

# **Open and Shut: New Zealand's Participation in the World Economy in the Twentieth Century**

Kenneth E Jackson  
Economics Dept.  
University of Auckland, New Zealand  
k.jackson@auckland.ac.nz

A paper for Session 24  
XIII World Congress of Economic History  
Buenos Aires  
July 2002

## **Introduction**

Openness, along with trade liberalisation, is currently seen as a major factor in producing economic growth and relatively high standards of living as conventionally measured by Gross Domestic Product (GDP) per capita. In the modern literature these two components have been described as: "... believed to have been central to the remarkable growth of industrial countries since the mid-20<sup>th</sup> century ..." (Winters, 2000, p. 43).

Some have suggested this was just as much true of the period a hundred years earlier, particularly for Britain. Openness has also been stressed as playing a significant role in the development of some of the British colonies and offshoots. New Zealand has been described as: "...the country with the highest standard of living in the world at this point in time." the mid-1860s (Dowie, 1966, p. 123) and as exhibiting an historical tendency towards openness and high levels of trade to overall income culminating in Condliffe's description of its having the highest overseas trade per capita of any country in the world (Condliffe, 1959, p. 17). Bloomfield (1984, p. 262), goes further in suggesting that in per capita trade terms and compared with other countries, New Zealand's rating has always been high. Such thoughts are commonly expressed in the historical literature. Trade to Income ratios were not used by Condliffe, simply because Income figures were lacking, long run estimates back to the 19<sup>th</sup> Century only appearing from the 1970s.

This paper explores some measures of how open the New Zealand economy really was for much of the period through from the late-nineteenth century and how the idea of New Zealand as an open economy arose in the historical literature. There is an examination of the measurements, which could be used in such an investigation and how far the available data permits or constrains such an investigation. The paper concludes with some observations and findings concerning the role of openness in achieving the high level of income apparent by the 1860s and in generating long-term growth rates since that date.

Case studies can appear both to support and contradict any belief in the power of openness. Winters, in a footnote to his paper on trade and poverty, comments on the apparently favourable outcome of such liberalisation in reducing poverty in the case of South East Asia, in contrast to the simultaneous unfavourable outcome in the case of Latin America. As he observes, it is difficult to separate out the effects of openness alone from those coming from the myriad of other factors at work in any dynamic economy (Winters, 2000, p. 43). Many hold the belief that the more open the economy the more likely it is to experience enhanced growth and competitiveness. Others are not so convinced or believe there may be a connection, but we do not as yet know what exactly it is. An historical case is worth exploring as a way to throw some light on an actual growth experience.

## **Part One: The Historical View of New Zealand as an "Open Economy"**

From the onset of formal colonisation in 1840, New Zealand economy has been characterised as open in the sense of being very dependent upon trade and overseas

investment in its development phase as a colonial offshoot of Britain. As Keith Sinclair commented in his standard history of the country free trade was the standard: “Tariff protection – economic nationalism – was a policy of radicals”, (Sinclair, 1991, p.168). Some of this open aspect was indeed the direct result of the colonial nature of the European economic development of the country with the desire for cheap imported inputs into the agricultural and pastoral sector. The Maori population, however, also engaged in trade with the local European population and with overseas markets, but by the 1860s their participation had been dwarfed by that of European interests. By the mid 1860s the European population vastly outnumbered that of the Maori. The Census figures for 1864 recorded a figure of 172,158 Europeans as opposed to the 1858 estimate of Maori numbers, which totalled 56,049. By 1874 there were almost 300,000 Europeans and 45,500 Maori (Bloomfield, 1984, p. 42). The omission of Maori from the early census estimates is reflective of the neglect of their role in developing an economy both before the coming of European colonisation and their role in the formative period before wool and gold had provided a secure base for sustained European economic development.

This neglect can be seen as part of the over-emphasis of the role played by external factors generally, and trade particularly, in developing the New Zealand economy in the colonial era. This may be the result of the greater availability of written records relating to trade and external relations, from Government sources rather than the true source of the historical growth and development experience. What is true is that whatever the reason, at both the macro-economic level and the micro-level, more of the written record comes from a trade perspective than from a vastly more important internal perspective. The first major economic history specialist, J. B. Condliffe, certainly gave a special emphasis to the role of trade, not least through publishing his thesis work on external trade as a special article in the 1915 Yearbook (pp. 858-962). Simkin’s tracing of fluctuations in economic activity through external series such as exports and imports was undertaken because of the lack of any adequate historical income figures at the time he was writing (Simkin, 1951, p. 3) and because of the more relevant association between overseas demand and supply changes and activity levels within New Zealand. External forces could be said to have provided the source of both immediate turning points in cycles and to have underpinned the course of long-term growth trends.

At the micro-level the history of the timber industry in New Zealand appears disproportionately concerned with the export position, from the early extraction of spars and masts from the Thames area (Condliffe, 1959, p. 18) through to the significant quantities sent to Melbourne in the major building boom of the 1880s. Even at the later date the vast bulk of timber use would seem to have been for internal purposes, rather than external ones. Most of this use was unrecorded, whether going into Maori or European usage. The question of burning rather than use is also an important issue in this case.

The exceptional cases of fully export-orientated industries before the 1880s, were really confined to wool and to gold, the latter having very limited use within the New Zealand economy, so that the production figures are given as the export volumes recorded (Jacobsen, 1998, p. 360). Gold was even more important in the sense of giving a

dynamic to the European development, which was not there before. If considered as a supply side shock, the strong initial impact and the relatively rapid absorption of that shock by the economy can be seen as products of the very open character of the New Zealand economy at the time. The easy and unimpeded labour flow into New Zealand adding to the open aspects of trade and investment flows (Jackson, 2002, pp. 63 -65).

Gold also explains the finding by Dowie of the relatively high standard of living of the “New Zealander” as demonstrated by the Knight Report estimates for the mid 1860s. The report was described as: “...appears to have sufficient effective accuracy to support strongly New Zealand’s claim to have had the highest average standard of living in the world...” (Dowie, 1966, p. 119). A similar, and possibly more controversial, claim has been made more recently for the year 1938, by Oxley and Greasley in one of their series of studies revising estimates of historical estimates of National Income, (Oxley and Greasley, 2001, p. 28). Their finding utilises the work of Angus Maddison for comparison with other country data. In contrast to the 1860s, the inter-war period was a time when the degree of openness of the New Zealand economy is conventionally viewed as being at its lowest and the level of immigration low to strongly negative. If it is accepted that both measures (or claims) are correct, then they were not attained through similar levels of openness. Before Oxley and Greasley’s claim there would appear to be an implicit feeling that high income levels and openness went together, whether or not they were causally linked. Protection, as in the case of the 1930s, was generally viewed as a response to an external threat to internal returns. Some interesting puzzles emerge which are worth investigating, including was the 1930s an aberration, can the evidence be relied on, or is the conventional wisdom incorrect?

## **Part Two: Possible Measures of Openness and Problems in Applying**

Trade is a significant part of the process of opening economies to the outside world and enhancing their productivity and growth as well as allowing them to reap the direct benefits of gains from trade. Trade measures can be enhanced or negated by other factors, however. The role of the exchange rate, of non-tariff barriers to trade of international investment and the movement of people are also of importance. Trade liberalisation has been found to practically assist growth by encouraging investment (see Levine & Renelt, 1992) and liberalisation is best seen as part of a process towards greater integration, both globally and regionally.

The first step in attempting to measure openness in this case is to consider possibilities in the best of all possible worlds. To assume this can be translated without problem into an historical case is misguided optimism. Practical issues including what measures exist and their accuracy have to be considered, as well as policy aims and interventions and their impacts, so that no one measure of openness has so far been accepted as a universal standard. In a pure world with perfect information, the degree of integration of an individual economy with the Global economy can be accurately measured. Measures of deviation of actual trade growth from predicted pure trade growth along the lines of Leamer’s Openness Index (Leamer, 1988) are unlikely to be of much practical use with

deficient historical data, where even the actual measure is best prefaced with “once upon a time”, but some use may be made of the Trade/Income ratios approach and other factors such as exchange rate movements, to indicate general levels of protection and openness. Examination of exchange rates are important in this case since New Zealand appears to have had a high level of convertibility through its fixed link to sterling, but was not entirely free from distortions through the operations of the commercial banking sector.

There are some conceptual difficulties with measuring openness, the commonly used trade intensity ratios can be affected by the size of the country involved as much as by national differences in trade policy stance (Pritchett, 1996, p. 309). New Zealand as a small open economy would normally be expected to demonstrate a high trade intensity ratio, but many of the potential problems related to comparing its degree of openness with that of other countries of larger size are not an issue here because the comparison is not between countries, it is over time rather than space. Categorising the salient points of New Zealand’s trade policy stance at any point in time and the impact of this on the measure of openness is the task. Given the conceptual problems some of the analysis is by necessity qualitative as well as quantitative.

In the empirical studies undertaken for developing countries in the 1990s there are several common variables brought into consideration. Most of these are concerned with levels of import penetration of consumer goods, the greater the penetration the greater the degree of openness. Consumer, or finished, goods are likely to be the ones most protected and therefore a better target to use in assessing indicators of openness. In part three it will be seen that investigation reveals some general trends emerging towards greater effective protection through reductions in duty on intermediate goods at times, reflecting less openness on the part of New Zealand. The detailed study of such issues is not possible with currently available data.

Several variables are typically used in current studies, starting with the more general and moving to the more specific. These variables relate to:

- trade intensity ratios
- the real exchange rate
- the ratio of imports to GDP
- consumer imports to total imports
- any premium in the black market
- non food consumer imports to total non food imports
- consumer imports to consumption
- non food consumer imports to consumption

Only the first two or three measures are used here, with some commentary relating to tariff structures in terms of the fourth measure. Largely this is because of data problems over the long run.

Defining or measuring that nebulous term “the trade policy stance” is a somewhat difficult target to achieve, but a general qualitative assessment is attempted in part three as a way to address the issue of how open New Zealand may have been at any point in time. This is a general test of the apparent conclusion of the conventional historical

wisdom that the country was always a major trader and, by implication, a very open economy. Problems with reliable data on movements in prices, nominal GDP and trade itself render even these basic measures somewhat difficult to ascertain, let alone the disaggregated data for the more sophisticated measures. These have to await further investigation. Some initial observations can, however be produced to stimulate further thinking.

### **Part Three: How Open was New Zealand?**

As stated earlier, Condliffe had described New Zealand as exhibiting the highest level of trade per capita of any economy in the world in the 1950s. This would suggest a high degree of openness, but the contradictions are abundant. The early 1950s was a time of both exchange regulation and restriction as well as physical trade restriction. New Zealand has experienced fluctuating degrees of openness over time, as measured by those indicators which are available to us. From such a high trade per capita position New Zealand declined in ranking when compared to other countries, many of whom were, in the 1950s, still disadvantaged by the disruptions visited on them during the inter-war, wartime and immediate post-war eras.

In the earlier period, before the Second World War, it is possible to argue that there are three possibilities when trying to characterise the degree of openness of the economy, was it indeed: open, shut or sheltered? A truly open economy was never that likely, at least in the free trade sense. The brief attempt at removal of all duties on imports, which was enacted on 28 September 1844, lasted just over six months, with customs duties re-appearing in place of the substitute rate on property on 8 April 1845 (Isles, 1986, p. 195). This attempt to encourage activity through free trade foundered on the lack of any viable alternative source of revenue for Government.

The perceived lack of an alternative income stream for the Government was a persistent problem and a motivation for the imposition of duties on a wide range of imports. Comparable excise duties on domestic production were slow to arise, beer and tobacco attracting excise from the 1880s onwards (Lloyd-Pritchard, 1970, p. 140), but these were not imposed on many other products. Customs duties accounted for the overwhelming bulk of tax revenue before 1881 and were still two thirds of the total tax take by the mid 1890s, when taxes on land and beer, as well as stamp duty were offering some alternatives. Effectively, revenue may have been the chief aim in Government's mind at this time, but a protective effect and less openness are inevitable, if incidental, outcomes of the approach, which did not pass unnoticed either by politicians or rent-seeking local interests. As the alternative sources of revenue develop so this motivation alters, if only slowly. With growing momentum from the 1870s onwards there was, by the 1890s, some rather more explicit recognition of protective effects and the possibilities for extending these.

The Free Trade ideals expounded in Britain in the second half of the nineteenth century are said not to have existed in the New Zealand case (Hawke, 1985, p. 112) and clearly

they did not. Protection, intended or unintended, was present and provided no legacy of free trade orthodoxy to overcome as was the case in Britain. In 1882 some articles used only as intermediate inputs were declared exempt from duty. The New Zealand Industrial Association had developed a strong protective leaning, requiring its new members to support tariff adjustment so as to favour locally produced manufactured products over imported ones by 1886 (Linge, 1959, p. 158). It was aided in such pressure by the New Zealand Protection Association, bringing the protection point home to politicians as a balance to the complaints from the primary sector that they suffered from protection in paying higher prices for their inputs than they otherwise might have done and in fact suffered from competitively supplying their export products to monopsonistic cartels of international meat companies for example.

By the beginning of the twentieth century the raising of tariff levels was seen as fully acceptable. Following on the coat tails of the trend to consider Empire preference schemes of one sort or another, New Zealand re-introduced preference schemes in 1903, after abandoning them some half century earlier. A so called “surtax” approach was adopted so that preference was afforded by means of leaving constant the tariffs faced by the preferred traders whilst raising the rates for the non-preferred. The rubric of the Preferential and Reciprocal Trade Act stated its aims to be: the encouragement of trade with the British Empire by imposing extra duties on certain imports and provide for reciprocal trade with foreign countries (NZ Statutes, 1903, p. 290). This was an approach described by Sinclair as “giving nothing away” (1955, p. 32). In welfare terms this was not far from the truth, since the extra tariffs were imposed on items and supplying countries which appeared very little in the import totals. Casual observation suggests there was little disturbance to any trend in terms of suppliers. The United Kingdom supplied 58.7 per cent of imports by value in 1903 and 59.19 per cent in 1905. A possible indication that exploration of the counterfactual might be needed, however, comes from the concern expressed at the 1907 Colonial Conference that British trade with both Australia and New Zealand had in fact been declining between 1899/1901 to 1904/1906 (Minutes of Proceedings, 1907, p. 267). 1907 saw tariff changes with some protection for specified industries, reduction in food duties and more preferential schemes.

Through to the late nineteenth century there would appear to be a general phase of “protection largely by default” from revenue gathering tariffs. This not to say that protection was unintended, as an acute awareness of the possible advantages of protection was shown by politicians and others at the time. From the late nineteenth century on the policy stance appears to harden, with Empire preference schemes and an avowedly protectionist stance being adopted.

Through World War One and into the inter-war period such protectionism appears to gather strength, although the value of tariffs relative to import prices fell between 1900 and 1920 from 20 per cent to 13. Duties on foreign products were raised during the war with extra imposts on imports from “enemy” countries. Moves to counter dumping (Australian roofing products) and to protect against “unfair” competition (devaluation and low wage costs) on the part of Japan, appear in 1919 (Isles, 1986, p. 198). Sheltering

in the sense of secure British markets through the commandeered process for bulk purchase of some food products during the war meant that there was a move to 90 percent or more reliance on one export market. New Zealand was trading, but not globally integrating.

Adding to this administrative interference in market processes, was the inter-war establishment and development of a series of marketing mechanisms, such as the Meat and Dairy Boards, for New Zealand's major export products, with significant Government support and involvement. These mechanisms tried to combat the falling demand and prices experienced once the war was over. The Imperial Government ceased its 1915 imposed wartime requisition of farm produce for export in 1920 for all but butter, which was requisitioned until 1921.

The 1920s were times of depressed commodity prices and reduced trading activity. Between 1921 and 1934, tariff revenue relative to import prices rose, averaging some 18 per cent compared to the 13 per cent of 1920 (Isles, 1986, p. 199). The 1920s saw little change overall, with some small tariff rises occurring, which generally enhanced the degree of preference given to British products. A more general revision occurred in 1934 following the same general aims and objectives of the 1920s. This pattern then prevailed through to 1957 when another review was undertaken. In addition to a protective intent in tariff policy, 1938 saw the introduction of quantitative controls through licensing arrangements, which further decreased the level of openness. Employment protection and dealing with persistent Balance of Payments problems were the avowed aim of the policy stance. In the 1950s this altered somewhat in character, but there remained a relatively protectionist and British focused approach. The 1970s saw a move towards a more universal stance, preferences to Britain and the Commonwealth being reduced or incorporated into the Generalised System of Preferences. By July 1978 the results of a Tariff review investigation were implemented, further globalising the stance with some moves towards a more open regime (Smith & Miller, 1981, p 449). It was the period after the mid 1980s, however, which saw the more radical steps taken towards reducing tariffs and the final elimination of quantitative controls. The recent past can be described as a fully open one from both the tariff policy stance perspective and that of relatively unrestricted capital flows. The general trend towards greater restrictions on the movement of people is reflective of a somewhat less open attitude, however, in part because of the increased ease of movement.

Generally it can be postulated that the New Zealand Commercial policy stance is characterised in time as broken into the following phases: firstly from the early days of European settlement through to the early 1850s, when the early preference to Empire products disappears and a settled period of looking to customs duties primarily for revenue appears. The early theoretical East India Company monopoly and close ties with New South Wales could be said to have left this period with a strong sheltered flavour in the sense of Empire ties. Secondly from the 1850s the primary reliance on duties for revenue purposes runs through to the early twentieth century. This second period sees strong links to Britain, but is essentially an open one. The third period starts with the renewal of an Empire preference scheme, developed in a "protective surcharge" manner at the beginning of the century. It sees an attempt to differentiate New Zealand from not

only New South Wales, but also the other “Australasian” colonies in the eyes of the British. The wartime period through to the early 1920s extends the sheltered reliance on Britain as a major market through the Imperial commandeer and guaranteed markets for food products. A fourth period from the early 1920s through to the early 1950s sees a period of relative closure with some degree of sheltering. The more open approach of the recent past starts from the early 1950s, but in rather hesitant fashion until the impossibility of relying on British markets and sheltering as being effective is finally made apparent with British entry into Europe. A liberalising approach is then seen as gathering pace through the 1970s and more particularly the 1980s, giving a fifth period which can be described as more open.

How does this qualitative analysis hold up against some of the quantitative measures? First the ratio of exports to National Income can be assessed. Second the question of fluctuations in real exchange rates can be looked at as far as available data permits.

Trade to Income ratios:

Imports to Income are the figure that most policy operators seek to influence. Export promotion is a somewhat more nebulous operation and usually it is the level and total value of imports that have been affected in periods of less openness. The general level of both exports and imports, however, can be used as general indicators of the degree of openness.

In the early days of European settlement, there was little alternative but to import most manufactured items, local sources of supply being non-existent. This structural tendency to import and consequent high propensity to import, has continued through into the modern era. New Zealand, however, proves not to be as open as conventional wisdom suggests. Simkin’s time of the early 1950s saw an export to GDP ratio of just over 30 per cent and nearly 33 per cent for imports. Twenty years later these numbers had declined to under 20 per cent in each case (Carey & Smith, 1981, p. 548) causing the heretical comment that maybe New Zealand was not as great a trader as conventional wisdom suggests. Exports to National Income below the 30 per cent level were not something new, however. What was new was their being below the 20 per cent level.

Table 1 Trade to Income Ratios 1870-1970

Sources: 1870-2 to 1940-2 Author’s calculations from data contained in Bloomfield, (1984); Hawke, (1975); Hawke, (1985) and Lineham, (1968).

1950-2 to 1970-2 taken directly from Carey & Smith, (1981, p. 548).

Year	Exports to Income %	Imports to Income %
1870-2	40.29	35.29
1880-2	24.44	28.55
1890-2	30.55	20.39
1900-2	31.81	26.04
1910-2	30.50	27.19

1920-2	26.68	23.66
1930-2	28.63	23.66
1940-2	37.08	25.32
1950-2	30.50	32.70
1960-2	20.70	20.70
1970-2	18.70	17.70

At the early stage the typical Trade to Income ratios are higher than for the 1970s, but for a small open economy with some abundant natural resource endowments to exploit, this is not surprising, indeed they look low on average, with the positive influence of Gold discoveries still traceable in the 1870s and the impact of refrigeration showing through at the turn of the century. Import penetration is found to be normally less than 30 per cent, which by modern standards is relatively modest.

In terms of the periods outline in the qualitative assessment, the idea of growing protectionist ideals through from the late nineteenth century is supported by the fall in import penetration with some fluctuation. 1920 to 1950 as less open is not well supported, with import penetration holding steady if not increasing, although the wartime conditions play a role in these developments. Similarly the idea that there was a more open stance from the early 1950s onwards is not supported with import penetration falling even if the 1950-2 period average is an anomalous base from which to start. The period after 1970 does show some rise, back to the 30 per cent level at times, but there are questions raised here about the qualitative assessment and the conventional wisdom.

### Real Exchange Rates

These are a possible check on the use of trade to income ratios alone. The following measures are taken from two sources, which use different methods of estimation, so that they are comparable only in broad terms, but that is sufficient for current purposes, where long-term broad trends are being sought. The period from 1914 to 1938 is covered by estimates made by Grant Fleming (1993, p. A – 36). The period from 1939 to 1959 is uncovered. Attempting to extend the Fleming data using the same methodology produces unsatisfactory results. Comments regarding the final period through to the late 1990s are based on tables produced by Dalziel and Lattimore (1999, p. 123) which was based on a different approach, more suited to the changes in export direction and other changes occurring at this time.

The period from the beginning of the 1970s sees the demise of attempts at fixed exchange rates or pegging to the £ sterling. Such fixed exchange rate mechanisms effectively ceased from 1972-3. Various floating regimes have been operated from that date. Whilst fixed nominal rates were in existence the real rates necessarily show greater variance from year to year, after the introduction of floating rates the real rates are somewhat more stable than the nominal ones.

The implications and importance of the exchange rate shifts lie in their indication of levels of protection and therefore the degree of openness present in the economy at any point in time. The real rate is a more effective indicator of levels of competitiveness and protection than the nominal one. A similar method of evaluation, using the difference in wage costs as a deflator, was employed by Lloyd, (1984) to assess the impact of the New Zealand Australia Free Trade Agreement (NAFTA) trade policy arrangements between 1966 and 1982. Significantly that study found the impact of bilateral real exchange rate movements to be far greater than that produced by the weak and permissive trade agreement itself.

Table 2 Real Exchange Rate Index 1914 to 1938

Source: Fleming, (1993, p. A - 36)  
1926 = 100

Year	Real Exchange Rate
1914	105
1915	93
1916	80
1917	69
1918	75
1919	73
1920	70
1921	103
1922	107
1923	105
1924	103
1925	102
1926	100
1927	98
1928	99
1929	103
1930	117
1931	120
1932	105
1933	110
1934	106
1935	107
1936	102
1937	96
1938	109

There is a plus or minus movement of some 51 points here (69 to 117) with nominal rates remaining pegged through the 1920s and moving on two occasions in the early 1930s,

first a devaluation to NZ£110 and then to NZ£125, to sterling £100 in 1934, responding to the problems reflected in the table in the earlier move to an index number of 120 for 1931.

Effectively the real rates estimated by Fleming, are determined appropriately, by relative movements in New Zealand and UK price levels since the overwhelming part of New Zealand trade at this time was with the UK. The New Zealand wholesale price index has been divided by the UK wholesale price index and the product multiplied by the nominal New Zealand to UK exchange rate index (Fleming, 1993, A – 37).

General price levels differentials between the two economies fluctuated less sharply in the period between 1870 and 1918, but there are several issues relating to trade patterns and weightings, which militate against a straight extension of the approach to the earlier period. Generally greater price falls are to be found in the New Zealand case than in the UK data, but the New Zealand starting base would still have some impacts of the Gold rush era. A general impression gained from investigation of relative price data, through to 1918 would be to categorise New Zealand as becoming slightly more open to the turn of the century and static or slightly less open thereafter. This is in line with the qualitative assessment, but reliant on statistics that are almost to be classed as anecdotal.

Looking at Fleming's results the concept of less openness in the inter-war period, is difficult to assess post 1921, when particular wartime and post war conditions were past. The degree of fluctuation is limited apart from early 1930s. No clear trend is apparent.

Immediately past 1960 the movements in real exchange rates (Dalziell & Lattimore, 1999, p. 123) are affected relatively little compared to those of World War One. The major breaks are associated with discrete regime changes of the late 1960s, early 1970s and mid 1980s. The free float and more open regime of the recent past is reflected in much greater year to year fluctuation with the trends far from uniform.

#### **Part Four: Consequences and Conclusions Arising from Differing Levels of Openness**

The qualitative assessment of the trade policy stance was characterised as demonstrating an early period of sheltered to dependent or closed activity. Trade Income or real exchange rate movements cannot assist in assessing this typology. The second period that of 1850 to 1900 approximately, was characterised as seeking tariff revenue rather than avowedly protectionist, but becoming more explicitly protectionist towards the end of the period. The quantitative data is not in line with the latter point with an increase in import intensity through the 1890s. The particular impact of the introduction of refrigeration, however, makes the assessment difficult. A counterfactual approach may be needed.

The period 1900 to 1920 was qualitatively characterised as less open and this was generally upheld by trade intensity figures, although the particular issues of the early

1920s, as reflected in the real exchange rate findings need to be considered carefully. The inter-war period as less open is not upheld by the quantitative data although again there may be particular circumstances, which merit closer investigation. The period from World War two as being increasingly open is also called into question by the quantitative data, certainly for the period through to the early to mid 1970s, when trade intensity had fallen to historically low levels.

The major period of global interest here, may well be the questioning of what happened in the inter-war period. The global typology provided by Summers (1999, p. 5) suggests that 1914-50 saw a literal disintegration of the of the world economy. Conventional wisdom and traditional qualitative assessment of this period for the New Zealand case suggests a similar outcome, but the trade intensity measures suggest more not less integration. Perhaps Oxley and Greasley have a point about New Zealand success in terms of per capita income levels in the 1930s if New Zealand was “bucking the trend”. If the qualitative assessment of this period as closed is wrong, however, then both the late 1930s and the mid 1860s could have had high income levels by world standards and a move in the direction of greater openness. For the 1930s this must remain a speculative conclusion at this point.

Global growth and performance in terms of relative levels of real income per capita seem a little confused if the data is taken as accurate. As with Pritchett’s (1996) findings that: whilst it is generally held that a country's trade policy stance can determine economic performance, what it is that does the trick is less obvious and less often questioned. The New Zealand case study is very incomplete at this point in time and needs more work, but it is clear that New Zealand is not the trading power the conventional wisdom suggests and there are some particular discrepancies in our thinking related to the inter-war period.

## References:

Bloomfield, G.T. (1984), New Zealand: A Handbook of Historical Statistics Boston, Mass. G.K. Hall & Co.

Carey, D.A. & Smith, A.A. (1981), *The External Dependence of the New Zealand Economy*, in Deane, R.S., Nicholl, P.W.E. & Walsh, M.J. (eds.) External Economic Structure and Policy: An Analysis of New Zealand’s Balance of Payments, Wellington, Reserve Bank of New Zealand.

Condliffe, J. B. (1915), *The External Trade of New Zealand*, New Zealand Official Yearbook, Wellington, Government Printer, pp. 858-962.

Condliffe, J. B. (1959), New Zealand in the Making: A Study of Social and Economic Development, 2<sup>nd</sup> Revised Ed. London, George Allen & Unwin Ltd.

Dalziel, P. & Lattimore, R. (1999), The New Zealand Macroeconomy: A Briefing on the Reforms, Oxford, Oxford University Press.

Dowie, J. A. (1966), *A Century-old Estimate of the National Income of New Zealand*, Business Archives and History, Vol. 6, pp. 117-31.

Fleming, G. A. (1993), Economic Thought and Policy Advice in New Zealand: Economists and the Agricultural Sector circa 1918-1939, University of Auckland Ph.D. thesis.

Greasley, D. & Oxley, L. (2001), Conquering the Great Depression: The Unique New Zealand Experience, Paper presented to New Zealand Association of Economists's Conference, Christchurch, New Zealand.

Hawke, G.R. (1975), *Income Estimation from Monetary Data: Further Exploration*, Review of Income and Wealth, Vol. 21, pp. 301-7.

Hawke, G.R. (1985), The Making of New Zealand, Cambridge, Cambridge University Press.

Isles, J. (1986), *Trade and Protection*, in B. Fraser, (ed.) The New Zealand Book of Events, Auckland, Reed Methuen pp. 194 - 203.

Jackson, K. (2002), *New Zealand and the Gold Rushes of the Mid-Nineteenth Century*, in Flynn, D. (ed.) Studies in Pacific History, London, Ashgate Press, pp. 56 –71.

Jacobsen, V. (1998), The Development of Gold Mining Law in New Zealand, University of Waikato Ph.D. thesis.

Lineham, B.T. (1968), *New Zealand's Gross Domestic Product, 1918/38*, New Zealand Economic Papers, Vol. 2, pp. 15-26.

Lloyd, P.J. (1984), *New Zealand, CER and the Pacific*, New Zealand Economic Papers, Vol. 18, pp. 1-12.

Leamer, E. (1988), *Measures of Openness*, in Baldwin, R. (ed.) Trade Policy Issues and Empirical Analysis, London, National Bureau of Economic Research. pp. 147 – 200

Levine, R.. & Renelt, D. (1992). *A Sensitivity Analysis of Cross-Country Growth Regressions*, American Economic Review Vol. 82 (4), pp. 942-63.

Linge, G.J.R. (1959), The Geography of Manufacturing in New Zealand, University of New Zealand Ph. D. thesis.

Lloyd-Pritchard, M. (1970), An Economic History of New Zealand to 1939, Auckland, Collins.

Pritchett, L. (1996), *Measuring Outward Orientation in LDCs: can it be done?* Journal of Development Economics, Vol. 49 No. 2, pp.307 – 335.

Simkin, C.G.F. (1951), The Instability of a Dependent Economy: Economic Fluctuations in New Zealand 1840-1914, London, Oxford University Press.

Sinclair, K. (1991), A History of New Zealand 4<sup>th</sup> rev. ed. Auckland, Penguin books.

Smith, A.A. & Miller, C. (1981), *Tariffs*, in Deane, R.S., Nicholl, P.W.E. & Walsh, M.J. (eds.) External Economic Structure and Policy: An Analysis of New Zealand's Balance of Payments, Wellington, Reserve Bank of New Zealand.

Summers, L.H. (1999), *Distinguished Lecture on Economics in Government: Reflections on Managing Global Integration*, Journal of Economic Perspectives, Vol. 13 No. 2, pp. 3-18.

Winters, L. Alan, (2000), *Trade and Poverty: Is there a Connection?*, in Ben-David, Dan, & Winters, L. Alan, Trade, Income Disparity and Poverty, Geneva: WTO Special Studies No. 5, pp. 43-69.