 1991 Gulf War, and since this time there have been greater efforts to maintain and boost trade and political links with this nation. A 1998 Saudi trade mission to New Zealand was the first official visit by a Saudi Minister in ten years and included a large private sector delegation.

A.2.20.2 Composition of exports

New Zealand’s main exports to Saudi Arabia for the year ended June 2004 were milk powder (47 percent), sheep meat (17 percent), cheese (11 percent), butter (10 percent) and casein (3 percent) while New Zealand’s merchandise exports were worth $28,734,000 for the same period (Statistics New Zealand, 2004, p121). Agricultural products have always dominated New Zealand’s exports to Saudi Arabia, with other important non-commodity exports including; joinery, motor vehicle parts and iron and steel products.

A.2.20.3 Underlying factors

Dairy products have been a major export to Saudi Arabia due to a New Zealand Dairy board joint venture establishing a milk powder canning plant in the Kingdom. Live sheep meat shipments have also been a feature of exports to Saudi Arabia with Saudi investors owning significant stakes in sheep farming operations in New Zealand.

In 2001, Saudi Arabia and New Zealand signed a trade and technical co-operation agreement which called for an expansion of trade between the two nations. It also established a Joint Commission to conduct ministerial level talks and to foster improved business links between the two nations.

A.2.20.4 Critical issues

Saudi Arabia has relatively high per capita income levels and demand for consumer goods is rapidly rising. This provides some good opportunities for New Zealand exporters especially in the areas of building materials, construction technology and food processing and packaging technology. There are also potentially large opportunities in the education sector as Saudi Arabia seeks to up-skill its workforce if New Zealand can attract students.