

"Trap or Treasure: an economic history of primary production in Hawke's Bay province, 1945-2010."

By

Malcolm Davie

A thesis submitted to the Victoria University of Wellington in fulfilment of the requirements for the degree of Doctor of Philosophy.

Victoria University of Wellington

2020

# Abstract

---

Comprised of a broad range of primary activities, Hawke's Bay is one of New Zealand's foremost agricultural provinces. Consequently, the province provides an excellent template by which to assess New Zealand agriculture and test differing perspectives of staples-led development. Importantly, the province provides a positive example of staples-led growth and this thesis argues that adjustment within, rather than abandonment of, existing primary production structures has been a rational response to changed economic, social and political circumstances since 1945. Most particularly, two essential adjustment mechanisms existed. First, a dynamic process of land use interchangeability provided the flexibility required for diversification and delivered strong relative investment returns. Second, levels of corporatisation and internationalisation increased significantly as participants sought productivity enhancements, greater scale and additional capital. Crucially, although aspects of classical staples theory are evident in Hawke's Bay after 1945, the development of the province's primary sector does not support interpretations of classical theory as a 'staples trap.' Therefore, Hawke's Bay's multi-polar model of staples-led economic development challenges the notion, typified by Sutch, that primary sector led economic development is undesirable. It is similarly significant that scholars have not previously considered staples theory within a dynamic system of land use change.

The history of the Hawke's Bay primary sector since 1945 enables the consideration of broader issues in New Zealand's economic history. Tariffs, regulation, deregulation and agricultural subsidies played a prominent role in the province after World War Two, the impact of which permits one to locate the Hawke's Bay story in the wider history of the New Zealand economy. But most importantly, Hawke's Bay illustrates the distortions of productivism, a concept backed in the first instance by New Zealand farmers and later pursued by the New Zealand government as a remedy for declining agricultural commodity prices and farm profitability. Historical evidence from Hawke's Bay suggests that productivism and its policy offspring, most notably Supplementary Minimum Prices, rendered the task of structural adjustment to declining commodity prices and changed market conditions substantially more difficult.

# Table of Contents.

---

Abstract	ii
Acknowledgements	iv
Abbreviations.	v
List of Tables & Figures.	vii
Introduction.	1
Chapter 1: The Development of the Hawke's Bay Economy to 1945.	25
Chapter 2: Hawke's Bay Rural Land Use & Land Prices 1945-2010.	57
Chapter 3: Hawke's Bay Pastoral Farming 1945-2010.	87
Chapter 4: Hawke's Bay Meat Processing Industry 1945-2010.	115
Chapter 5: Hawke's Bay Wool Distribution, Processing & Manufacturing 1945-2010.	143
Chapter 6: Hawke's Bay Horticulture 1945-1975.	175
Chapter 7: Hawke's Bay Horticulture 1975-2010.	199
Chapter 8: Hawke's Bay Entrant Primary Sectors 1945-2010.	229
Conclusion.	259
Bibliography.	271

# Acknowledgements

---

As with any work of this size, a debt of gratitude is owed to many. But in particular, love and thanks go my family especially my wife Andrea and daughters Olivia and Brigette. Without your support this project would never have been completed. The generous assistance of Statistics New Zealand, New Zealand Companies Office, QV Napier, Hawke's Bay Museum and Napier Library is also acknowledged. Thanks must also be extended to the farmers, growers and businesspeople that provided interviews, a number of whom were recorded anonymously due to lingering commercial sensitivities. Without their input this thesis could not have been completed. Finally, to my supervisors – Jim McAloon and Steve Behrendt. Economic History is a niche academic topic in this country and I was indeed fortunate to find two individuals so well qualified to advise me.

# Abbreviations.

---

AGM – Annual General Meeting.

APMB – Apple & Pear Marketing Board.

CAGR – Compound Annual Growth Rate.

CARP - Campaign Against Rising Prices.

CEO – Chief Executive Officer.

CER – Closer Economic Relations.

DIC – Department of Industries and Commerce.

EEC – European Economic Community.

EPW – Elders Primary Wool.

EU – European Union.

GDP – Gross Domestic Product.

GFW – Goodman Fielder Wattie.

ha – Hectares.

HBFGA - Hawke's Bay Fruit Growers Association.

HBFMC – Hawke's Bay Farmers Meat Company (also referred to as 'Co-operative').

HBRC – Hawke's Bay Regional Council.

HW – Heinz Wattie.

IWS - International Wool Secretariat.

JV – Joint Venture.

M&A – Merger & Acquisition.

MMP - Mixed Member Proportional.

NEFD - National Exotic Forestry Description.

NMA – National Mortgage & Agency.

NZCC – New Zealand Commerce Commission.

NZD – New Zealand Dollar.

NZFP – New Zealand Forest Products.

NZFS – New Zealand Forest Service.

NZIER – New Zealand Institute of Economic Research.

NZMAF – New Zealand Ministry of Agriculture & Forestry.

NZMOF – New Zealand Ministry of Forestry.

NZMOW – New Zealand Ministry of Works.

NZWSI – New Zealand Wool Services International.

NZX – New Zealand Stock Exchange.

OECD – Organisation for Economic Co-operation & Development.

OSF - Oji Sankoku Forests.

PGG – Pyne Gould Guinness.

RBNZ – Reserve Bank of New Zealand.

RoE – Return on Equity.

SMP – Supplementary Minimum Price.

SSA – Stock & Station Agent.

UEB – United Empire Box.

WPI – Wool Partners International.

# Tables and Figures

---

## Tables.

Table I.1. Per capita GDP of select settler economies relative to the USA, 1923-1998 (in 1990 US Dollar terms).

Table 1.1. Pastoralism dominates: estimated land use in Hawke's Bay, 1945 (ha).

Table 1.2. New Zealand pastoral sector: structure by provincial region, 1945.

Table 1.3. Process vegetables dominate: Hawke's Bay vegetable plantings, 1945 (ha).

Table 1.4. Dominated by apples: Hawke's Bay fruit sector productive structure, 1945/46 (cases).

Table 1.5. Hawke's Bay viticulture: productive structure, 1945.

Table 2.1. Estimated Agricultural Land Use: Hawke's Bay Province, 1945-2010 (Hectares).

Table 2.2. Pastoral stock numbers and grassland intensity: Hawke's Bay, 1945-2010.

Table 2.3. Hawke's Bay pastoral property values: % movement in price per acre/ha, 1945-2010.

Table 2.4. Hawke's Bay rural property values: price per ha, 2010.

Table 2.5. New Zealand's key pastoral product prices, 1984/5 vs. 1985/6.

Table 3.1. Value of New Zealand agricultural produce, 1938-1968 (adjusted for change in livestock numbers).

Table 3.2. Huge growth: Hawke's Bay wool production, 1945-1975 (estimated million lbs).

Table 3.3. Dual purpose breeds dominate: New Zealand sheep breeds, 1962 & 1979 (% of total).

Table 3.4. New Zealand wool export destinations: 1939-1975 (% of total).

Table 3.5. NZ wool output lbs (m) & prices (cents/Kg), 1945-2010 (main subsidy period in bold italics). Rebased to 2010.

Table 3.6. Hawke's Bay wool production, 1985-1995 (estimated tonnage).

Table 3.7. Gross farm profit/HA, farm size & lambing %, Hawke's Bay 1971-1995.

Table 3.8. Hawke's Bay wool production, 1995-2010 (estimated tonnage).

Table 3.9. Hawke's Bay pastoral farm size, profitability & lambing percentages, 1995-2010.

Table 4.1. Richmond Meats major event timeline, 1930-2003.

Table 5.1. Wool auction market shares: Napier wool sale, 14<sup>th</sup> November 1955.

Table 5.2 Napier wool auction volume growth in bales tendered, 1941-1980 (%).

Table 5.3. Post war wool boom generates massive growth. Williams & Kettle financials, 1934-1966.

Table 5.4. Limited domestic demand: wool exports as a % of total production, 1946-1975 (% & lbs - millions).

Table 5.5. Napier wool auction volumes and public auction share of total, 1955-1999 (bales & % of market).

Table 5.6. Tough trading between 1985 and 1990: Williams & Kettle financials, 1980-1995.

Table 5.7. Strong growth: New Zealand wool scouring volumes, 1965-1995.

Table 5.8. Little local manufacturing: exports of wool as a % of total NZ production, 1980-2005.

Table 5.9. New Zealand carpet manufacturers lose market share: wool & synthetic fibre output, 1971-1981.

Table 5.10. China replaces the UK & Europe: % of total wool exports, 1975-2010.



Table 6.1. New Zealand apple exports: destinations & volumes, 1939-1975.

Table 6.2. Apples Dominate: Production & acreage (pip-fruit & stone-fruit), Hawke's Bay 1945/46 and 1968/69.

Table 6.3. J. Wattie Canneries: Growth in processed volumes, 1955-1974 (tonnes).

Table 6.4. J. Wattie Canneries: select financial data, 1945-1968.

Table 6.5. Wattie Industries Limited: select financial data, 1970-1975.

Table 7.1. Apple trees planted/ha, 1940-2010.

Table 7.2. Wattie Industries Limited: select financial data, 1980-1983.

Table 7.3. New Zealand apple export destinations, 1984-2010 (% of total).

Table 7.4. Production & acreage (pip-fruit & stone-fruit): Hawke's Bay, 1968/69 vs. 2012.

Table 7.5. Hawke's Bay - major vegetable varieties, 1997-2012 (planted area in hectares).

Table 7.6. Heinz Wattie: selected financial data, 2001-2010.

Table 8.1. New Zealand timber production and sources, 1945-1980.

Table 8.2. Early government owned exotic forests in Hawke's Bay, dates of establishment & area.

Table 8.3. Exotic Forestry Area & Growth (000's ha) vs. Stock Units/ha, 1945-2010.

Table 8.4. Export log prices: value in real & nominal terms, 1992-2010.

Table 8.5. A late transition: Hawke's Bay timber mill feedstock, 1955-90.

Table 8.6. Hawke's Bay sawmills and timber processing capacity, 1992 & 2010 (million cubic meters p.a.).

Table 8.7. Forty years of growth: Port of Napier forestry exports, 1968-2007 (cubic metres).

Table 8.8. Five Eras of Hawke's Bay viticulture, 1945-2010.

Table 8.9. Fortified & Germanic wine styles collapse: New Zealand wine production, 1962-2010.

Table 8.10: Muller Thurgau reigns supreme: Hawke's Bay dominant varietal mix, 1983 (% ha).

Table 8.11. Hawke's Bay specialises in Reds: Dominant varieties, 2010 (% of total production).

Table 8.12. Relative decline: Hawke's Bay as a % of total national vineyard area, 1960-2010.

Table 8.13. Rising market diversification: New Zealand wine export markets by value % (1995 vs. 2010).

## Figures.

Figure I.1: Hawke's Bay Regional Council Boundaries and major geographical features.

Figure I2: Location of Hawke's Bay province.

Figure 1.1. Major land purchases in Hawke's Bay, 1851.

Figure 1.2: Hawke's Bay Province: Pre-European Vegetation & Drainage.

Figure 1.3. Von Thunen's "Isolated State." Schematic model of Hawke's Bay agricultural development prior to 1945.

Figure 3.1. Sheep numbers & lambing percentages, 1935-2011 (%).

Figure 3.2. Meat & wool export values compared, 1953-2011 (absolute values).

Figure 3.3. Short Boom(s) & Long Bust: relative New Zealand wool export prices, 1925-2010.

Figure 3.4. Sheep meat prices rebound: New Zealand sheep meat prices relative to total export prices, 1971-2011.

Figure 3.5. Area of average sheep and beef farm in Hawke's Bay, 1970-2015 (effective ha).

Figure 5.1. Structure of New Zealand wool industry (all levels operate in Hawke's Bay).

Figure 5.2. Short boom(s) followed by a long decline: Real term wool prices, 1948-2010.

Figure 7.1. Three eras across 90 years of pip-fruit production in New Zealand, 1922-2012 (area in hectares).

Figure 7.2. Move to sweeter varieties: New Zealand apple volumes harvested, 1950-2014 (% of vol).

Figure 7.3. New Zealand apple industry: volatile profitability, 1995-2015.

Figure 7.4. New Zealand apple growing area: provincial percentages, 1925-2015 (% of total ha).

Notes:

- Imperial measurements were abolished in New Zealand in 1976. For the period preceding abolition, imperial measurements have been used. For the period following abolition all statistics are expressed in the metric system. When cross period comparisons are presented, imperial figures have been converted to metric to highlight long term trends.
- Ethics approval has been obtained for all interviews.

# Introduction.

---

The primary sector is the dominant economic activity in Hawke's Bay but there is no single-volume economic history of the province and no full-length study of Hawke's Bay primary production. Although the province's economic development is covered briefly in the Encyclopedia of New Zealand and a very small number of Hawke's Bay primary sector histories exist, such as Mannering's history of the fruit industry and Sweet's history of the wine sector, none of these examine the interplay between production, processing and marketing and/or the economic success of participants. Furthermore, existing histories do not consider the significance of rural land values. Nevertheless, it is important to acknowledge that writers have discussed aspects of Hawke's Bay economic history as part of local studies, family histories, technical scientific studies and marketing surveys. But again, economic history is either a subordinate focus or discussed as part of a single sector monograph.

The choice of Hawke's Bay is significant in the context of these topics. As one of New Zealand's foremost agricultural provinces, the region's land based primary sectors are diverse. Consequently, the province provides an excellent template by which to assess New Zealand agriculture and test differing perspectives of staples-led development. Importantly, Hawke's Bay provides a positive example of staples-led growth and this thesis argues that adjustment within, rather than abandonment of, existing primary production structures has been a rational response to changed economic, social and political circumstances since 1945. Most particularly, two essential adjustment mechanisms exist. First, a dynamic process of land use inter-changeability provided the flexibility required for diversification. Second, levels of corporatisation and internationalisation have increased significantly as participants have sought productivity enhancements, greater scale and additional sources of capital.

This thesis will begin with an introductory chapter that defines the geographic area of the research project, states the research topic and presents an outline of scholarly thoughts regarding staples theory – both positive and negative – including New Zealand contributions to debate. The introduction concludes with a discussion of primary sources,

a statement of research aims and the methodology to be used. The following chapter discusses Hawke's Bay's economic development prior to World War Two (WW2). The thesis will then examine the behaviour of rural land prices in Hawke's Bay from 1945 to 2010. Subsequent chapters will discuss the development of the province's land-based staples of meat, wool, horticulture, wine and forestry. The financial performance of key participants - growers, farmers and processors - will be a particular focus.

## Hawke's Bay - A Region Defined.

Hawke's Bay, located on the east coast of New Zealand's North Island, lies at approximately latitude 40 degrees south. The province is the sixth largest of New Zealand's sixteen provincial regions, extending from the Mahia Peninsula in the north to Porangahau in the south and to the Kaweka ranges to the west.<sup>1</sup> The region includes seven major rivers and a large inland waterway in the form of Lake Waikaremoana.<sup>2</sup> The province has a temperate climate, albeit subject to frequent dry spells in spring and summer.<sup>3</sup> The climate is ideally suited to a wide range of primary/agricultural activities including pastoral farming, horticulture, viticulture and forestry.<sup>4</sup> Hawke's Bay is home to approximately 150,000 residents, most of who live in two medium sized cities (Napier 57,000 and Hastings 64,000).<sup>5</sup> The balance of the provincial population is spread across rural areas and the agricultural service towns of Wairoa, Waipawa and Waipukurau.<sup>6</sup>

Definitions of Hawke's Bay have changed over time. This thesis will use the current area of the Hawke's Bay Regional Council (HBRC) which comprises Wairoa District, Napier

---

<sup>1</sup> "Our Region," Hawke's Bay Regional Council, accessed December 5th, 2015, <https://www.hbrc.govt.nz/hawkes-bay/>

<sup>2</sup> Ibid.

<sup>3</sup> "The Climate and Weather of Hawke's Bay," New Zealand National Institute of Water and Atmospheric Research, accessed December 2<sup>nd</sup>, 2015, <https://www.niwa.co.nz/static/Hawkes%20Bay%20WEB.pdf>

<sup>4</sup> Ibid.

<sup>5</sup> "2013 Census Quick Stats," Statistics New Zealand, accessed December 8<sup>th</sup>, 2015, [http://archive.stats.govt.nz/Census/2013-census/profile-and-summary-reports/quickstats-about-a-place.aspx?request\\_value=14018&tabname=](http://archive.stats.govt.nz/Census/2013-census/profile-and-summary-reports/quickstats-about-a-place.aspx?request_value=14018&tabname=). Includes Havelock North.

<sup>6</sup> Ibid.

City, Hastings District and Central Hawke's Bay District. From 1990 onwards, New Zealand Official Year Books consistently define Hawke's Bay this way.<sup>7</sup>

Oddly, the westernmost extremity of today's HBRC includes three small enclaves belonging to other regions (see Figure I.1). Two are part of Taupō District Council and one sits within Rangitikei District Council. In explanation, the headwaters of three major Hawke's Bay Rivers (Mohaka, Tutaekuri and Ngaruroro) are located in these areas. These waterways are an essential resource for the province's primary sector as they flow to the coast and recharge irrigation aquifers.<sup>8</sup> However their exclusion of these remote areas from the compilation of statistics has little practical effect on the discussion in this thesis.

To achieve the greatest degree of consistency, for the years before 1989 the region, also commonly called a province, is defined as the counties of Wairoa, Hawke's Bay, Waipawa, Waipukurau and Patangata (and the cities and towns within their limits, where relevant). Throughout the thesis reference will be made interchangeably to 'region' and 'province' but reference will always be to the HBRC area or its pre-1989 analogue. The choice of boundary also reflected a desire to group areas according to commonality of land use: Dannevirke and Woodville, historically part of Hawke's Bay, but since 1989 part of the Taranaki District, have land use dominated by dairying, and have been excluded on those grounds for the pre-1989 period as well.

An important geographical feature of the province is the presence of three large agricultural plains – Heretaunga, Ruataniwha and Takapau. Generally, the most productive soils are found in these areas, most particularly Heretaunga. To the immediate west and north-west of these plains, towards the Kaweka and Te Urewera Ranges, rolling hill country dominates. In these regions soil quality tends to be lower. Similarly, the inland climate is less amenable to agriculture than the lowland plains where higher average temperatures and numerous micro climates permit a broader range of primary activities.

---

<sup>7</sup> New Zealand Official Year Book (NZOYB) 1970, Chapter 14A. Where required statistics have been adjusted accordingly.

<sup>8</sup> "Our Region."

Figure I.2: Hawke's Bay Regional Council Boundaries and major geographical features.

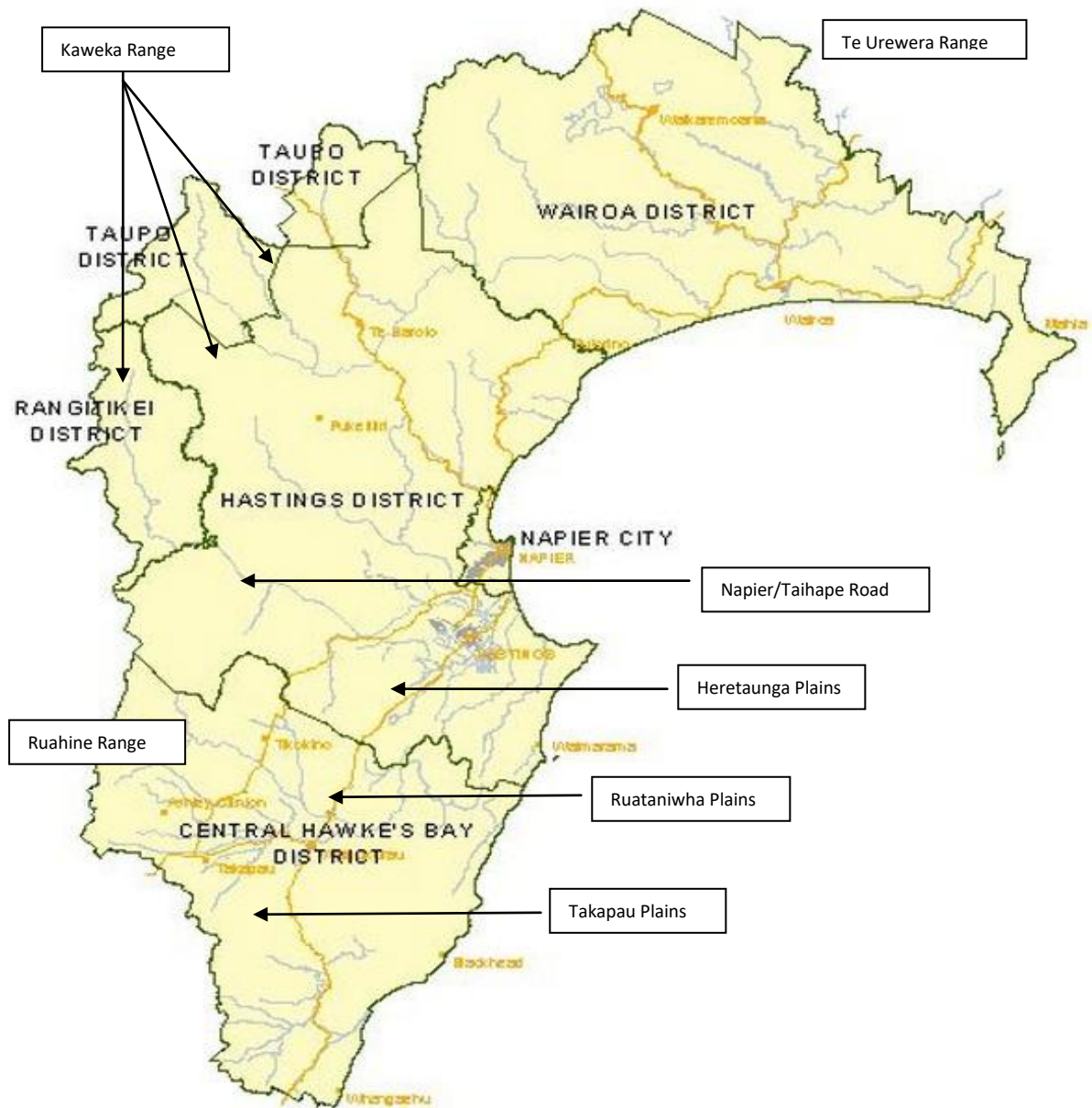


Figure 12: Location of Hawke's Bay province.



## Historiography.

Economic historians have long identified the common features of staples-led economic development. These include the production of a narrow range of natural resources and primary products, such as oil, wheat, fur, wool and meat, and reliance upon exports of these products to developed economies. There has been much debate over the merits of such an economic model particularly the dependent relationship between periphery and core. Academic discussion regarding the difficulty of migrating staples based economies from primary to more advanced products, and the success of staples-led economies relative to economies with less abundant natural resources, has been similarly recurrent. Consequently, as an export-led growth hypothesis, staples-led development theory sits within the larger context of competing theories of economic growth such as Structuralism, Dependency Theory and Neo-classical economics.<sup>9</sup>

Von Thunen's "Isolated State" published in 1826 is one of the earliest examples of staples-led development theory.<sup>10</sup> A predictive land use model based on agricultural geography and spatial economics, von Thunen's hypothesis holds that as the distance from

<sup>9</sup> Morris Altman, 'Staples Theory and Export-Led Growth: Constructing Differential Growth,' *Australian Economic History Review*, Vol.43, No.3 (November 2003): 230-55. Ricardo Contreras, 'Competing Theories of Economic Development,' *University of Iowa Center for International Finance and Development*. Accessed May 12<sup>th</sup>, 2019, <https://ufl.instructure.com/courses/333527/files/29613906/download>

<sup>10</sup> Johann Heinrich Von Thunen, *Von Thunen's Isolated State*, trans. Carla Wartenbery, ed. Peter Hall (New York: Pergamon Press, 1966).



a city increases “land will be progressively given up to products cheap relative to their value.”<sup>11</sup> Von Thunen’s model is typically presented to explain a fully inhabited landscape as opposed to one that is a dynamic or evolutionary as is the case with export-focused settler economies. Similarly, von Thunen, and more recently Cronon, approach the issue of land use from the perspective of a landlocked state rather than one in which exports are a crucial driver of the primary economy. Furthermore, von Thunen’s model regards transport costs as comparatively fixed; they do not vary with distance. Despite these considerations, von Thunen is nonetheless relevant to staples theory. On the basis that farmers take into account three factors when considering the economics of a certain agricultural activity (land costs, transport costs and market prices), particular land use patterns and forms of economic development are likely to emerge.<sup>12</sup> Most importantly, as the distance from end markets increases, land use intensity will fall. In practical terms von Thunen’s theory means that livestock are more likely to be reared on distant lands and vegetables more likely to be grown on lands closer to markets. Consequently, von Thunen’s theory is, at least in part, an expression of comparative advantage as nations with plentiful land will tend to specialise in products that require it.

The focus of von Thunen’s model has significant commonality with pioneering research by Canadian academics Mackintosh<sup>13</sup> and Innis, the latter of whom examined the Canadian fur trade (1930)<sup>14</sup> and cod fisheries of Newfoundland (1940).<sup>15</sup> Mackintosh and Innis share many of the same perspectives as von Thunen, including how natural endowments determine the type of staple produced.<sup>16</sup> Individually, however, they offer slightly differing narratives. Innis focuses on the negatives of dependency and economic instability whilst Mackintosh offers a more optimistic perspective with the suggestion that

---

<sup>11</sup> Ibid, 8.

<sup>12</sup> Ibid.

<sup>13</sup> William A. Mackintosh, ‘Economic Factors in Canadian History,’ *Canadian Historical Review*, Vol.IV (March 1923): 12-25. Also see - *The Economic Background of Dominion-provincial Relations* (Toronto: McGill Queens University, 1964).

<sup>14</sup> Harold Adams Innis, *The fur trade in Canada: an introduction to Canadian economic history* (Toronto: Yale University Press, 1930).

<sup>15</sup> Innis, *The cod fisheries: the history of an international economy* (New Haven: Yale University Press, 1940 and Toronto: The Ryerson Press, 1940).

<sup>16</sup> C.B Schedvin, “Staples and Pax Britannica,” *Economic History Review*, Vol.43, No.4 (Nov 1990): 534.

staples can, and do, facilitate steady progress toward more diversified industrial structures.<sup>17</sup>

In the 1950s and 1960s, a number of scholars sought to further develop the theories of Mackintosh and Innis. Schedvin suggests that researchers of the period, such as Nurkse (1954), North (1955), Baldwin (1956), Hirschmann (1958), Watkins (1963) and Caves (1965), adopted Mackintosh's more "pasteurised" version of staples theory.<sup>18</sup> As long as linkages between the staple and other sectors of the economy were robust, primary production could indeed provide the basis for secondary processing industries (forward linkages) as well as investment in transport (backward linkages).<sup>19</sup> Importantly, Watkins described linkages as "diversification around an export base."<sup>20</sup> On the other hand, he raised the possibility of a less positive outcome when he referenced the term "staples trap" to describe the possibility that staples dependency and an "overconcentration of resources in the export sector" could lead to embedded underdevelopment.<sup>21</sup>

The negative implications of staples-led development raised by Watkins represented a major turning point, and in the early/mid 1960s others subjected the classical interpretation of staples theory to considerable critique. In 1964, McCarty questioned the "linkage effects" of staples, arguing that their technologies were "simple" and were of limited importance as they had "small capital requirements."<sup>22</sup> Moreover, McCarty suggested that the pastoral sector had "weaker linkage effects than ... wheat and mining" due to limited interconnections with other sectors of the economy.<sup>23</sup> In 1966, Buckley argued that staples theory lacked empirical proof, and did little to explain Canadian economic development after 1820, as from this date forward staples no longer drove Canadian economic growth.<sup>24</sup> Furthermore, with the suggestion that "it is reasonable to

---

<sup>17</sup> Ibid.

<sup>18</sup> Ibid.

<sup>19</sup> Mel Watkins, *Staples and Beyond: Selected Writings of Mel Watkins*, eds. Hugh Grant and David A. Wolfe (Montreal: MQUP Publishing, 2006), 10 & 11.

<sup>20</sup> Watkins, "A staple theory of economic growth," *Canadian Journal of Economic and Political Science*, Vol.29, No.2 (1963): 141-58.

<sup>21</sup> Ibid, 150 & 151.

<sup>22</sup> J.W McCarty, "The Staple Approach In Australian Economic History," *Business Archives and History*, Vol.4.1 (1964): 7.

<sup>23</sup> Ibid.

<sup>24</sup> K Buckley, "The Role of Staples Industries in Canada's Economic Development," *The Journal of Economic History*, Vol.18, Issue 4 (December 1958): 439-450.

believe that the proportion of economic activity that is un-related to staples production has increased more rapidly," Buckley raised the possibility that staples were in fact a source of economic underperformance.<sup>25</sup>

Another source of dissatisfaction with classical staples theory reflected the simple observation that, with the exception of the United States and to a lesser extent Canada, the group of states Nurkse described as "settler economies," were by the 1970s noticeable underperformers in terms of relative GDP/capita.<sup>26</sup> It is understandable why Mackintosh's classical theory was under mounting pressure. Since 1923, when his initial observations were made, levels of relative wealth amongst staples producing states had become much diminished, particularly in South America. Consequently, "the task of successful diversification from an original export base ... encountered more obstacles than the post war optimists expected."<sup>27</sup> It is important to highlight the extent to which economies in South America and others formed by European colonisation represent a distinct subset of staples dependency. Described by Ehrensaft and Armstrong as examples of "dominion capitalism," these economies produced goods that complemented the colonising 'core.'<sup>28</sup> Therefore, development relied on an economic model similar to that of "large land areas in the tropics" where "colonies of exploitation were the norm."<sup>29</sup> In contrast, temperate zone, settler economies, such as New Zealand, were able to use "the economic surplus" accumulated from exports to the metropolis to build up high income, modern economies.<sup>30</sup> Less positively, the relative performance of staples based settler economies reached a peak in the 1920s and by the 1970s primary based, settler economies, whether examples of dominion capitalism or not, were systemic underperformers (see Table I.1). With this in mind, it is important to draw a distinction between staples dependent economies such as Saudi Arabia and settler economies such as New Zealand. The latter is both a settler economy and a staples-led economy. Saudi Arabia is only a staples dependent economy.

---

<sup>25</sup> Ibid, 444 & 445.

<sup>26</sup> Ragnar Nurkse, "International investment today in the light of nineteenth-century experience," *Economic Journal*, Vol.64, No.256 (1954): 744-758. Comprised of Argentina, Australia, Canada, New Zealand, South Africa, the United States, Uruguay and southern Brazil.

<sup>27</sup> Schedvin, "Staples and Pax Britannica," 534.

<sup>28</sup> P Ehrensaft and W Armstrong, "Dominion Capitalism: A First Statement," *Australian and New Zealand Journal of Sociology*, Vol.14, No.3, October (1978): 352.

<sup>29</sup> Ibid.

<sup>30</sup> Ibid.

**Table I.1. Per capita GDP of select settler economies relative to the USA, 1923-1998 (in 1990 US Dollar terms).**

Country	Per capita GDP - 1923 (% of USA)	Per capita GDP - 1950 (% of USA)	Per capita GDP - 1970 (% of USA)	Per capita GDP - 1998 (% of USA)
Australia	84%	78%	81%	75%
New Zealand	83%	88%	75%	54%
Canada	65%	78%	82%	75%
Argentina	63%	52%	49%	34%
Uruguay	51%	49%	34%	30%

Source: Organisation for Economic Co-operation and Development (OECD), Development Centre Studies, *The World Economy*, Historical Statistics, Vol.2, 466 & 467, 518-522.

From the mid-1970s, scholars began to seek an explanation for the relative underperformance of staples-based economies. In 1975, R.T Naylor suggested that primary production crowded out manufacturing, leading to poor industrial diversification<sup>31</sup> and the consequence that staple products retarded economic growth.<sup>32</sup> By the early 1980s, the desirability of staples-led growth was widely discredited, even amongst former adherents. In 1981, Hirschmann, a member of the post war consensus group, re-considered his optimistic view of staples theory.<sup>33</sup> Whilst continuing to advocate the positive impact of effective linkages, Hirschmann shifted his position to argue that the low technology nature of staples hindered the development of value-added activities.<sup>34</sup> Moreover, he stressed the influence of power imbalances between primary and secondary sectors. Importantly, market power rested with “groups distinct to the grower of the staple” and consequently a farmer was “relegated to ... his agricultural role,” a situation that aligned with Watkin’s concept of a trap.<sup>35</sup> In other words, staples producers are price takers.

Hirschmann’s consideration of power relativities was a precursor to more extensive theories of staples-led development and in 1983 the first example of an explanatory theory encompassing both economic and social phenomena emerged. Denoon’s concept of “Settler

<sup>31</sup> Tom R. Naylor, *The History of Canadian Business 1867-1914*, Vols. 1 & 2 (Toronto: J. Lorimer Publishing, 1975).

<sup>32</sup> *Ibid*, 283.

<sup>33</sup> Albert O. Hirschmann, *The Strategy of Economic Development* (New Haven: Yale University Press, 1958).

<sup>34</sup> Hirschmann, *Essays in Trespassing – economics to politics and beyond* (New York: Cambridge University Press, 1981), 73.

<sup>35</sup> *Ibid*.

Capitalism”<sup>36</sup> described a set of economies with high levels of immigration, capital imports (often British) and, most crucially, long term dependence upon a narrow range of tradeable commodities. Many of these features aligned with Ehrensaft and Armstrong’s earlier concept of ‘dominion capitalism.’ But Denoon added important new elements to the understanding of settler economies, most particularly the importance of political and legal institutions in the colony, both of which were needed to protect the value of capital imports and the investments of migrants drawn from the core. Consequently, Denoon introduced a new critique of staples theory with the assertion that economies such as Uruguay failed to sustain rapid initial growth rates due to a lack of social and political democratisation.<sup>37</sup> In doing so he suggested that reasons for economic success are in fact multifarious, and that the singular focus on a dominant economic (primary) sector ignores the importance of institutional structures such as the quality of societal governance.

In the early 1990s, Denoon’s multi-sector focus became the prompt for a new approach to staples theory, one that partly rehabilitated the classical interpretations of Mackintosh. Schedvin provides a clear example. Declaring that “The staple argument should not be seen as a single factor explanation,”<sup>38</sup> Schedvin saw in staples theory an “explanatory framework ... sufficiently flexible to accommodate cultural, institutional and other economic factors.”<sup>39</sup> In common with classical staples theory,<sup>39</sup> Schedvin acknowledged the importance of linkages but suggested the classical version provided an insufficient explanation as linkages were determined by the extent to which a single staple dominates all others as well as by the type of staple itself.<sup>40</sup> For example, the extent to which further processing can be conducted domestically (a backward linkage), and therefore a contributor to industrial diversification, is partly determined by the type of staple produced.<sup>41</sup>

---

<sup>36</sup> Donald Denoon, *Settler Capitalism: the dynamics of dependent development in the Southern Hemisphere* (Oxford: Clarendon Press, 1983).

<sup>37</sup> Ibid.

<sup>38</sup> Schedvin, “Staples and Pax Britannica,” 556.

<sup>39</sup> Ibid. Schedvin’s analysis was sufficiently wide ranging to consider the impact of tariff/protectionist policy.

<sup>40</sup> Schedvin, “Staples and Pax Britannica,” 545 & 552.

<sup>41</sup> Ibid, 544. This is a finding backed by Bryan Philpott whose 1973 study of the New Zealand wool industry found that wool was a good example of what Schedvin termed a linkage commodity. See Bryan P. Philpott, G.A Fletcher and W.G Scott, “The structure of wool and wool textile production, trade, and consumption 1948-68,” *Agricultural Economics Research Unit Publication No.55*, Lincoln College, UoC (1970): 1-48. Somewhat counter intuitively, Schedvin saw wool (relatively little of which was processed domestically) as an advantageous

In common with Denoon, Schedvin acknowledged the importance of institutions, including strong educational and scientific structures and a functioning legal system to protect individual property rights.<sup>42</sup> With reference to these findings, Schedvin looked to practical examples to back his theory, suggesting that the failure to develop advantageous institutional linkages partly explains why relative per capita GDP in Argentina declined after reaching a peak in the 1930s.<sup>43</sup> Furthermore, superior institutions explain why the Canadian economy was better able to diversify in the post war period than other commodity dependent states such as Australia and New Zealand.<sup>44</sup> Finally, Schedvin recognised Canada's success as "exceptional" as the break from staple-induced path dependency is unusually difficult to achieve.<sup>45</sup> Despite the apparent difficulty of staples-led growth, the practical example of Canada, nonetheless, suggested that staples could, given certain circumstances, provide the basis for sustainable economic growth. The contention, which brought into question the universality of Watkins' concept of a 'staples trap,' represented another major turning point in the evolution of staples theory.

In the early 2000s, Denoon and Schedvin's comparatively optimistic reinterpretation of classical staples theory received extensive critique. Known as the "curse of natural resources" thesis, and again based on observations from staples-based economies, Sachs and Warner suggested that resource intensity and economic performance are inversely correlated.<sup>46</sup> In essence, they dismissed the desirability of staples-led economic development on the basis that resource abundant economies tended to be "high price economies" which diluted their ability to achieve sustainable export-led growth and hindered the competitiveness of non-resource sectors.<sup>47</sup> Crucially their hypothesis was backed by a large sample of primary producing states, a finding that gave their negative interpretation of staples-led development a sense of legitimacy sufficient for them to claim that the 'staples

---

commodity to the extent it created forward linkages to advanced service sectors such as finance, insurance and shipping.

<sup>42</sup> Schedvin, "Staples and Pax Britannica," 546 & 556.

<sup>43</sup> Ibid, 556.

<sup>44</sup> Ibid.

<sup>45</sup> Ibid, 557.

<sup>46</sup> Jeffrey D. Sachs and Andrew M. Warner, "The Curse of Natural Resources," *European Economic Review*, Vol.45 (2001): 827.

<sup>47</sup> Ibid. The positive wealth shock from the natural resource sector translates into excess demand and domestic inflation.

trap' was "a demonstrable empirical fact."<sup>48</sup> In doing so, Sachs and Warner addressed another recurrent criticism of staples theory namely the lack of quantitative proof.<sup>49</sup>

Although the empirical evidence presented by Sachs and Warner suggested that staples were a wholly undesirable basis for long term growth, the optimists again responded. In 2001, De Ferranti, Perry, Lederman and Maloney found that natural resource wealth was not necessarily a curse.<sup>50</sup> Rather, free trade and foreign investment can indeed lead to export diversification, innovation and the development of human skills that in combination "permit ... the potential of natural advantages such as natural wealth."<sup>51</sup> In 2012, Ville and Wicken found that the success of Norway and Australia was due to the "reinvention and extension of their resource products and industries."<sup>52</sup> Introducing the concept of "enabling sectors," and again stressing the importance of supportive institutional structures, they argued it was indeed possible to "transition to a resource based knowledge economy."<sup>53</sup> Furthermore, in a clear reference to classical staples theory, Ville and Wicken referred to the importance of "linkages" between enabling sectors and other aspects of the economy.<sup>54</sup>

The conspicuous success of the Australian and Norwegian economies challenged historical perceptions that Canada was the sole exception among resource intense economies. In 2013, McLean added to the revisionist interpretation of staples theory with the suggestion that "Australian history ... offers compelling evidence against the widely held view that resource abundance is a curse not a blessing."<sup>55</sup> McLean noted that the successful development of staples based economies was a complex, multifaceted process, however

---

<sup>48</sup> Ibid, 828.

<sup>49</sup> Robin Neill, *A History of Canadian Economic Thought* (London: Routledge, 1991). Neill criticised staples theory on the basis that it lacked quantitative proofs and by presenting itself as a homogenous model, staples trap theory failed to account for regional differences.

<sup>50</sup> David De Ferranti et al., *From Natural Resources to the Knowledge Economy: Trade and Job Quality* (New York: World Bank, 2002).

<sup>51</sup> Ibid, 2.

<sup>52</sup> Simon Ville and Olav Wicken, "The dynamics of resource-based economic development: evidence from Australia and Norway," *Industrial and Corporate Change*, Vol.22, No.5 (2013): 1364.

<sup>53</sup> Ibid, 1364 & 1365.

<sup>54</sup> Ibid, 1365. Ville and Wicken's emphasis on comparative advantage is of great relevance to the regional economies of New Zealand. For example, after 1945 Hawke's Bay remained focused on the production of temperate food stuffs most of which are ideally suited to the provinces climate and geography.

<sup>55</sup> Ian W. McLean, *Why Australia Prospered – The Shifting Sources of Economic Growth* (Princeton: Princeton University Press, 2013), 5.

success was underpinned by the pre-requisites of high quality economic, political and legal institutions that ensured enduring property rights, economic adaptability and a willingness to innovate.<sup>56</sup> As such, Australia avoided what McLean dubbed the “Argentine Road.”<sup>57</sup> In 2015, McLean’s multi-sector approach was further developed by Madsen who stressed the important role of technological diffusion, innovation and knowledge development in successful staples dependent economies.<sup>58</sup>

Despite the more recent rehabilitation of staples theory and staples economies, a lengthy struggle has occurred between two sharply differing narratives. The positive perspective has tended to stress, amongst other things, the importance of effective linkages between the staple itself and the broader economy as well as quality institutions, property rights and a willingness to innovate. Scholars in this school have often worked within broad based models to explain how primary products can indeed provide the basis for sustainable growth. In contrast, the negative perspective, neatly encapsulated in the terms ‘staples trap’ and ‘resource curse,’ has sought to outline how primary products are an unsatisfactory basis upon which to achieve sustainable growth. Accordingly, development based on staples is regarded as a marker of both underdevelopment and dependency resulting in heightened economic vulnerability and underperformance. Scholars in this school have more recently drawn upon empirical data to link economic underperformance and staples. It is noticeable, however, that neither position is uncontested and with such points in mind, this discussion now turns to the contribution New Zealanders have made to the evolution and history of staples theory.

## Staples Theory in the New Zealand Context.

Questions of economic vulnerability first came to the attention of New Zealand policy makers not long after the end of World War One. By the 1930s, some politicians and officials were beginning to understand the difficulties engendered by excessive reliance on

---

<sup>56</sup> Ibid, 5-9, 228-245. McLean also stresses the importance of Australian exports that were complementary to the UK, Japanese and Chinese economies.

<sup>57</sup> Ibid. A term to describe the underperformance of the Argentine economy.

<sup>58</sup> Jakob B. Madsen, “Economic growth and its drivers since settlement” in *Cambridge Economic History of Australia*, eds Simon Ville and G Withers (Port Melbourne: Cambridge University Press, 2015), 50 & 51.



pastoral farming and concurrent dependence on the UK market.<sup>59</sup> As the history of staples theory indicates, such questioning ran counter to the then dominant perspectives of Mackintosh as well as the generally favourable relative position of the commodity based New Zealand economy. Even so, the consensus of the time came under increased scrutiny, most particularly by the then Department of Industries and Commerce (DIC).<sup>60</sup> Importantly, in common with international debate regarding staples-led development the position of the department was never uncontested, both within government and academic circles.<sup>61</sup> Contrasting these rival perspectives provides the core focus of the next section of this literature review.

McAloon contends that a tentative push in favour of industrial diversification first emerged in New Zealand officialdom during the 1920s and by the 1930s the desirability of industrialisation had become a common belief.<sup>62</sup> To some extent the change reflected contemporary academic research advocating greater industrial depth and decreased reliance on the export of primary goods. Dr William Ball Sutch, a government official and head of the DIC from 1958, was one such proponent. Similar in tone to contemporary scholar James Belich,<sup>63</sup> Sutch was highly sceptical of staples-led growth and the belief formed a key part of his critique of New Zealand's economic development.<sup>64</sup> In the early 1930s Sutch became an influential advisor to Minister of Finance Gordon Coates, an appointment that gave him the platform to advocate in favour of industrialisation.<sup>65</sup> But more specifically Sutch supported government intervention in the area of tradeable goods,

---

<sup>59</sup> Jim McAloon, *Judgements of all Kinds – Economic Decision Making in New Zealand 1945-1984* (Wellington: Victoria University Press, 2013), 40.

<sup>60</sup> McAloon, "Staples and the Writing of New Zealand's Economic History," *New Zealand Journal of History*, Vol. 49, No.2 (2015): 8.

<sup>61</sup> *Ibid.*

<sup>62</sup> *Ibid.*

<sup>63</sup> James Belich, *Replenishing the Earth: the Settler Revolution and the Rise of the Anglo World, 1783-1939* (New York: Oxford University Press, 2009), 479. Belich contended that the foremost driver of growth in settler economies such as New Zealand was growth itself. In his view, growth attracted inflows of immigrants and capital which in turn drew in greater quantities of the same. Furthermore, Belich suggested bursts of development were in truth poorly aligned with staples booms. Although he acknowledged the gains from staples exports, Belich suggested these tended to emerge *after* the inevitable bust in the settler economy and as such provided the means of recovery or "export rescue" rather than the initial growth pulse itself.

<sup>64</sup> William B. Sutch, *Poverty and Progress in New Zealand* (Wellington: Modern Books, 1941).

<sup>65</sup> Brian Easton, "What Happened to the Nation Building State in New Zealand," (paper presented for the New Zealand and Australian Studies section of the Conference of the Western Social Sciences Association, Fort Worth, Texas, April 21<sup>st</sup>-24<sup>th</sup>, 1999). Coates was similarly minded. Easton describes Coates as the "earliest" member of a group of New Zealanders who were "committed to use the instruments of state to build a New Zealand nation distinctive and independent."

arguing that “quantitative regulation of imports” could provide “a definitively purposive method of developing the national economy.”<sup>66</sup>

Described as “economic insulation” by A.M Endres, the New Zealand government began to employ Sutch’s ideas in the mid-1930s.<sup>67</sup> During the first Labour government (1935-1949), the belief that governments had a crucial role to play in both the diversification of the New Zealand economy and the development of secondary industry gained significant traction.<sup>68</sup> Regarded as “more protectionist than its rivals,”<sup>69</sup> Savage’s Labour administration actively sought to promote the development of new industry.<sup>70</sup> But in the absence of dedicated funding for industrial development initiatives, import protection remained the focus. In 1936, the Industrial Efficiency Act was enacted to promote the development of new industries by way of protection and in 1938 Import Control Regulations were introduced.<sup>71</sup> By 1946, thirty industries were subject to import licensing<sup>72</sup> and by 1950 the policy was sufficiently successful to bring into question the seemingly unbreakable dependence of the New Zealand economy on the British market. Although recognised as a structural weakness before WW2, the inherent vulnerability of relying on a narrow range of primary exports to a single market was disguised by bulk buying agreements with the UK, both during and after the war. After the war, however, as market and product diversification gained ground, a process of “commercial estrangement” between New Zealand and Britain gradually took hold that suggested it was indeed possible for the New Zealand economy to develop a broader base.<sup>73</sup>

Although New Zealand’s acknowledged external imbalance problem was as much a motivation for economic insulation as infant industry theory, opposition parties and many officials questioned the policy.<sup>74</sup> Following the election of a National government in 1949,

---

<sup>66</sup> Sutch, *Price Fixing in New Zealand* (New York: Columbia University Press, 1932), 142.

<sup>67</sup> A.M Endres, “The Political Economy of W.B Sutch: Towards a Critical Appreciation,” *New Zealand Economic Papers*, Vol.20, Issue 1 (1986): 17-37.

<sup>68</sup> Ibid.

<sup>69</sup> S.R.H Jones, “Government Policy and Industry Structure in New Zealand, 1900-1970,” *Australian Economic History Review*, Vol.39, Issue 3 (November 1999): 197.

<sup>70</sup> Ibid, 198. Jones suggests the policy was both underutilised and underfunded.

<sup>71</sup> Industrial Efficiency Act, 1936 (No.40). Import Control Regulations, 1938 (No.161).

<sup>72</sup> McAloon, *Judgements of All Kinds*, 62.

<sup>73</sup> John Singleton and Paul Robertson, *Economic Relations Between Britain and Australasia, 1945-1970* (London: Palgrave, 2002), 75, 99 & 100.

<sup>74</sup> McAloon, *Judgements of All Kinds*, 62

Labour's policy of import selection was gradually reversed.<sup>75</sup> But in 1957 Labour was re-elected. Faced with yet another balance of payments crisis, Labour introduced a "more stringent set of (import) Licensing Schedules" to encourage import substitution and foster industrialisation.<sup>76</sup> Unsurprisingly the renewed commitment to protectionism was "enthusiastically embraced" by Sutch.<sup>77</sup> Even so, Sutch was not unopposed. Government advisors such as Henry Lang, Treasury head under five Prime Ministers, strongly advocated "exporting rather than import substitution"<sup>78</sup> as part of a set of policies in favour of "export oriented liberalisation."<sup>79</sup> Lang and other senior Treasury officials, along with the Department of Agriculture, provided a significant counterweight to the ideas of Sutch.<sup>80</sup> Although there is little or no evidence that Lang and others questioned the desirability of diversification, disagreement was firmly focused on the extent to which government intervention was needed, a sentiment that would subsequently underpin the economic policies of the Lange government elected in 1984.<sup>81</sup> The contrast between Labour and National and between Lang and Sutch highlighted the depth of ideological disagreement within New Zealand politics and between government departments. But it was Labour and Sutch that had the lasting impact. Although Sutch was not the first, or indeed only, New Zealander to support diversification and industrialisation he was perhaps its most "articulate" advocate.<sup>82</sup> Although his approach was never unchallenged, the influence of Sutch extended beyond the years of Savage and Fraser and shaped the economic policies of numerous post war governments. As McAloon notes, "capital investment, industry policy and diversification of markets and export commodities were constant themes after 1945."<sup>83</sup> The lasting belief in industrialisation and diversification confirmed how deep the anti-staples messages had sunk in New Zealand. But just as Sutch's writings in the 1930s ran counter to those of Mackintosh, the approach of New Zealand officials and politicians in the immediate

---

<sup>75</sup> Jones, "Government Policy and Industry Structure," 203-205.

<sup>76</sup> *Ibid*, 205.

<sup>77</sup> *Ibid*.

<sup>78</sup> McAloon, *Judgements of All Kinds*, 118.

<sup>79</sup> *Ibid*, 129.

<sup>80</sup> *Ibid*, 105, 117-119. Disagreements of this nature can be seen in submissions concerning the establishment of the Tariff and Development Board in 1962.

<sup>81</sup> *Ibid*, 172. McAloon believes Lang never lost faith in export-led growth nor his belief that New Zealand enterprises would, ipso facto, be internationally competitive.

<sup>82</sup> McAloon, *Judgements of All Kinds*, 111. Insulation was supported by manufacturers, a group commonly associated with the National Party.

<sup>83</sup> McAloon, "The State and Economic Policy in Twentieth Century Australia and New Zealand – Escaping the Staples Trap," in *Settler Economies in World History*, eds Christopher Lloyd et al (Leiden: Brill, 2013), 540.

postwar years ran counter to the developmental consensus of the 1950s as represented by Hirschmann and others. Although a developed country, the New Zealand economy remained heavily reliant on staples after WW2, an enduring feature of the New Zealand economy that was not necessarily minimised at various national development conferences during the 1960s. For example, numerous policies were enacted to encourage the development of new land-based staples, many of which were supported by tax incentives. But, perhaps somewhat ambiguously, the policy of insulation continued unabated, a fact that underlined the extent to which the anti-staples message had become entrenched within New Zealand politics, officialdom and among industry interests which benefited from it.

The revisionist approach to staples theory that first emerged in the 1960s suggests that the policy presumption was in fact well advised. But the supposition against agricultural staples was, however, subject to considerable scholarly critique in New Zealand, the most notable of which came from J.B Condliffe. In contrast to the policy of insulation, Condliffe felt the rejection of agriculture was short sighted. In an essay from 1969, Condliffe suggested that it “would be economic folly to abandon or diminish New Zealand’s reliance upon its grassland exports.”<sup>84</sup> As a free trade advocate, he acknowledged the trade restrictions prevalent in the global agricultural sector but believed in the long-term benefits of comparative advantage. Importantly, Condliffe was strongly in favour of liberalising the heavily regulated and protected New Zealand economy in order to stimulate new industry and encourage “inventive and creative innovators”<sup>85</sup> as well as a supporter of private (equity) investment in New Zealand infrastructure.<sup>86</sup> Moreover, Condliffe described the economic autarky required by infant industry theory as both a “hoary fallacy” and “a net cost to the consumer.”<sup>87</sup> The contrast with Sutch could not have been starker.<sup>88</sup>

Economic historian John Gould echoed Condliffe’s criticisms. Gould’s 1981 economic history of New Zealand – *The Rake’s Progress?* – maintains that the import substitution policy that underpinned the insulation period was “either arbitrary or extremely ill-

---

<sup>84</sup> John B. Condliffe, *The economic outlook for New Zealand* (Wellington: Whitcombe & Tombs for BERL, 1969), 33.

<sup>85</sup> *Ibid*, 154.

<sup>86</sup> *Ibid*, 138.

<sup>87</sup> *Ibid*, 119 & 120.

<sup>88</sup> *Ibid*, 144-154.

informed” and that the system “built a dangerous rigidity into the structure of manufacturing and commerce.”<sup>89</sup> In common with Condliffe, Gould rejected the opprobrium directed at New Zealand agriculture and noted that since the 1960s New Zealand’s primary industries have “achieved far more success in diversification than seemed possible.”<sup>90</sup> Furthermore, borrowing from work undertaken by academic Bryan Philpott, Gould pointed to evidence that the total factor productivity growth of New Zealand agriculture between 1926 and 1964 was significantly better than other sectors of the economy<sup>91</sup> and that agricultural diversification explained the impressive increase in the real value of agricultural land.<sup>92</sup> Furthermore, although the policy of insulation had a strongly positive impact on several key secondary processing industries in provincial New Zealand, restructuring in the 1980s suggested the accuracy of Gould’s allegation of commercial rigidity. Tariff protection, which did not extend to growers, enabled Watties to build a domestic business of sufficient scale upon which to base the expansion of exports. Similarly, the growth of carpet manufacturing gained much from the absence of international competition. But following the removal of tariff protection, Watties was absorbed into a multinational whilst Cavalier and other carpet manufacturers were forced to downsize.

Hawke, Easton and Pawson back the relatively optimistic perspectives of Condliffe and Gould. In 1985, Hawke contended that New Zealand agriculture was an “activity where the productivity of labour was at or above that available in other activities” and as such was not at all undesirable.<sup>93</sup> Moreover, Hawke emphasised that primary products had provided the basis for New Zealand’s high comparative wealth levels for many decades.<sup>94</sup> Hawke’s position was made explicit in his assertion that “Industry was wanted

---

<sup>89</sup> John D. Gould, *The Rake’s Progress? The New Zealand Economy Since 1945* (Auckland: Hodder & Stoughton, 1982), 110 & 111.

<sup>90</sup> *Ibid*, 160. Diversification included the development of non pastoral land-based staples such as horticulture and forestry.

<sup>91</sup> *Ibid*, 188 & 189. Philpott’s ‘The Economic Mechanism’ is worthy of further of note given the focus on linkages between key sectors of the New Zealand economy. Bryan P. Philpott, *The Economic Mechanism: Economic Theory in Relation to the New Zealand Economy* (Wellington: Reed, 1973).

<sup>92</sup> *Ibid*, 162. The general desirability of farming for capital gains is moot but if the value of traditional pastoral farmland reflects the higher cash flows of current (and alternative) uses rising land values are not necessarily as “insidious” as Gould suggests. *Ibid*, 163.

<sup>93</sup> Gary R. Hawke, *The Making of New Zealand: An Economic History* (Cambridge: University of Cambridge Press, 1985), 233. Staples theory has great relevance to New Zealand provinces. Prior to 1945, Hawke’s Bay appears to match the first stage of staples-led development - rapid growth. Hawke finds that the processing of pastoral products was the fastest growing manufacturing activity in New Zealand between 1870 and 1910.

<sup>94</sup> *Ibid*, 177 & 178.

for various reasons including a misplaced belief that it was the only path to modernisation.”<sup>95</sup> Hawke’s conclusion is backed by comparative investment returns. Although he acknowledged the importance of tax-free capital gains, Easton found that from 1958 to 1973 total investment returns from the “typical farm”<sup>96</sup> exceeded those of both fixed interest and equities.<sup>97</sup> As for import substitution, Easton bemoaned the “failure to phase out assistance earlier”<sup>98</sup> and concluded that import substitution was in fact a “poor alternative” to pastoral farming.<sup>99</sup> In 2018, Easton’s positive perspectives were bolstered by Pawson et al. In a discussion of what was termed the “new biological economy,” Pawson et al showed that New Zealand agriculture was indeed capable of generating sustainable economic outcomes despite its history of productivism – the prioritisation of quantity over quality.<sup>100</sup> Pawson’s reference to entrenched productivism, which suggests a long-term focus on absolute growth in New Zealand agriculture, is not however ubiquitous. For example, Dibden et al show that productivist agriculture in Australasia after 1985 was significantly different to that found in Europe.<sup>101</sup> Nevertheless, Pawson et al stressed the importance of the transition away from output maximisation in favour of income diversification, a trend that accelerated in New Zealand following deregulation in the mid-1980s.<sup>102</sup>

Discussion of scholarly debate highlights an important observation regarding staples theory in this country. Most importantly, as elsewhere, New Zealand has lacked a consensus. As a consequence, policy prescriptions have been somewhat schizophrenic. Although “insulation” was unwound aggressively in the mid-1980s, misgivings regarding the usefulness of staples-led development continued from 1945 through to the mid-1980s and beyond, the latter as evidenced by the abolition of agricultural subsidies in 1985.<sup>103</sup> Furthermore, doubts regarding the long term prospects for staples appear to have

---

<sup>95</sup> Ibid, 263.

<sup>96</sup> Brian Easton, *In Stormy Seas* (Dunedin: University of Otago Press, 1997), 153.

<sup>97</sup> Easton, “Income Distribution in New Zealand,” *NZIER Research Paper, No.28* (1983): 110.

<sup>98</sup> Easton, *In Stormy Seas*, 158.

<sup>99</sup> Ibid, 213.

<sup>100</sup> Pawson et al, *The New Biological Economy* (Auckland: Auckland University Press, 2018), 1-19.

<sup>101</sup> J Dibden, C Potter & C Cocklin, “Contesting the neoliberal project for agriculture: Productivist and multifunctional trajectories in the European Union and Australia,” *Journal of Rural Studies* No.25 (2009):299-308.

<sup>102</sup> Ibid.

<sup>103</sup> Frank Holmes, “New Zealand in the World Economy 1938-56,” *IPS Policy Paper 18, (2004):* 16.

remained in official circles for much of the post war period.<sup>104</sup> These continuities could be considered anomalous given that they occurred across a number of very different administrations – both National and Labour – and coincided with efforts to develop new staple industries. On the other hand, officials and politicians commonly regarded commodity foodstuffs as core to the New Zealand economy. Instructively, herculean efforts were made to retain UK access for primary products whilst policies to encourage primary sector diversification and growth from the 1970s onwards were both extensive and generous leading to numerous new primary activities.<sup>105</sup> Similarly, the Department of Agriculture was a much-committed cheer-leader for the primary sector. Consequently, development policy in this country has never been entirely singular.

In the history of staples theory, there are two clearly different interpretations – one positive, one negative. Historical analysis from the 1920s onward indicates that neither perspective has gained overwhelming ascendancy. Each school has enjoyed lengthy periods of (contested) dominance but never supremacy. The same pattern exists in New Zealand. The history of academic research regarding staples theory in this country commences in the 1930s with Sutch and includes important contributions from Condliffe, Gould, Hawke, Easton and Belich (as well as Lang). Although these scholars acknowledge the wisdom of diversification, it is particularly noticeable that several are significantly more accepting of agricultural staples than Sutch. It is a contrast that applies as much to New Zealand governments after 1945. Since the 1930s, a number of economic policies have operated on the core presumption that an economy based on primary products or staples is a marker of both relative failure and under-development. But, in a clear contradiction, much has also been done to foster new staple industries and ensure trade access for pastoral exports.

New Zealand government initiatives to escape the ‘staples trap’ and foster diversified industrialisation are typified by the policy of insulation and infant industry theory, both of which were advocated by Sutch. Even so, when these policy prescriptions broke down in the mid-1980s, policy makers continued to seek ways to diversify the New Zealand economy except the dogma now favoured free markets instead of subsidies, tariff

---

<sup>104</sup> Ibid.

<sup>105</sup> McAloon, *Judgements of All Kinds*, 140-143.

protection and import licensing.<sup>106</sup> The change created a conundrum. Diversification has taken place in provincial economies since 1945 but within the broad parameters of *existing* primary sectors. Moreover, paradoxically, government support for the sector has at times been substantial and the primary sector has continued to grow. In net terms, the essential economic structures of staples based, provincial economies, such as Hawke's Bay, have remained unchanged. Explaining why this is the case lies at the heart of this research project.

### Primary Sources.

Analysing the range of Hawke's Bay agricultural activities from 1945 to 2010 requires one to research numerous regional archives as well as the past records of New Zealand government departments and other official entities. This thesis draws extensively on the records of Statistics New Zealand, particularly agricultural census data, historical information concerning the financial performance of the Hawke's Bay farming sector and the price of relevant commodities. Other significant primary sources used include relevant Acts of Parliament and parliamentary debates, local newspapers, the records of primary industry bodies and the archives of the Hawke's Bay Regional Museum. Similarly, research draws upon the past records of the Port of Napier, Hawke's Bay Regional Council and the archives of the Hawke's Bay Knowledge Bank (Digital Archives Trust).<sup>107</sup> In addition, data from the New Zealand Companies Office have been used to fill gaps in private sector records.<sup>108</sup>

Crucially this is the first academic study to examine the rural land valuation archives of the New Zealand Valuation Department in Napier. Land valuations are important as they provide a way to assess the long-term financial performance of a farmer's most significant asset. Moreover, dating from 1945, Hawke's Bay rural land valuations provide an understanding of the long-term impact of commodity price

---

<sup>106</sup> Ibid, 199-204.

<sup>107</sup> Research includes discussions with farmers and growers, the financial accounts and annual reports of primary sector companies, archived industry publications and other media.

<sup>108</sup> In a limited number of instances relevant information is unavailable or limited in scope. For example, New Zealand freezing works were not required to publish their accounts in the decades that followed WW2, a problem that extends to the accounts of multinational businesses operating in New Zealand. Furthermore, significant gaps exist in official statistics, most particularly in the mid-1980s.



movements on investment behaviours and land use in the province. Analysis of these themes is supported by the records of the provincial branch of Federated Farmers and the Ministry of Works Regional Survey of the mid/late 1960s. Importantly, neither primary source has previously been considered as part of a multi-sector regional economic history. Furthermore, in a number of instances, data from these sources have been merged to create new historical insights.

Although one archive is completely unique, and several primary sources have not previously been researched for the purposes of regional economic history or staples theory, the archives of the Hawke's Bay regional museum have been examined by scholars including Fargher, Grant, Hall, Mannering, Manning and Stevenson and by non-academics Wright and Wilson. In addition, a number of scholars including Easton, McAloon and Hawke and research houses such as Coriolis have drawn on the records of Statistics New Zealand and its forerunners. Similarly, agricultural census data have been widely utilised by scholars, consultancies and research houses. But crucially none have done so in the context of Hawke's Bay economic history.

## Aims and Research Methodology.

This thesis discusses how the Hawke's Bay regional economy has developed since 1945 and seeks to identify what this tells us about an economy that relies on land-based staples. A key objective is to assess whether continued adherence to staples production is a rational choice, given changes in commodity prices, market access and industry structures. In making that assessment, this thesis will evaluate competing scholarly narratives about staples-led economic development. One way to approach such a question is to evaluate historical returns from investment in the primary sector, most particularly rural land as the key capital asset. Another is to consider the profitability of Hawke's Bay's key staple sectors - meat, wool, horticulture, forestry and wine. Consequently, the profitability of participants and the interaction between production, processing and marketing will be examined.

Various economic and regulatory changes over the period 1945 to 2010 suggest the usefulness of considering the Hawke's Bay primary sector within discrete time periods. Most importantly, since 1945 New Zealand economic history has experienced three broad

phases. The first period from 1945 to 1975 featured mostly free access to the UK market and strong post war demand that led to periodic commodity booms. On the other hand, the period saw declining real commodity prices and progressive trade access restrictions, negatives that became dominant in the early years of the 1970s. Together these deteriorating fundamentals brought an end to a period of great prosperity that began shortly after WW2. In the second phase, a less prosperous period commencing in 1975 and extending to 1995, existing access arrangements were significantly altered, key commodity prices weakened further, and regulatory structures were reformed. The period, which witnessed two very different solutions to the decline in the New Zealand's economic fundamentals (one interventionist, the other free-market), resulted in significant disruption that altered established corporate and industry structures. These years were extremely painful for primary producers but by the mid-1990s evidence of recovery emerged and after 1995 a third phase commenced. Key events in the period included the rising importance of Asian markets, particularly China, as well as the stabilisation of New Zealand's primary industry structures, regulations and participant profitability.

These phases are summarised below:

- 1945 – 1975: Continuity and Change;
- 1975 – 1995: Disruption and Adjustment;
- 1995 – 2010: Recovery and Stabilisation.

The decision to employ a sectoral approach rather than this three-part periodisation as the main organizing concept of the thesis reflects a desire to highlight the impact of key economic themes and events *within* individual primary sectors. Importantly, doing so enables the identification of common themes across activities. Furthermore, sectoral analysis facilitates a tailored discussion concerning the adaptability of key primary sectors, the evolution of industry structures, including models of ownership, and the commercial interaction between producers and secondary processors. A further aim is to consider the success of diversification strategies within each primary cylinder and the time taken for these to gain traction. After 1975, problems such as different languages, customs, food preferences and trade barriers became more pronounced. It

is noteworthy that IMF research suggests economic reform typically takes between five and ten years to implement and a similar period for results to become apparent.<sup>109</sup> Furthermore, given New Zealand's remote location and small domestic market, a freely accessible 'Metropolis' is a pivotal element of diversification. It seems plausible to suggest that the effort to establish a new metropolis, either singular or multi-polar, is only now bearing fruit. By using Hawke's Bay's primary sectors as case studies, it is hoped such a question can be answered.

---

---

<sup>109</sup> Dr William Lee, former IMF official now Head of North American Economics at Citibank speaking at Citi investment conference, Sydney October 18<sup>th</sup>, 2016. Candidate attended conference. Presentation unavailable as a podcast or other online source.

# Chapter One: The Development of the Hawke's Bay Economy to 1945.

---

## Introduction.

This chapter will examine the economic development of Hawke's Bay province before 1945. The focus will be on key primary industries in order to provide historical context for subsequent chapters. The first part of Chapter One covers the period prior to 1870, most particularly the pre-European Māori economy and the emergence of a viable settler economy, a theme that coincided with rapacious demand for Māori land. Subsequent sections address the development of individual primary sectors between 1870 and 1945. These collective discussions are not intended provide a comprehensive account. Rather, key historical themes will be identified, and these will be summarised with reference to von Thunen's classical land use model.

Principal primary sources used in this chapter include New Zealand Official Year Books, Annual Sheep Returns, the Ministry of Works Regional Survey of 1971 and the archives of Hawke's Bay newspapers. Important secondary sources include the Digital Archive Trust, Waitangi Tribunal reports, Wilson's History of Hawke's Bay, Ballara's thesis concerning the origins of Ngāti Kahungunu and the histories authored by Ammundsen and Boyd.<sup>1</sup> Furthermore, the chapter draws upon the industry and business histories of Conly, Mannering, Roche, Sulzberger and Sweet along with Stevenson's history of the port of Napier. Baker's discussion of the New Zealand economy during WW2 provides additional context.<sup>2</sup>

---

<sup>1</sup> James Gordon Wilson, *A History of Hawke's Bay* (Wellington, Reed, 1939); Angela Ballara, "The Origins of Ngati Kahungunu" (Ph.D. diss., Victoria University of Wellington, 1991); R. Ammundsen, *From Swamp to City* (Hastings, Hart Publishing, 1961); Mary Boyd, *City of the Plains: a History of Hastings* (Wellington, Victoria University Press, 1984); for the Digital Archives Trust and Waitangi Tribunal reports see bibliography.

<sup>2</sup> Geoff Conly, *Watties: the First Fifty Years* (Hastings, J Wattie Canneries, 1984); Rose Mannering, *A Hundred Harvests: a History of Fruit Growing in New Zealand* (Wellington, PSL Press, 1999); Mike Roche, *History of New Zealand Forestry* (Auckland, NZ Forestry Corporation, 1990); Jack Sulzberger, *The Richmond Years* (Hastings: Pictorial Press, 1980); Mark Sweet, *Wine: Stories from Hawkes Bay* (Havelock North, Baybuzz Publishers, 2015); Jock Stevenson, *Port and People: Story of the Port of Napier 1875-1975* (Napier, Hawke's Bay Harbour Board, 1989); J.V.T. Baker, *The New Zealand People at War: War Economy* (Wellington, Historical Publications Branch, Department of Internal Affairs, 1965)

Land use statistics in 1945 show the dominance of pastoralism and a range of smaller scale primary activities. With a temperate climate and generally supportive soils the province is ideally suited to a wide range of agricultural activities but most importantly Hawke's Bay provides excellent 'sheep country.' Table 1.1 provides a snapshot, but it is very clear that the growth of pastoralism captures the essence of Hawke's Bay's economic development prior to 1945. Albeit of sufficient importance to register as distinct land use sector, horticulture was small in comparison. Viticulture and exotic forestry were inconsequential, the latter due to the dominance of native logging.

**Table 1.1. Pastoralism dominates: estimated land use in Hawke's Bay, 1945 (ha).<sup>3</sup>**

Land use activity	Hectares	Percentage
<i>Pastoral Grazing (est)</i>	874,125	61.7%
Non-Agricultural	217,000	15.3%
<i>Native Grassland</i>	162,000	11.4%
Flax/Scrub (unimproved)	104,000	7.3%
<i>Native Forest</i>	39,000	2.8%
<i>Fallow</i>	15,000	1.1%
<i>Exotic Forest</i>	2,875	0.2%
<i>Orchards<sup>4</sup></i>	1,178	0.1%
<i>Vegetable Crops</i>	1,043	0.1%
<i>Viticulture</i>	59	neg
Total provincial area	1,416,280	100.0%

Source: NZOYB, 1946, Chapter 18, section 16a. Agricultural categories (approximately 1.095m ha) shown in italics.

## Before 1870: The Settler Economy and the rush for land.

Māori occupation of Hawke's Bay predates European contact and the subsequent rush for land by between four hundred and five hundred years.<sup>5</sup> The earliest Māori were a

<sup>3</sup> Hawke's Bay's area is 1,416,000 ha (14160 km<sup>2</sup>). The estimated grassland area represents the balance after subtraction of known categories. Also see New Zealand Ministry of Works (NZMOW), *Hawke's Bay Regional Resource Survey*, Part VI (Wellington: Government Print, 1971), 72.

<sup>4</sup> NZOYB, 1946, Chapter 19, section 17b, "Land District Percentages."

<sup>5</sup> Kerryn Pollock, "Hawke's Bay region - Māori settlement and occupation," Te Ara - the Encyclopedia of New Zealand, last modified July 1<sup>st</sup>, 2015, <http://www.TeAra.govt.nz/en/hawkes-bay-region/page-4>

semi-nomadic people that employed a subsistence model of agriculture.<sup>6</sup> Ballara describes the economy of the time as “highly mobile,”<sup>7</sup> a structure that led to a system of “bi-lateral inheritance” of overlapping claims.<sup>8</sup> Consequently, the economic boundaries of Hawke’s Bay were malleable, certainly more so than in European times. Furthermore, in a sign that Māori were acutely aware of the economic importance of their land, place names were commonly used to describe the nutritional function of a physical location or feature.<sup>9</sup> The hunter-gatherer economic model employed by early Māori was inconsistent with a large population, and inhabitants remained limited in number until the 1500s when the now dominant tribal group, Ngāti Kahungunu, began to migrate south from the Mahia Peninsula.<sup>10</sup> Although numerically superior to incumbent groups, Ngāti Kahungunu faced significant resistance and their eventual supremacy was attributable to a combination of might and marriage.<sup>11</sup> Under Ngāti Kahungunu domination the economy diversified and from the 16<sup>th</sup> century land cultivation became widespread, a way to offset the declining availability of protein sources such as moa and seals.<sup>12</sup> Kumara and Taro were grown extensively supplemented by supplies of edible vegetation gathered from tribal plots<sup>13</sup> as well as fresh water and inshore fisheries.<sup>14</sup>

Based on a successful combination of land and sea, the Ngāti Kahungunu economy was both wide ranging and self-sustaining when the first Europeans arrived in the province. In the early 1820s, commercial relationships were established between the tribe and European flax merchants.<sup>15</sup> The trade grew strongly and flax production was of sufficient scale and quality for Sydney based buyers to establish permanent agencies in the province.<sup>16</sup> The successful engagement with European capitalism suggests that the Ngāti Kahungunu

---

<sup>6</sup> William T. Prentice, “The Coming of Toi,” in *History of Hawke’s Bay*, ed. James Gordon Wilson (Wellington: Reed, 1939), 22 & 23.

<sup>7</sup> Ballara, “Origins of Ngāti Kahungunu”, 20.

<sup>8</sup> Ibid. Tribal histories are complex and broad names such as Ngāti Kahungunu are labels of convenience.

<sup>9</sup> Ibid, 26.

<sup>10</sup> “Rangahaua Whanui District 11b,” Hawke’s Bay, Dean Cowie, Waitangi Tribunal Rangahaua Whanui Series (working paper: first release), 1-3, last modified September, 1996, <https://www.waitangitribunal.govt.nz/assets/Documents/Publications/WT-District-11-Hawkes-Bay.pdf>

<sup>11</sup> Ibid, 5.

<sup>12</sup> Matthew Wright, *Hawke’s Bay – the History of a Province* (Palmerston North: Dunmore Press, 1994), 12.

<sup>13</sup> Ballara, “Origins of Ngāti Kahungunu,” 48-51.

<sup>14</sup> Ibid.

<sup>15</sup> “Rangahaua Whanui District 11b,” Wairoa, Joy Hippolite, 11, last modified November 1996, <https://www.waitangitribunal.govt.nz/assets/Documents/Publications/WT-District-11-Wairoa.pdf>

<sup>16</sup> Ibid.

economy was of sufficient sophistication to utilise the province's extensive resource base and the Waitangi Tribunal notes that by 1840 the entire land/sea area of Hawke's Bay was "owned, occupied and utilised by Māori."<sup>17</sup> Another feature of these first contacts is that Europeans appear to have been welcomed, a reflection of the trading opportunities they afforded Ngāti Kahungunu. Ahuriri, now part of Napier City, was established as a whaling centre in the 1830s and added to Royal Navy charts from 1834.<sup>18</sup> Inter-tribal relations were, nevertheless, challenging at the time. Attracted by the trading opportunities whaling stations offered, isolated inland tribes were drawn to the coast. These were not always peaceful incursions and Ballara notes that in the two decades prior to 1840 the Māori population in the province halved following the introduction of muskets to tribal warfare, a catastrophe that was worsened by introduced disease.<sup>19</sup> The population decline is likely to have been a severe economic shock and "It is clear that Māori wanted Europeans to settle in Hawke's Bay," an enthusiasm that appears, at least in part, commercially minded.<sup>20</sup> Well-developed agricultural production systems gave Māori the means by which to trade with Europeans and economic relations with the embryonic settlement of Ahuriri were essential for the survival of the latter and economic recovery of the former.<sup>21</sup> Notably, Ngāti Kahungunu were signatories to the Treaty of Waitangi and European-Māori relations were both relatively harmonious and symbiotic in 1840.<sup>22</sup>

The treaty, as elsewhere in New Zealand, was an event of great economic and political significance in Hawke's Bay and laid the basis for a step change in the rate and tone of land dealing in subsequent decades. The Waitangi Tribunal notes that "Compared with other parts of the North Island, Hawke's Bay Māori had little contact with settlers and almost none with the Crown in the first decade following the signing of the Treaty."<sup>23</sup> Similarly, in common with most of the North Island, "there are ... few examples of land alienation in Hawke's Bay prior to ... 1850."<sup>24</sup> Nevertheless, the observation understates the extent to which the 1840s created four essential preconditions for subsequent land

---

<sup>17</sup> "Rangahaua Whanui District 11b," Hawke's Bay, Introduction, ix.

<sup>18</sup> Wright, *Hawke's Bay – the History of a Province*, 25.

<sup>19</sup> Ballara, "Origins of Ngāti Kahungunu," 59.

<sup>20</sup> "Rangahaua Whanui District 11b," Hawke's Bay, 21.

<sup>21</sup> *Ibid*, 15-17.

<sup>22</sup> *Ibid*, 22.

<sup>23</sup> "Rangahaua Whanui District 11b," Hawke's Bay, 22.

<sup>24</sup> *Ibid*.

acquisitions. First, in late 1844, William Colenso of the Church Missionary Society arrived at Ahuriri.<sup>25</sup> Although opposed to the sale of Māori land, Colenso's enthusiasm for exploration opened up vast areas of the Hawke's Bay interior to European knowledge, a precursor to eventual purchase and exploitation.<sup>26</sup> Second, in 1846, the passage of the Native Land Purchase Ordinance, which limited the ability of Māori to lease land to settlers, removed a major impediment to land acquisition.<sup>27</sup> The legislation was highly controversial. Ngāti Kahungunu had a strong preference for leasehold transactions and friction soon emerged between Māori and Pākehā as well as within iwi when sales involved collectively held tribal lands.<sup>28</sup> Third, in 1849 the first sheep (3,000 Merino) entered the province from the Wairarapa region to the south, an event that heralded a dramatic rise in land demand.<sup>29</sup> Fourth, shortly thereafter the controversial figure of Donald McLean arrived in the province to take up the position of Land Commissioner, a role intended to stimulate the pace of land acquisition.<sup>30</sup>

As was hoped by his political masters, McLean's appointment led to a dramatic increase in both the rate of Māori land sales as well as the development of sheep farming in Hawke's Bay. Less positively, his appointment coincided with the advent of fraudulent land dealings. McLean's acquisition drive began with the purchase of three large blocks of Māori owned land - Waipukurau<sup>31</sup>, Ahuriri and Mohaka,<sup>32</sup> transactions described, somewhat ambiguously, as "nearest to being satisfactory."<sup>33</sup> Although Colenso expressed concern about McLean's decision to subvert group rights in favour of chiefly rights, all three blocks

---

<sup>25</sup> David MacKay, "Colenso, William," *Te Ara - The Encyclopedia of New Zealand*, last modified October 30<sup>th</sup>, 2012, <http://www.TeAra.govt.nz/en/biographies/1c23/colenso-william>

<sup>26</sup> Mackay makes mention that Colenso was opposed to the sale of Māori lands much to the consternation of Donald McLean and Pākehā settlers. It should be noted that a key element in McLean's land purchasing was the government proscribing Māori leasing to pastoralists. Also see - "Rangahaua Whanui District 11b," *Hawke's Bay*, 18.

<sup>27</sup> "Rangahaua Whanui District 11b," *Hawke's Bay*, 35.

<sup>28</sup> *Ibid*, 20 & 44.

<sup>29</sup> "First Sheep in Hawke's Bay," *Hawke's Bay Herald*, Vol XXXIII, Issue 11000, August 23<sup>rd</sup>, 1898. Also see - Wilson, *History of Hawke's Bay*, 245.

<sup>30</sup> Ray Fargher, *The Best Man Who Ever Served the Crown? A Life of Donald McLean* (Wellington: Victoria University Press, 2007), 89.

<sup>31</sup> *Ibid*, 25 & 28. Confusingly the block is sometimes referred to as Hapuku. Importantly, Chief Te Hapuku was a central figure in the sale of Hawke's Bay land to the Crown in the period and the relationship between Te Hapuku and McLean is covered in great depth by Fargher. The Waitangi Tribunal notes, however, the legitimacy of Te Hapuku was at times in question, "Rangahaua Whanui District 11b", *Hawke's Bay*, Chapter 3.

<sup>32</sup> *Ibid*, 23-36.

<sup>33</sup> *Ibid*, 35. Quotation drawn from Waitangi Tribunal, Ballara A & G Scott, Waipukurau block file, Vol.II, 90-94; Ahuriri block file, Vol.I, 51 & 52; Mohaka block file, Vol.I, 6 & 7.



were successfully transferred into Crown ownership.<sup>34</sup> The sharp increase in land availability that flowed from these transactions sparked a dramatic increase in sheep numbers<sup>35</sup> and by the early 1850s wool production was sufficient to justify an export port at Ahuriri.<sup>36</sup> Less positively an unquenchable demand for agricultural land emerged that led to fraudulent land deals. McLean proved to be a most effective negotiator and was greatly trusted by many Māori but as demand for agricultural land soared, unscrupulous activities appeared, transactions in which McLean was implicated.<sup>37</sup> In 1854 and 1855 McLean conducted a series of “secret deals” involving 116,000 acres in which occupants were not advised of sale.<sup>38</sup> Further illegalities included land confiscations and the Aorangi Māori Trust Board notes the annexation of 7,000 acres on the Takapau plains in the early/mid 1850s.<sup>39</sup> The block was subsequently on-sold to settlers and iwi forced to relocate.<sup>40</sup> But McLean’s dubious tactics worked. Between 1851 and 1859/60, 1.5 million acres of land, equal to nearly half the province, was sold to the Crown for £40,000 spread across 38 transactions.<sup>41</sup>

---

<sup>34</sup> “Rangahaua Whanui District 11b,” *Hawke’s Bay*, 28.

<sup>35</sup> James Gordon Wilson, *History of Hawke’s Bay* (Wellington: Reed, 1939), 245-253.

<sup>36</sup> Wright, *Hawke’s Bay – the History of a Province*, 52. Reference to the *Iron Pot* references the whaling station at Ahuriri.

<sup>37</sup> “Rangahaua Whanui District 11b,” *Hawke’s Bay*, 36, 38 & 40. Runholders usually leased land from the Crown but might also buy where they saw opportunities for closer settlement.

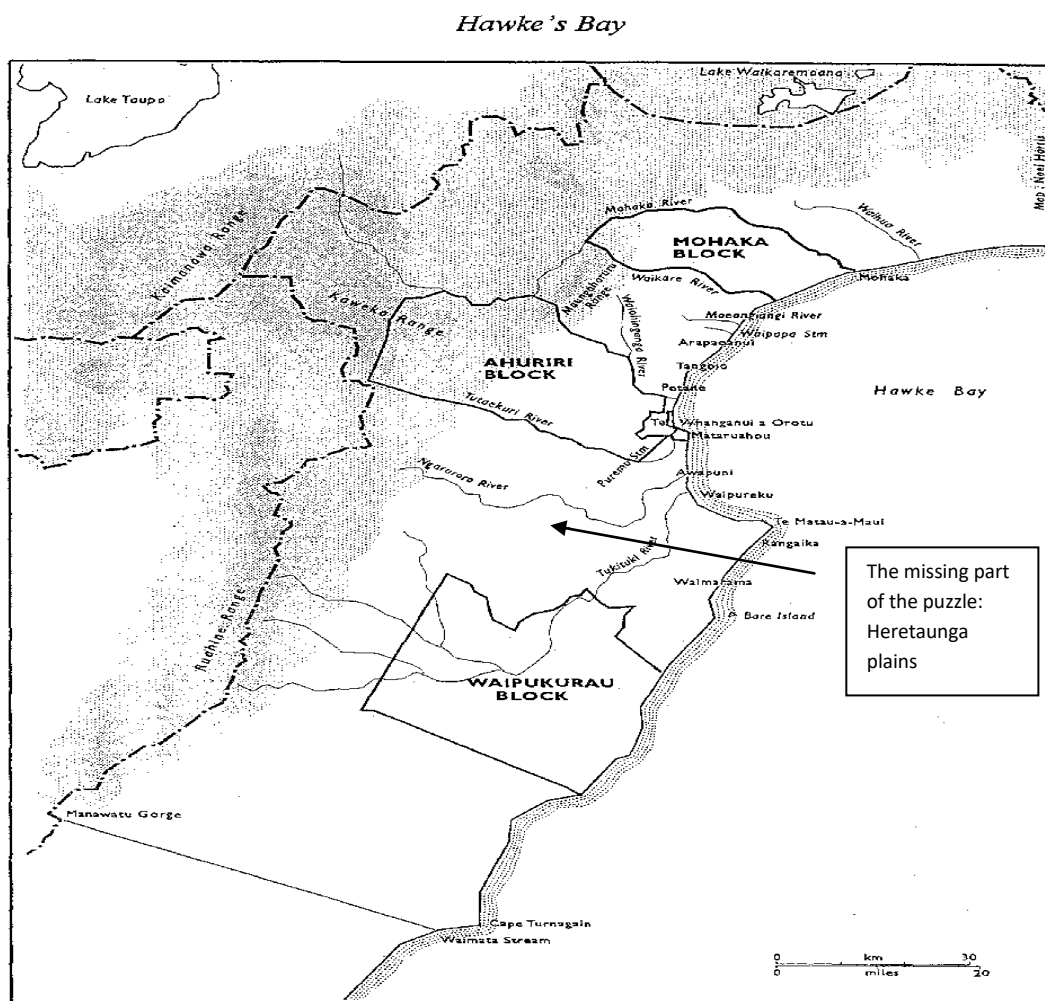
<sup>38</sup> *Ibid.*

<sup>39</sup> Aroha Treacher, “Homes for Whanau are now ready in Hastings,” *Hawke’s Bay Today*, November 24<sup>th</sup>, 2015.

<sup>40</sup> *Ibid.* Compensation of £50,000 was paid in 1950 – nearly 100 years after the annexation. Other confiscations should be noted. On January 12<sup>th</sup>, 1867, the colonial government confiscated land in the Mohaka-Waikare district belonging to Ngāti Hineuru following clashes with colonial troops and other Māori and at Oamaru and Petane. Doug Laing, “Descendants and iwi to remember one day war,” *Hawke’s Bay Today*, October 11<sup>th</sup>, 2016.

<sup>41</sup> “Rangahaua Whanui District 11b,” *Hawke’s Bay*, 23, 57-60.

Figure 1.1. Major land purchases in Hawke's Bay, 1851.



Source: "Rangahaua Whanui District 11b," Hawke's Bay, 24.

The legality of McLean's land deals was questioned by Colenso and many Māori but improved land availability had the desired economic impact, lifting the settler population and underpinning broader economic growth. Of particular importance a long standing shortage of timber was addressed in 1859 when Harold Holt & Co, later part of New Zealand multinational company Carter Holt Harvey, constructed a native log sawmill in Napier.<sup>42</sup> Improved timber supplies and population growth stimulated further commercial development and by the early 1860s the shortage of suitable land was once again acute, a

<sup>42</sup> "Proud to Lead the Trade Since 1859," Carter Holt - Trade Leader, last modified November 2009, <http://www.carters.co.nz/UserFiles/Carters/file/tradeleader/Trade-Leader-Nov09.pdf>.

difficulty made all the worse by basic geographical facts.<sup>43</sup> Napier was surrounded by water on three sides whilst Hastings (then known as Hicksville) was described as “a swamp.”<sup>44</sup>

McLean’s programme of land purchases was in decline by the mid-1860s, but the renewed land shortage forced a pivotal block of Māori land into focus. Located in the centre of the province, and comprising some of Hawke’s Bay’s best grazing land the purchase of the Heretaunga Block in 1870 is regarded as the “cause celebre” of land alienation in the province as well as a “progenitor of outrage against the Native Lands Act.”<sup>45</sup> As land commissioner, McLean was aware of premeditated illegalities regarding the transaction and criticised in Parliament for his role in land confiscations but his desperation for a solution to the land shortage was overwhelming.<sup>46</sup> Accordingly, the Waitangi Tribunal describes land transactions in Hawke’s Bay as something of an “open scandal” by 1870.<sup>47</sup> Making matters worse, the concentration of land holdings among a small number of favoured settlers led to allegations of corruption. Consisting of just eight individuals, a high-profile group of established pastoral run holders known as the “Twelve Apostles,” subsequently purchased the entire Heretaunga Block from the Crown.<sup>48</sup>

Following the Heretaunga Block purchase the concept of a Hawke’s Bay hinterland based on sheep farming and, most importantly, wool production was firmly in place but success was far from cost free.<sup>49</sup> In the scramble for land, settlers and Crown representatives had been tainted by dishonest dealings. Furthermore, the destruction of native forests was painfully apparent, a difficulty that McLean appears to have well understood but did little to stop.<sup>50</sup> Despite these problems it was evident by 1870 that pastoralism, most particularly wool, provided the basis for a vibrant provincial economy, albeit one based on dispossession and ecological destruction. Nevertheless, the key progenitor of such problems was soon to lose all influence. A distinct political entity from

---

<sup>43</sup> Wilson, *History of Hawke’s Bay*, 235.

<sup>44</sup> Amundsen, *From Swamp to City*, 9-13. These problems would not be fully addressed until the uplift of land in the 1931 earthquake and installation of drainage schemes by the Hawke’s Bay Drainage Board (forerunner to the Hawke’s Bay Regional Council).

<sup>45</sup> “Rangahaua Whanui District 11b,” Hawke’s Bay, 67.

<sup>46</sup> Fargher, *The Best Man Who Ever Served the Crown?*, 329, 325.

<sup>47</sup> “Rangahaua Whanui District 11b,” Hawke’s Bay, 212.

<sup>48</sup> *Ibid*, 67.

<sup>49</sup> A town was also planned, viz., Hastings.

<sup>50</sup> Roche, *History of New Zealand Forestry*, 84 & 86. Government Geologist James Hector estimated that 253,000 acres of native forests remained in 1873, a mere 8% of the original area.

1858, Hawke's Bay lost its political independence in 1876 following the abolition of provincial government. In December of the same year McLean resigned from all official roles and a month later he died.<sup>51</sup>

### Pastoralism (1870-1945): a province is built on the sheep's back.

Rapacious demand for land by European settlers was well founded in economic reality but the boom eventually ended exposing the underlying vulnerability of Hawke's Bay's wool dependent economy. Sheep farming was highly profitable and the flat, fertile Heretaunga plains were particularly well suited to large scale sheep stations.<sup>52</sup> High returns drove a sharp increase in investment and sheep numbers exploded to well over one million by the early 1870s.<sup>53</sup> In the absence of refrigeration, profitability depended on the price of wool. Fortunately, in the early 1870s New Zealand was in the midst of an unprecedented wool boom.<sup>54</sup> Between 1871 and 1873 the price of agricultural land on the Heretaunga plains rose from £4 to £56 per acre, a huge gain in the context of an acquisition price from Māori of 30 Shillings.<sup>55</sup> But in 1879 the boom faltered spectacularly when wool prices almost halved and a protracted economic slowdown began that extended into the early/mid 1880s.<sup>56</sup> Well known members of the Twelve Apostles group, tenant farmers Tanner and Rich, were financially ruined and Riverslea, one of the province's most notable sheep stations, was broken up.<sup>57</sup>

Despite persistent economic woes during the 1880s crucial investments were made in the meat processing industry and farm servicing sector. Most importantly, in 1881

---

<sup>51</sup> Alan Ward, "McLean, Donald," Dictionary of New Zealand Biography, Te Ara - the Encyclopedia of New Zealand, accessed May 16<sup>th</sup>, 2019, <https://teara.govt.nz/en/biographies/1m38/mclean-donald>. McLean was provincial superintendent from 1863 to 1869.

<sup>52</sup> Wilson, *History of Hawke's Bay*, 231-35. See Hawke's Bay Sheep Returns, 1872. Purchases were often financed by family monies sourced from Britain. But returns were sufficiently high, and land prices sufficiently low to ensure that the need for entry capital was limited. Wright, *Hawke's Bay – the History of a Province*, 43.

<sup>53</sup> Ibid, 231-234. The so called 'Vogel boom', a rapid growth era based on infrastructural investment.

<sup>54</sup> Neville Bennett, "Boom and Bust in the 1870's," *Interest.com*, September 26<sup>th</sup>, 2009, accessed March 20<sup>th</sup>, 2016, <http://www.interest.co.nz/news/41357/opinion-boom-and-bust-1870s>. Wool prices peaked at 16p per pound in 1873 – a level not matched again until 1944.

<sup>55</sup> Ammundsen (ed), *From Swamp to City*, 9 & 10. Relates to land near the centre of modern-day Hastings. The quoted figures are supported by Neville Bennett who suggests that land prices rose 500% from 1874-79 across New Zealand as a whole.

<sup>56</sup> Bennett, "Boom and Bust in the 1870s."

<sup>57</sup> Kay Mooney, "Tanner, Thomas", Te Ara - The Encyclopedia of New Zealand, last modified October 30<sup>th</sup>, 2012, <http://www.TeAra.govt.nz/en/biographies/1t10/tanner-thomas>.

the Tomoana meat works were established by Nelson Brothers.<sup>58</sup> Meat refrigeration, which was introduced to New Zealand in 1882, was similarly pivotal. Although Hawke's Bay was slightly slower to adopt the new technology than other provinces the Tomoana "Freezing Works" was completed in 1884, a year after the first shipment of New Zealand meat arrived in London on the ship *Dunedin*,<sup>59</sup> with capital (£80,000) raised on the London financial markets.<sup>60</sup> The investment was successful and on 31 March 1884, the first shipment of frozen sheep meat left Hawke's Bay on the steamship *Turakina*.<sup>61</sup> The Hawke's Bay economy received an immediate boost. Farmers began to invest in additional stock and in 1886 sheep numbers numbered 2.56m.<sup>62</sup> New freezing works were subsequently constructed at Ahuriri in 1888 and at Waipukurau in 1889 (closed 1893).<sup>63</sup> Furthermore, soaring livestock numbers encouraged the creation of new support industries. Stock and station agent Williams and Kettle was established in 1885<sup>64</sup> and in 1891 the Hawke's Bay Farmers Co-operative opened its first stores.<sup>65</sup>

In the late 1880s Hawke's Bay's pastoral economy began to diversify and restructure, a change based on linkages between the sheep industry and other sectors of the economy coupled with land intensification. In 1889, the Riverslea wool scour was established<sup>66</sup> and in 1894 a second scour was opened by the Tucker family.<sup>67</sup> Along with the emergence of new secondary industries an important structural change was occurring in land ownership. In the early 1900s, several of the large sheep runs owned by the Twelve Apostles on the Heretaunga Plains were broken up to create more numerous, smaller sized family owned farms.<sup>68</sup> In 1901, 27,000 acre Hatuma Station was divided into fifty

---

<sup>58</sup> Wilson, *History of Hawke's Bay*, 372. William Nelson is regarded as the father of the meat industry in Hawke's Bay.

<sup>59</sup> *Ibid*, 373.

<sup>60</sup> Messrs Nelson Brothers'. Prospectus - NELSON BROTHERS, (LIMITED.) Incorporated under The Companies Acts, 1862 to 1880, accessed March 16<sup>th</sup> 2016, [http://www.mirrormist.com/the\\_nelson\\_brothers.htm](http://www.mirrormist.com/the_nelson_brothers.htm)

<sup>61</sup> Wilson, *History of Hawke's Bay*, 373.

<sup>62</sup> AJHR, 1886, H-15 (Counties: Wairoa, Hawke's Bay, Waipawa, Waipukurau, Patangata).

<sup>63</sup> G.J Burridge, "The Location of Meat Freezing Works in New Zealand," *New Zealand Geographer*, Vol.20, No.1 (1964): 43-59.

<sup>64</sup> Simon Ville, *The Rural Entrepreneurs - A history of the stock and station agent industry in Australia and New Zealand* (Cambridge: Cambridge University Press, 2000), 19, 20.

<sup>65</sup> Ammundsen (ed), *From Swamp to City*, 30.

<sup>66</sup> *Ibid*, 26.

<sup>67</sup> Wright, *Hawke's Bay – the History of a Province*, 122.

<sup>68</sup> Ammundsen (ed), *From Swamp to City*, 9.

four smaller properties.<sup>69</sup> Similarly, Milbourne Station's 33,602 acres were broken into sixty two smaller lots in 1903.<sup>70</sup> The resulting democratisation of land ownership led to further intensification of the pastoral estate in Hawke's Bay and in 1905 sheep number reached yet another record (2.94m).<sup>71</sup>

The relentless increase in sheep numbers encouraged further investment in meat processing. In 1905, Thomas Borthwick and Sons (UK) opened a freezing works at Paki Paki<sup>72</sup> and in 1910 Archie Lowe established Lowe Meats.<sup>73</sup> Both investments reflected the spread of pastoralism to the south of the province.<sup>74</sup> But in 1912, frustrated at the lack of control over the processing and distribution of their produce, southern Hawke's Bay farmers established a rival freezing works.<sup>75</sup> Located at Whakatu, close to the existing Tomoana plant, the Hawke's Bay Farmers Meat Co-operative (HBFMC) challenged the prevailing model of industry ownership and control.<sup>76</sup> Whakatu was, nevertheless, an instant success.<sup>77</sup> Crucially, the plant gained greatly from the loyalty of its farmer shareholders and the support of the province's then dominant sheep wholesaler, Scottish immigrant William Richmond.<sup>78</sup> Although Whakatu lifted the number of meat processors in the province to five, sheep numbers in Hawke's Bay were sufficient to ensure all freezing works were viable at the start of World War One.<sup>79</sup>

The Great War increased the demand for Hawke's Bay wool and sheep meats but growth after 1918 became less convincing. In 1915, sheep numbers totalled 2.80m.<sup>80</sup> Although a level well below that of the early 1900s, strong demand for pastoral products

---

<sup>69</sup> Wilson, *History of Hawke's Bay*, 290.

<sup>70</sup> *Ibid*, 292.

<sup>71</sup> AJHR, 1905, H-23 (Counties: as noted previously but adjusted for inclusion of Weber).

<sup>72</sup> Wilson, *History of Hawke's Bay*, 375.

<sup>73</sup> Ammundsen (ed), *From Swamp to City*, 44.

<sup>74</sup> Wilson, *History of Hawke's Bay*, 318-321.

<sup>75</sup> *Ibid*, 375 & 376.

<sup>76</sup> *Ibid*.

<sup>77</sup> *Ibid*.

<sup>78</sup> Jack Sulzberger, *The Richmond Years*, 62. Although Richmond worked closely with Tomoana as well this was the start of a very long association with HBFMC. Richmond was bankrupted in 1928 but recommenced trading in 1930.

<sup>79</sup> *Ibid*. Another somewhat smaller freezing works was opened at Wairoa in 1915. Wilson, *History of Hawke's Bay*, 432. Also see – "Visit to Wairoa" *Bay of Plenty Times*, Volume XLIV, Issue 6673, April 25<sup>th</sup>, 1916, 4, accessed November 15<sup>th</sup>, 2016, <https://paperspast.natlib.govt.nz/newspapers/BOPT19160425.2.20>

<sup>80</sup> AJHR, 1915, H-24 (Counties: as noted previously). The figure is slightly lower than 1905 due to "a severe drought" that killed "thousands of sheep and cattle" in southern areas of the province in 1914. See Wilson, *History of Hawke's Bay*, 321.

during WW1 meant the years from 1914 to 1918 were encouraging for the sector and at the end of the conflict sheep numbers had recovered to a new all-time high of 3.18m.<sup>81</sup> But the rate of expansion thereafter slowed significantly. In 1925, sheep numbers in Hawke's Bay had fallen to 3.08m.<sup>82</sup> Similarly, the 1935 number of 3.39m was little more than 5% above that of 1918.<sup>83</sup> Although growth was moderating, confidence in the future of the sheep industry in Hawke's Bay was, nevertheless, sufficient to attract an important international investor and in 1921 the Vestey family of the UK purchased Tomoana from the Nelson family.<sup>84</sup> Tomoana survived the 1931 Hawke's Bay earthquake but others did not. The Borthwick owned works at Paki Paki<sup>85</sup> and the meat freezing plant at Ahuriri were not rebuilt and in 1932 three meat works remained operational.<sup>86</sup>

Although the advent of refrigeration facilitated much of the growth in sheep numbers that occurred between 1870 and the early 1930s, wool remained an essential aspect of pastoralism in Hawke's Bay and a key justification for infrastructure investment. In the 1930s, around 60% sheep farming revenues in New Zealand came from wool.<sup>87</sup> Hawke's Bay was likely similar given the province's comparable agricultural economy. Moreover, wool trading was of particular importance to Napier and Ville estimates that by 1930 as much as 18% of the New Zealand wool clip was transacted at wool stores in the port suburb of Ahuriri.<sup>88</sup> In the mid-1930s, the combined strengths of wool and sheep meat exports provided the justification for the construction of a deep-water port, an investment that locked Napier into global supply chains. Although New Zealand's terms of trade fell during the period from 1940 to 1945,<sup>89</sup> strong wartime demand for pastoral products underpinned additional infrastructure investment including Herrick Wharf (1943).<sup>90</sup>

---

<sup>81</sup> AJHR, 1918, H-23 (Counties: as noted previously).

<sup>82</sup> Ibid & AJHR, 1925, H-23.

<sup>83</sup> Ibid & AJHR, 1935, H-23. Reflects the Great Depression.

<sup>84</sup> Mary Boyd, *City of the Plains*, 238.

<sup>85</sup> Wilson, *History of Hawke's Bay*, 375 & Ammundsen (ed), *From Swamp to City*, 33.

<sup>86</sup> Burridge, "The Location of Meat Freezing Works in New Zealand," 46.

<sup>87</sup> NZOYB, 1938, Chapter 11.

<sup>88</sup> Ville, *The Rural Entrepreneurs*, 129.

<sup>89</sup> "Terms of Trade," Statistics New Zealand, accessed April 20<sup>th</sup>, 2016, <http://www.stats.govt.nz/infoshare/SelectVariables.aspx?pxID=69e5b2bf-7506-425e-a601-c6eda64a036b>

<sup>90</sup> Wilson, *History of Hawke's Bay*, 353-355.

At the end of WW2 sheep numbers in Hawke's Bay stood at an all-time high of 3.80m.<sup>91</sup> Consequently, the province's economy remained reliant on the production and export of wool and sheep-meats, most particularly to the UK. But with the third largest sheep flock in New Zealand, the structure of Hawke's Bay's pastoral sector was quite unlike other North Island provinces. Most particularly, dairy and beef cattle remained comparatively small livestock categories (see Table 2.2). As a result, although Hawke's Bay was more productive than its southern counterparts, the province's pastoral sector was more like South Island provinces such as Canterbury.<sup>92</sup> Nevertheless, in common with all New Zealand provinces at the time, pastoral revenues in Hawke's Bay were greatly dependent on UK demand. New Zealand produced 339,000 tons of meat in 1944/45 and of this, 75% was exported to the UK.<sup>93</sup> Lamb comprised 60% all UK meat sales.<sup>94</sup> Figures for the Port of Napier, New Zealand's third largest export port in 1945, indicate meat exports of 30,000 tons and 144,000 bales of wool.<sup>95</sup> The percentage of national meat exports sent through the Port of Napier (8.8%) therefore aligns relatively well with the number of sheep and cattle in the province as a proportion of the New Zealand total, a fact that emphasises the continued importance of the UK for Hawke's Bay farmers at the conclusion of WW2.

Growth in meat production was another important wartime theme but wool was less fortunate. Exports of Hawke's Bay lamb and beef rose 25% and 60% respectively between 1940 and 1945 while total exports through the Port of Napier rose 18% between 1939 and 1945.<sup>96</sup> As the percentage of the province in pasture fell from a pre-war figure of 60% to 58% in 1945, export growth reflected sharp productivity gains on Hawke's Bay farms.<sup>97</sup> Most of the rise in meat output was directed to the UK. Nevertheless, around a quarter of all volumes were diverted to meet the wartime needs of United States forces in

---

<sup>91</sup> AJHR, 1945, H-23 (Counties: as noted previously).

<sup>92</sup> Cumberland, "The Agricultural Regions of New Zealand," 50 & 51. Cumberland assumes that one cow equates to seven sheep and one horse equates to ten sheep. Prior to fertilisation Hawke's Bay was thought capable of supporting no more than two-three ewes per acre. *Hawke's Bay Regional Resource Survey*, 42 & 76.

<sup>93</sup> NZOYB, 1946, Chapter 19, section 17c, "Production and disposal of meat, 1944-45 season."

<sup>94</sup> Ibid.

<sup>95</sup> Jock Stevenson, "History of Napier Port" - in manuscript. Archival box 306, Hawke's Bay Regional Museum, Napier.

<sup>96</sup> Jock Stevenson, *Port and People*, 249 & 251.

<sup>97</sup> *Hawke's Bay Regional Resource Survey*, 72.



the Pacific.<sup>98</sup> In contrast, wool markets were oversupplied. Hall notes that “Britain contracted to purchase New Zealand wool during WW2 but did not need the tonnages.”<sup>99</sup> Hence, unlike sheep meats, unsold stockpiles of wool were “considerable” in 1945.<sup>100</sup> Commodity price caps were a further problem. As per the terms of the UK bulk purchase agreement, New Zealand’s primary exports were sold “at prices ... ruling before the war.”<sup>101</sup> Consequently, farm returns were effectively capped at pre-war levels, a problem that applied equally to processors. Earnings at Hawke’s Bay meat wholesaler and exporter, W. Richmond, were regarded as “steady” but “not spectacular” during the war years.<sup>102</sup>

**Table 1.2. New Zealand pastoral sector: structure by provincial region, 1945.**<sup>103</sup>

Land District	Sheep (in total)	Breeding Ewes	Lambs tailed	Cattle (incl Dairy)	Sheep/cattle ratio
Hawke’s Bay	4,490,367	2,819,972	2,253,421	369,581	12.1x
Auckland	3,241,666	2,176,468	2,165,189	1,240,557	2.6x
Gisborne	2,247,138	1,253,393	1,057,134	349,583	6.4x
Wellington	7,062,775	4,338,051	4,263,625	885,486	8.0x
Canterbury	5,588,778	3,414,842	3,086,817	179,568	31.1x
Otago	4,165,483	2,384,559	2,138,001	121,301	34.3x
Southland	3,367,233	2,225,032	2,336,997	149,225	22.6x
New Zealand	33,974,612	20,865,858	19,561,458	4,666,782	7.3x

Source: NZOYB, 1946, Chapter 19, section 17c. Wellington includes provinces Manawatu and Wairarapa.

**Horticulture (1870-1945): rapid growth based on exports, new varieties and Watties.**

The story of Hawke’s Bay horticulture prior to 1945 is mainly about fruit, most particularly apples. Although the first commercial sale of Hawke’s Bay produce occurred as early as 1853, vegetables were grown mostly for household consumption.<sup>104</sup> Both fruit and vegetable growing remained cottage industries until the 1890s when the first

<sup>98</sup> Stevenson, *Port and People*, 249.

<sup>99</sup> David Hall, *Emerging From An Entrenched Colonial Economy – New Zealand Primary Production, Britain and the EEC, 1945-1975* (Cham: Palgrave, 2017), 306.

<sup>100</sup> Ibid.

<sup>101</sup> NZOYB, 1946, Chapter 19, section 17a. “BULK PURCHASE OF PRIMARY PRODUCE BY UNITED KINGDOM GOVERNMENT.”

<sup>102</sup> Sulzberger, *The Richmond Years*, 98.

<sup>103</sup> The number of sheep in the Annual Sheep Return differ from the above figure. Table 1.2 includes sheep shorn, lambs shorn, and lambs tailed for the season 1945/46.

<sup>104</sup> Wilson, *History of Hawke’s Bay*, 369.

commercial orchard plantings in Hawke's Bay were made by pioneer nurseryman, Thomas Horton.<sup>105</sup> Growth thereafter was rapid and by 1899 fruit production was sufficient to justify the creation of the Hawke's Bay Fruitgrowers' Association (HBFGA) as a marketing co-operative.<sup>106</sup> In 1900, Horton partnered with a number of local businessmen, most prominently James Williams, to establish a commercial orchard on a twenty acre plot at Frimley near Hastings.<sup>107</sup> A dual purpose nursery and fruit farm, the orchard was reputedly among the largest in the southern hemisphere at the time.<sup>108</sup>

In the early 1900s, the addition of a cannery and the advent of cool store technology gave growers the confidence to invest in new orchards and pursue export markets. In 1904, Williams opened a cannery using surplus fruit from the Frimley orchard<sup>109</sup> and the facility soon expanded to include excess fruit and vegetables from other locations.<sup>110</sup> The expectation that growers could now sell surplus produce encouraged further expansion and in 1910 orchards occupied 1,310 acres of land on the Heretaunga plains.<sup>111</sup> Unfortunately, grower optimism was misplaced. The Frimley factory was closed in 1911 amid claims the plant provided "almost no assistance to Hawke's Bay fruit growers."<sup>112</sup> Although tainted by the failure of their cannery, Williams and Horton subsequently pioneered New Zealand apple exports, importing the high-quality rootstocks needed to produce export quality fruit.<sup>113</sup> Likewise, the international trade in fresh fruit was furthered by the advent of cool store technology. In 1913, the HBFGA floated the

---

<sup>105</sup> Ibid, 46 & 47. Thomas Horton was established in Pahiatua in 1896.

<sup>106</sup> "About the Hawke's Bay Fruitgrowers' Association," Hawke's Bay Fruitgrowers' Association, accessed June 25<sup>th</sup>, 2016, <http://www.hbfruitgrowers.co.nz/>. Also see – "Fair Priced Fruit," *Evening Post*, Volume LXXXVI, Issue 60, September 8<sup>th</sup>, 1913, Page 3, accessed June 25<sup>th</sup>, 2016, <http://paperspast.natlib.govt.nz/cgi-bin/paperspast?a=d&d=EP19130908.2.32>

<sup>107</sup> Ammundsen (ed), *From Swamp to City*, 47.

<sup>108</sup> Ibid. Also see – Mark Sweet, *Wine: Stories from Hawke's Bay* (Havelock North: Baybuzz Publishers, 2015), 16.

<sup>109</sup> Mary Boyd, "Williams, James Nelson," Te Ara - the Encyclopedia of New Zealand, last modified April 8<sup>th</sup>, 2014,

<http://www.TeAra.govt.nz/en/biographies/2w22/williams-james-nelson>

<sup>110</sup> Ammundsen (ed), *From Swamp to City*, 41. Also see Wright, *The History of a Province*, 123 & "Fair Priced Fruit." In 1908, output reputedly reached 500,000 cans.

<sup>111</sup> Kerry Pollock, "Hawke's Bay region – Horticulture," Te Ara - the Encyclopedia of New Zealand, last modified July 1<sup>st</sup>, 2015, <http://www.TeAra.govt.nz/en/hawkes-bay-region/page-8>.

<sup>112</sup> "Williams, James Nelson." Also see - "Fair Priced Fruit."

<sup>113</sup> Ibid; Ammundsen (ed), *From Swamp to City*, 47. In 1914, the potential for export fruit from Hawke's Bay was highlighted at a trade exhibition in Argentina where orders were received for 20,000 cases of apples over the five following years.

“Hawke’s Bay Fruit, Produce and Cool Storage Company.”<sup>114</sup> Run as a growers co-operative, the new capability facilitated a growing apple trade with Argentina.<sup>115</sup> Further investments followed and taking advantage of electricity supplied by the Borough of Hastings (the first municipal supply in New Zealand), Lowe & Sons built a large cool store for both fruit and dairy.<sup>116</sup>

By the start of World War One, Hawke’s Bay horticulture was growing strongly but a serious structural weakness – the lack of a cannery - remained unresolved until the 1930s. Underpinned by a robust export market for apples, Horton’s nursery sold over one million fruit trees in 1916 but as output rose seasonal gluts became more common.<sup>117</sup> Lacking a cannery, the industry continued to face a major capability gap. Unable to deal profitably with seasonal gluts and service wartime needs, the Hawke’s Bay fruit industry stalled after 1915 and in the early 1920s the area in orchard was little changed from 1910.<sup>118</sup> Faced with the same problem, the tiny commercial vegetable sector experienced a similar trend.<sup>119</sup> The failure of the Frimley venture had discouraged investment in canning during the 1920s but in 1934 James Wattie opened a cannery in Hastings.<sup>120</sup> Given the Depression, the project was a brave move for Wattie, a former employee of the HBFGA.<sup>121</sup> Furthermore, capital was in short supply and in 1935 Wattie was turned down by a government funding scheme.<sup>122</sup> Fortunately, twenty eight local business people agreed to back Wattie.<sup>123</sup> The business performed strongly and by 1937 the Hastings

---

<sup>114</sup> “Fair Priced Fruit.”

<sup>115</sup> *Ibid.* The trade was in Jonathan Apples, a variety that is now rarely grown.

<sup>116</sup> Ammundsen (ed), *From Swamp to City*, 37 & 44-46. Electricity supply was the essential pre-requisite. In 1924 the Hawke’s Bay Electric Power Board (now Unison) was created following the merger of all generators in the province (Napier, Taradale, Havelock North and Hastings).

<sup>117</sup> *Ibid.*, 47.

<sup>118</sup> *NZOYB*, 1911, Chapter 42, section XVII, “Area in cultivation & in occupation,” & 1921-22, Chapter 16, section XVI, sub-section b, “Area in Orchard.”

<sup>119</sup> *NZOYB*, 1916, Chapter 17, section XVII, “Area in cultivation and in occupation, 1915-16” & *NZOYB*, 1920, Chapter 16, section XVI, “Area in cultivation and in occupation, 1919-20.”

<sup>120</sup> Ammundsen (ed), *From Swamp to City*, 43 & 44. Wattie employed a mere 25 people in the first year of operation. Also see Mary Boyd, “Wattie, James”, *Dictionary of New Zealand Biography*, Te Ara - the Encyclopedia of New Zealand, <https://teara.govt.nz/en/biographies/4w9/wattie-james>, accessed November 8<sup>th</sup>, 2019.

<sup>121</sup> “Watties Ltd - History,” *International Directory of Company Histories*, Vol.7, accessed August 15<sup>th</sup>, 2016, <http://www.fundinguniverse.com/company-histories/wattie-s-ltd-history/>. The Directors of the grower’s co-op rented Wattie his first premises. Also see – David Irving and Kerr Inkson, *It Must Be Wattie’s!* (Auckland: David Bateman Publishing, 1998).

<sup>122</sup> Conly, *Wattie’s*28. This book was commissioned by Watties. Information contained therein should be considered as sourced from the company.

<sup>123</sup> *Ibid.*, 6.

factory was producing thirty three million cans a year using locally produced fruit and vegetables.<sup>124</sup> The primacy afforded sheep meat production meant canned foods were a second tier government priority in the early stages of WW2 but in 1941 the US Joint Purchasing Board signed an agreement to take Wattie's full output and the Lend Lease Act was used to provide capital to acquire advanced can making machinery.<sup>125</sup> Output surged and by 1944 Wattie's turnover was fourteen fold higher than in 1939.<sup>126</sup>

**Table 1.3. Process vegetables dominate: Hawke's Bay vegetable plantings, 1945 (ha).**

Land use activity	Area (ha)	%
Potatoes	415	39.8%
Vegetables for processing	342	32.8%
Field crops	181	17.3%
Peas	105	10.1%

Source: NZOYB, 1946, Chapter 19, section 17b.

Vegetable growers were another group to benefit from wartime demand and the arrival of United States forces in the Pacific.<sup>127</sup> In addition to new canning facilities, Wattie built a vegetable dehydration plant in Hastings specifically for US demand.<sup>128</sup> Although volume growth based on Wattie products was robust during the war, the profitability of vegetable growers, most of whom remained very small in scale, was unlikely to have been particularly high. In common with meat, important crops were subject to a government-imposed price ceiling and hence profitability was capped.<sup>129</sup> Furthermore, the mix of categories shown in Table 1.3 indicates the dominance of relatively low value processing crops. World War Two was, nevertheless, critical to the establishment of commercial vegetable growing in the province.

In contrast, WW2 was a mixed experience for fruit growers. Although offshore market development stalled in the 1920s and early 1930s, a record 400,000 cases of apples

<sup>124</sup> Ammundsen (ed), *From Swamp to City*, 44.

<sup>125</sup> "Wattie's Ltd – History."

<sup>126</sup> Ibid.

<sup>127</sup> Baker, *War Economy*, 218.

<sup>128</sup> Ibid, 463.

<sup>129</sup> Ibid.

and pears was exported from Hawke's Bay to Britain in 1938.<sup>130</sup> Regrettably, the advent of war meant the recovery was short lived. In the early years of WW2 the UK Government effectively curtailed all fruit imports citing a critical shortage of shipping space.<sup>131</sup> In an effort to compensate growers, the New Zealand Government undertook to sell the country's entire apple crop domestically.<sup>132</sup> Less positively, official prices were generally below the cost of production.<sup>133</sup> Fortunately other government actions, such as a 'free fruit in schools' programme, were more supportive and the industry remained "reasonably intact" during the early years of WW2.<sup>134</sup> Following the entry of the United States into the war the outlook for the fruit sector improved and from June 1942 to April 1945 US military purchases accounted for one-seventh of New Zealand's fruit production.<sup>135</sup> Nevertheless, the international trade in fresh fruit remained decimated and exports of New Zealand apples and pears collapsed from 62,000,000 lbs in 1939 to 20,000 lbs in 1944.<sup>136</sup>

Although the war represented a major dislocation for the New Zealand fruit industry, orchardists in Hawke's Bay were well positioned for post-war recovery. Accounting for 15% of New Zealand plantings in 1944,<sup>137</sup> the area of Hawke's Bay in orchard had barely increased since the conclusion of WW1.<sup>138</sup> Despite the lack of growth, Hawke's Bay produced a total of one million cases in 1944, a significant amount in the context of pre-war levels<sup>139</sup> and the relative immaturity of new stone-fruit plantings (mostly peaches).<sup>140</sup> Fortunately, two pre-war continuities remained intact. First, diversification into stone-fruit did not come at the expense of apples, historically Hawke's Bay's most successful fruit export. Second, the proven production profile of pre-war years remained unaltered. Leading apple varieties in 1945/46 included the successful mix of Sturmer (160,000 cases produced), Delicious (104,000), Ballarat (74,000) and Cox's Orange (68,000).<sup>141</sup> After WW2 a meaningful recovery began and in 1946 fruit exports recommenced from the Port of Napier,

---

<sup>130</sup> Mannering, *100 Harvests*, 77.

<sup>131</sup> Baker, *War Economy*, 216.

<sup>132</sup> *Ibid*, 65.

<sup>133</sup> Mannering, *100 Harvests*, 77.

<sup>134</sup> *Ibid* & Baker, *War Economy*, 448a (photo).

<sup>135</sup> Baker, *War Economy*, 216.

<sup>136</sup> *Ibid*, 588.

<sup>137</sup> NZOYB, 1945, Chapter 17, sub-section b.

<sup>138</sup> NZOYB, 1920, Chapter 16, sub-section a, "Area in cultivation & in occupation 1919-1920."

<sup>139</sup> Mannering, *100 Harvests*, 77. Production on a per hectare basis is estimated at 780 cases/H.A.

<sup>140</sup> *Ibid*, 78.

<sup>141</sup> *Ibid*. Quote in *The Orchardist*, July 5<sup>th</sup> 1946.

albeit in small volumes.<sup>142</sup> In the same year, Hawke's Bay experienced "an influx of young growers."<sup>143</sup> Most were ex-servicemen attracted by the prospect of rehabilitation assistance but cheap land provided an additional draw card.<sup>144</sup> In 1945, these new entrants paid approximately £50 per acre for horticultural land in sought after localities such as Pakowhai, a level largely unchanged since 1939 due to price controls introduced by New Zealand's wartime government.<sup>145</sup>

**Table 1.4. Dominated by apples: Hawke's Bay fruit sector productive structure, 1945/46 (cases).**

Land use activity	Production 1945/46
Apples	765,000 cases
Pears	73,609 cases
Peaches *	250,000 cases
Plums *	52,000 cases
Nectarines *	20,000 cases
Apricots *	1500 cases
Cherries *	1500 cases

Source: Mannering, *100 Harvests*, 76. It was common to equate a bushel in weight (40lbs) to a case hence the term 'bushel-case.' \*Stone-fruit.

### Forestry (1870-1945): based on natives, sustainability is questioned.

The majority of Hawke's Bay's exotic forests were developed after WW2. Consequently, the story of the forest industry prior to 1945 is almost entirely about the exploitation of native timber in remote areas to the south and north of the province, locations that were largely inaccessible until the 1880s.<sup>146</sup> As very little native forest cover remained near Napier after 1840 (see Figure 1.2) early Pākehā homes were little more than simple Whare.<sup>147</sup> The lack of a local sawmill before 1859 was an additional problem

<sup>142</sup> Ibid.

<sup>143</sup> Mannering, *100 Harvests*, 78 & 84.

<sup>144</sup> Ibid.

<sup>145</sup> Ibid, 99 & Jane Thompson, "The Policy of Land Sales Control: Sharing the Sacrifice," *New Zealand Journal of History*, Vol.25, No.1 (April 1991): 4, accessed April 15<sup>th</sup>, 2016, [http://www.nzjh.auckland.ac.nz/docs/1991/NZJH\\_25\\_1\\_02.pdf](http://www.nzjh.auckland.ac.nz/docs/1991/NZJH_25_1_02.pdf)

<sup>146</sup> Roche, *History of New Zealand Forestry*, 14-44.

<sup>147</sup> Wilson, *History of Hawke's Bay*, 137 & 239.

and timber (mostly Kauri) was commonly imported from Auckland.<sup>148</sup> Furthermore, housing was often prefabricated in Auckland and shipped to Napier.<sup>149</sup> Following the purchase of Māori lands south of Hastings, the rate of native timber logging rose substantially giving aspiring farmers a much needed source of development capital.<sup>150</sup> At the same time, a local timber market developed. From around 1885 sawn timbers and raw logs were railed from southern and central Hawke's Bay to Napier and Hastings<sup>151</sup> and by 1900 as many as eight mills were in operation in the Takapau district alone.<sup>152</sup> Most of these mills were supplied with native trees from Seventy Mile Bush to the south of the province.<sup>153</sup> In what was a symbiotic relationship with aspiring farmers, Roche notes that mills in the area "secured much of their timber from settlers and not from Crown forests."<sup>154</sup> The sale of private cutting rights thus facilitated the clearance of land for future pasture and provided farmers with both labouring work and the development capital needed by the rapidly growing pastoral sector.<sup>155</sup>

---

<sup>148</sup> Ibid, 377. Also see - Roche, *History of New Zealand Forestry*, 62.

<sup>149</sup> Colenso's home on Napier Hill is a case in point. Author in discussion with current occupants of Colenso's home, April 28<sup>th</sup>, 2016.

<sup>150</sup> Wilson, *History of Hawke's Bay*, 377 & 378. Hawke's Bay native forests comprised mixed stands of Rimu, Totara, Matai, Red Beech, and Kahikatea.

<sup>151</sup> Ibid, 306 & 307. Transport costs were extremely important to the economics of logging at the time. For example, it was claimed that it was cheaper to transport timber from the Baltic States to Auckland than from the central North Island (Ohakune). See Roche, *History of New Zealand Forestry*, 249.

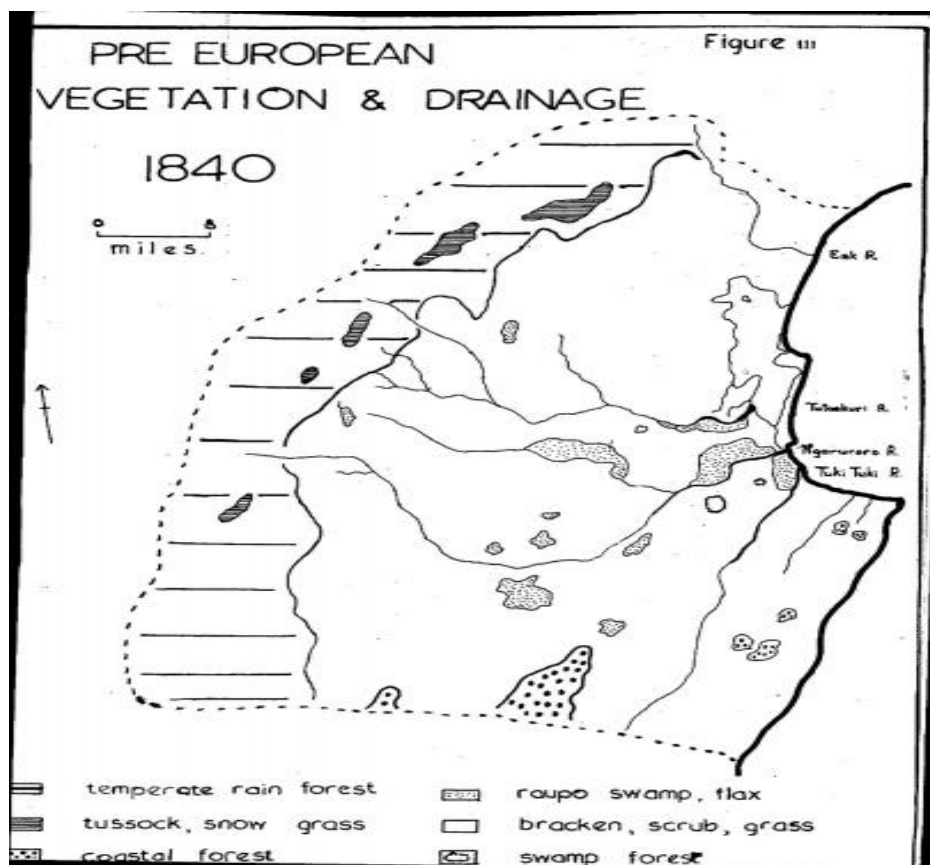
<sup>152</sup> Ibid, 378.

<sup>153</sup> Ibid, 377 & 378. Seventy Mile Bush (Te tapere nui o Whatonga) is often referred to as Forty Mile and/or Ninety Mile Bush. However, there were three distinct blocks albeit sections of a contiguous body. Ibid, 165.

<sup>154</sup> Roche, *History of New Zealand Forestry*, 438.

<sup>155</sup> Ibid. It should be noted that relations between farmers and foresters were often antagonistic due to competition for the best land. However, pastoralists tended to dominate. See Roche, *History of New Zealand Forestry*, 10.

Figure 1.2: Hawke's Bay Province: Pre-European Vegetation & Drainage.



Source: A.C Yule, "An Historical Geography Of Hawke's Bay Region," (M.A thesis, Canterbury University, January 1958), 8.

After 1900, the focus of Hawke's Bay forestry began to switch from coastal forests in the south towards temperate rain forests in the north. As urban areas grew, sawmills were constructed in Napier<sup>156</sup> and Hastings<sup>157</sup> and by the early 1900s native timber mills were located at Lake Tutira,<sup>158</sup> Tikokino, Tiratu, Tamaki,<sup>159</sup> Piripiri and Kereru.<sup>160</sup> Cutting proceeded at a ferocious rate and by 1905 much of the forest between Takapau and Dannevirke had been cleared.<sup>161</sup> As the southern forests dwindled, millers moved to locations further in the interior and underpinned by exports of Matai timber to Australia,

<sup>156</sup> Michael Roche, "Holt, Robert," Te Ara - the Encyclopedia of New Zealand, last modified October 30<sup>th</sup>, 2012, <http://www.TeAra.govt.nz/en/biographies/2h47/holt-robert>

<sup>157</sup> Ammundsen (ed), *From Swamp to City*, 27 & 28.

<sup>158</sup> "The Mohaka ki Ahuriri Report, 2004, section 19.4.2 (Forestry)," Waitangi Tribunal, last modified May 11<sup>th</sup>, 2004, <http://www.justice.govt.nz/tribunals/waitangi-tribunal/Reports/wai0201/Chapt19#H201.19.4.2>

<sup>159</sup> Wilson, *History of Hawke's Bay*, 307.

<sup>160</sup> "Holt, Robert."

<sup>161</sup> Wilson, *History of Hawke's Bay*, 307.



backcountry mills were built at Puketitiri in 1896, 1906 and 1924,<sup>162</sup> Te Pohue (1900), Te Haroto (1920) and Kaiwaka (1922).<sup>163</sup> In addition, the Gardner mill at Te Haroto was greatly expanded in 1936.<sup>164</sup> Although the 1931 earthquake stimulated timber demand, there were fewer than twelve native timber mills in the province in 1937 due to resource depletion and the inaccessibility of remaining native forests, most of which was located on the mountainous periphery of the province.<sup>165</sup>

After stalling during the 1930s, the timber industry in Hawke's Bay benefited greatly from WW2.<sup>166</sup> Despite indications native forests were close to depletion,<sup>167</sup> large areas of Hawke's Bay's interior were milled to meet wartime needs.<sup>168</sup> The consequent sale of native timber logging rights by the State Forestry Service during WW2 reflected the absence of exotic forests in the province<sup>169</sup> as well as the fact the New Zealand construction industry relied extensively on supplies of domestic timber throughout the war.<sup>170</sup> Defence related construction accelerated from 1939 and peaked in 1942/43.<sup>171</sup> Spending thereafter gradually declined and by 1945/46 defence construction had returned to pre-war levels.<sup>172</sup>

Although native timber logging continued throughout WW2, it had been apparent for decades that the destruction of native forest in Hawke's Bay was environmentally unsustainable.<sup>173</sup> By the mid-1930s, forests had been cleared to an average altitude of 600m (2,000 feet) and the resulting run off contributed to floods that degraded valuable

---

<sup>162</sup> Wright, *Hawke's Bay – The History of a Province*, 151.

<sup>163</sup> "Mohaka ki Ahuriri Report 2004. Section 19.4.2 (Forestry)." For locations see Figure I1.

<sup>164</sup> Ibid.

<sup>165</sup> Wilson, *History of Hawke's Bay*, 378. Environmentalists of the period, such as Guthrie Smith, questioned the sustainability of native logging. Wright, *Hawke's Bay – The History of a Province*, 151 & 152.

<sup>166</sup> "History of Carter Holt," Carter Holt Harvey Ltd, accessed April 28<sup>th</sup>, 2016, <http://www.referenceforbusiness.com/history/Ca-Ch/Carter-Holt-Harvey-Ltd.html>

<sup>167</sup> L.M Ellis, "Afforestation," *Auckland Chamber of Commerce Journal*, Vol.1, No.1 (1925): 3. Afforestation projects had been mooted since 1925 with government plans to plant 25,000 acres in Hawke's Bay.

<sup>168</sup> P.J Grant, *Hawke's Bay Forests of Yesterday* (Havelock North: P.J Grant, 1996), 60 & 218. Grant argues that the destruction of Hawke's Bay's coastal forests was mostly due to natural phenomena such as gales, (naturally started) fire and sedimentation rather than deliberate burning by early inhabitants.

<sup>169</sup> Wilson, *History of Hawke's Bay*, 216.

<sup>170</sup> Baker, *War Economy*, 222.

<sup>171</sup> Ibid, 229.

<sup>172</sup> Ibid, 230.

<sup>173</sup> Herbert Guthrie Smith, *Tutira: The Story Of A New Zealand Sheep Station* (Edinburgh and London: William Blackwood and Sons, 1921), Chapter 3. Guthrie Smith makes numerous references to the problem of accelerated erosion.

farmland on the lowland Heretaunga plains.<sup>174</sup> Despite early drainage and flood protection measures, the destructive 1938 flood highlighted the need for political cohesion and the Hawke's Bay Catchment Board was constituted on September 23<sup>rd</sup>, 1943.<sup>175</sup> Shortly thereafter, a proposal was made to plant exotic forests in the province commencing in the Esk Valley<sup>176</sup> and Gwavas Forest.<sup>177</sup> Although plantation forestry gained momentum after 1943, the Hawke's Bay's timber industry continued to rely on native forests.<sup>178</sup> In 1945, 97,218 acres of native forests remained in Hawke's Bay but the exotic forestry estate was negligible in size.<sup>179</sup> Although a small amount of private forestry investment occurred prior to 1939, as part of the Forestry Encouragement Loan scheme, no more than 2,000 acres was planted.<sup>180</sup>

### Viticulture (1870-1945): an infant industry struggles for traction.

The wine industry in Hawke's Bay has a very clear starting point and one essential participant. The first grape vine plantings occurred at Pakowhai in 1851 on a small plot of land owned by Society of Mary missionaries.<sup>181</sup> Production was on an extremely small scale (for sacramental use only) but these initial vines produced the rootstock for subsequent plantings when missionaries relocated to a larger block at Meeanee in 1858.<sup>182</sup> In 1871, the first wine sales in Hawke's Bay were made at what is now known as the Marist Brothers

<sup>174</sup> Ibid, 43. Also see - Roche, *History of New Zealand Forestry*, 137. Roche notes that cutting rights to Crown forests were issued with relative promiscuity. Such was the belief in pastoral farming that bush clearance was regarded as "noble work."

<sup>175</sup> "Hawke's Bay Catchment and Regional Water Board," Central Archives, accessed May 15<sup>th</sup>, 2016, <http://archivescentral.org.nz/agencies/topics/show/128952-hawkes-bay-catchment-board-and-regional-water-board>. The establishment of the Catchment Board in 1943 was the beginning of archival sources concerning rural land use and valuations. Note that erosion was a national issue which had prompted the Soil Conservation and Rivers Control Act (1941).

<sup>176</sup> "The Mohaka ki Ahuriri Report 2004, section 19.4.2 (Forestry)." Small, privately owned forestry plantings were undertaken prior to this. See – Roche, *History of New Zealand Forestry*, 137. Roche notes that as early as 1889 small areas of Hawke's Bay forest had been reserved. The overwhelming theme was, nevertheless, deforestation.

<sup>177</sup> Ibid, 217. 'Gwavas' was a failed returned soldier/farmer project. The area proved unsuitable for pastoral endeavours, an excellent example of how plantation forestry was regarded as a second-best option reserved for the very worst of lands.

<sup>178</sup> Ibid, 216.

<sup>179</sup> NZOYB, 1946, Chapter 18, section 16a.

<sup>180</sup> *Hawke's Bay Regional Resource Survey*, 109.

<sup>181</sup> Sweet, *Wine: Stories from Hawke's Bay*, 12.

<sup>182</sup> Ibid, 13.

Mission Vineyard ('Mission').<sup>183</sup> Although the size of the 'Mission' winery was diminutive, Marist missionaries can, nonetheless, justifiably claim to have established the first commercial winery in the country.

The decades that followed were years of consolidation for both 'Mission' and the Hawke's Bay wine industry. The Temperance movement was a growing force, and lacking either a cultural or historical link with wine, British settlers in Hawke's Bay had a strong preference for locally brewed beer.<sup>184</sup> Fortunately, a rotation of winemakers from Europe resulted in constant quality improvements and three Mission wines were awarded silver medals at the 1892 Paris Exhibition.<sup>185</sup> 'Mission' remained the sole vineyard in the province until the early years of the 1890s when Bernard Chambers and Henry Tiffen planted vineyards at Te Mata and Greenmeadows respectively.<sup>186</sup> In 1895, Romeo Bragato, regarded as the founding father of the New Zealand wine industry, commended the region on its excellent grape growing potential<sup>187</sup> and in 1896, with such potential in mind, 'Mission' purchased a 600 acre grape block at Church Road, Greenmeadows from Tiffen's estate.<sup>188</sup> The potential identified by Bragato attracted new entrants. In 1897, Bartholomew Steinmetz established a five-acre vineyard at Greenmeadows and in 1902 the Te Mata vineyard employed its first dedicated wine maker.<sup>189</sup> In the same year Bragato took control of all experimental, government-controlled vineyards located in Hawke's Bay<sup>190</sup> and in 1904 he established the Arataki Vineyard as part of a push by the Department of Agriculture in favour of new primary industries.<sup>191</sup> Other development followed. In 1905, the Vidal family,

---

<sup>183</sup> Ibid.

<sup>184</sup> Ammundsen (ed), *From Swamp to City*, 35. The Leopard Brewery was sold to Fraser & Neave and Malaysian Breweries and subsequently folded into Dominion Breweries in 1956.

<sup>185</sup> Sweet, *Wine: Stories from Hawke's Bay*, 16.

<sup>186</sup> Ibid. 16-19. Tiffen, a former New Zealand company surveyor, had extensive interests in shipping. His Greenmeadows vineyard was reputedly the largest in New Zealand at this time.

<sup>187</sup> Ibid, 21. Bragato was employed by the New Zealand government to assess the potential for a wine industry.

<sup>188</sup> Ibid, 16 & 18. The Seminary was moved from Meeanee to Church Road, Greenmeadows in 1909. Tiffen's estate was inherited by his niece, a devout Baptist, and in 1923 the original Tiffen vineyard was dismantled

<sup>189</sup> Ibid, 33 & 19. Steinmetz is believed to have paid £100 pounds/acre. Winemaker: J.O Craikie.

<sup>190</sup> Bronwyn Dalley, "Wine - Industry expansion, 1890s–1910s," *Te Ara - The Encyclopedia of New Zealand*, last modified July 13<sup>th</sup>, 2012, <http://www.TeAra.govt.nz/en/wine/page-3>.

<sup>191</sup> Ibid.

formerly of Whanganui, established a winery in central Hastings<sup>192</sup> and in 1908 the Te Mata Winery became the largest in New Zealand.<sup>193</sup>

Viticulture, a small but vibrant industry in 1908, encountered declining political support and climatic disaster in the lead up to WW1. In 1917, Prime Minister William Massey, in a heated parliamentary speech, described wine made by Dalmation immigrants as “Austrian Wine” and portrayed the product as “demoralising and sometimes maddening.”<sup>194</sup> In the same year, after a run of poor vintages due to frost and faced with rising offshore competition as well as a strident prohibition lobby, the Chambers family leased their Te Mata vineyard and exited the industry.<sup>195</sup> Together these events led to a severe decline in confidence, and in 1920 the size of the New Zealand wine industry (253 acres) was substantially smaller than pre-war years (594 acres).<sup>196</sup>

Signs of recovery emerged after World War One, but the revival remained embryonic, a reflection of economic depression and natural calamity. The return of ex-servicemen fostered a more permissive environment for alcohol after 1918.<sup>197</sup> Consequently, the inter-war years were faintly better for market leader, ‘Mission.’<sup>198</sup> Sales at the Marists’ Greenmeadows vineyard continued to expand, reaching 5,200 gallons in 1928.<sup>199</sup> Success was not, however, universal. Other Hawke’s Bay wineries continued to struggle and the Te Mata winery was dismantled in 1930.<sup>200</sup> The 1931 Hawke’s Bay Earthquake created an additional challenge. ‘Mission’ suffered extensive damage in the first quake and again in May 1932 following an after-shock.<sup>201</sup> It took almost a decade before sales eclipsed 1928 levels.<sup>202</sup> The 1930s Depression was tough for all primary producers and viticulture was no exception. Unfortunately, the wine industry entered the

---

<sup>192</sup> Sweet, *Wine: Stories from Hawke’s Bay*, 23.

<sup>193</sup> “Wine - Industry expansion, 1890s–1910s.”

<sup>194</sup> “Auckland’s 175<sup>th</sup> anniversary: The Dalmatians and their wine,” *New Zealand Herald*, March 28<sup>th</sup>, 2015, accessed 16<sup>th</sup> July, 2016, [http://www.nzherald.co.nz/nz/news/article.cfm?c\\_id=1&objectid=11424285](http://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=11424285). Also see - Sweet, *Wine: Stories from Hawke’s Bay*, 24.

<sup>195</sup> *Ibid*, 19.

<sup>196</sup> *NZOYB*, 1916, Chapter 17, section XVII, “Area in cultivation and in occupation, 1915-16” & *NZOYB* 1920, Chapter 16, section XVI, “Area in cultivation and in occupation, 1919-20.”

<sup>197</sup> Sweet, *Wine: Stories from Hawke’s Bay*, 24.

<sup>198</sup> *Ibid*, 29.

<sup>199</sup> *Ibid*. Approximately 55,000 litres.

<sup>200</sup> *Ibid*.

<sup>201</sup> *Ibid*.

<sup>202</sup> *Ibid*. Sales totalled 5,500 gallons in 1941.

period on the ‘back foot’ as interest in the sector had been waning since the end of the war.<sup>203</sup>

In the 1930s the New Zealand government ‘rediscovered’ the wine industry, a change that underwrote a mild recovery. Awareness by central government as to the potential of New Zealand wine saw the introduction of import tariffs in 1935.<sup>204</sup> The policy acted as a crucial ‘circuit breaker’ that gave Hawke’s Bay winemakers a much needed boost.<sup>205</sup> Protection was helpful for incumbents but a mere three vineyard/winery businesses existed in 1939 and for contract growers, grapes were often a side-line to their main income - orcharding and/or cropping for Watties.<sup>206</sup> But importantly tariffs gave existing wineries the confidence to make new investments and in the early 1940s Tom McDonald, one of the few wine industry survivors of the 1930s, added to his existing vineyard to create a contiguous eighteen acre block in Greenmeadows.<sup>207</sup> Although subsequently sold to Ballins’ Brewery, the name McDonald would in time become synonymous with the wine industry in both Hawke’s Bay and New Zealand.<sup>208</sup>

**Table 1.5. Hawke’s Bay viticulture: productive structure, 1945.**

Land use activity	Area (HA)	Production (estd)	Tonnes & litres/HA	Cases (12x750ml)
Wine grapes	59	36,540 imperial gallons (est.) <sup>209</sup> = 166,114 litres.	3.744 tonnes/ha 2,815 litres/ha	18,457 cases

Sources: Sweet, *Wine: Stories from Hawke’s Bay*, 29, 33, 42-45 & NZOYB, 1946, Chapter 19, section 17b.

World War Two gave Hawke’s Bay viticulture a further lift but the sector remained a cottage industry. Wartime demand was such that by 1942, ‘Mission’ had fully recovered

<sup>203</sup> Bronwyn Dalley, “Wine – Industry in Flux, 1910s-1960s,” Te Ara - the Encyclopedia of New Zealand, last modified July 13<sup>th</sup>, 2012, <http://www.teara.govt.nz/en/wine/page-4>. The New Zealand Viticultural Association, formed in 1911, went into recess between 1918 and 1939.

<sup>204</sup> “Wine – Industry in Flux, 1910s-1960s.”

<sup>205</sup> Sweet, *Wine: Stories from Hawke’s Bay*, 34.

<sup>206</sup> Ibid.

<sup>207</sup> Ibid, 33 & 34. Vineyard land was not well sought after. Prices were little more than £13/acre in 1938 – a level less than a quarter of the 1870s.

<sup>208</sup> Ibid, 35.

<sup>209</sup> ‘WINES OF NEW ZEALAND,’ Bernard John Foster, A.H McIntock (ed), An Encyclopaedia of New Zealand, accessed November 22<sup>nd</sup>, 2016, <http://www.TeAra.govt.nz/en/1966/wines-of-new-zealand>. New Zealand wine production in 1939/40 was an estimated 174,000 gallons. Hawke’s Bay accounted for circa 21% of the national vineyard area of 676 acres - NZOYB, 1946, Chapter 19, section 17b (assumes 1,000 litres requires 1.33 tonnes of grapes).

from the disastrous inter-war years.<sup>210</sup> Troops based in New Zealand provided a very useful market and other Hawke's Bay wineries including Vidal, Glenvale and Brookfields actively sought out and supplied US forces.<sup>211</sup> Quality was not a priority. US soldiers would reputedly drink "anything ... from boot polish to beer" and wineries employed 'sly-groggers' to avoid detection.<sup>212</sup> Consequently, production at the conclusion of WW2 was oriented towards liqueurs and fortified wines as opposed to higher quality table wines.<sup>213</sup> In 1946, demand for fortified products was so strong that 'Mission' suspended sales for ten months due to low stock levels.<sup>214</sup> Production nevertheless remained small in scale with low productivity and little in the way of mechanisation and effective spray schedules. In 1945, cropping levels were little less than four tonnes per hectare (ha) against modern standards of close to 15 tonnes/ha.<sup>215</sup>

### Hawke's Bay economic history (1840-1945) with reference to von Thunen's "Isolated State" theory.

An adapted version of Johann Heinrich von Thunen's "Isolated State" aids analysis of Hawke's Bay economic history, 1840-1945.<sup>216</sup> Although von Thunen's model assumed a land locked state with no exports and transport costs that did not vary with distance, his hypothesis that the intensity of agricultural production declines as the distance from market increases provides an elegant means by which to outline the economic history of Hawke's Bay province prior to 1945.<sup>217</sup> In the period that preceded the arrival of Ngāti Kahungunu, Hawke's Bay is best described as wilderness. Although small numbers of Māori already lived in the province, the influx of peoples from the north resulted in greatly increased levels of hunting and trapping, activities typical to von Thunen's second phase of development (exploitation). Phase two of the model can be extended to include the arrival

---

<sup>210</sup> Sweet, *Wine: Stories From Hawke's Bay*, 29. 1942 production reached 8,000 gallons. By 1942, sacramental production was immaterial compared to commercial sales.

<sup>211</sup> Ibid, 42.

<sup>212</sup> Ibid.

<sup>213</sup> Ibid, 42-45. After the war quality began to improve and Williams planted grapes for table wines in 1946.

<sup>214</sup> Ibid, 29.

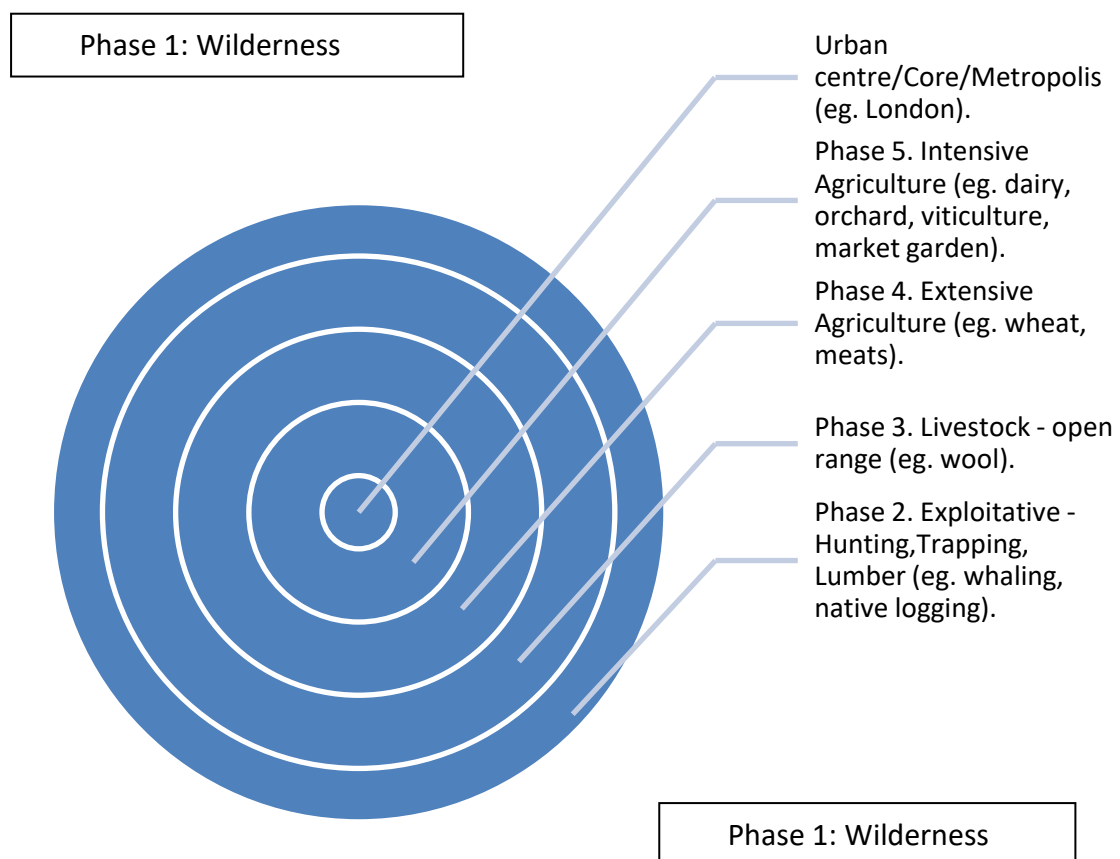
<sup>215</sup> Ibid, 29, 33 & 44. Mission produced 8,000 gallons in 1942. Brookfields produced a maximum of 10,000 gallons. Together Vidals, Glenvale, Steinmetz and others are assumed to have produced no more than 5,000 additional gallons.

<sup>216</sup> Von Thunen, *von Thunen's Isolated State*. The model sought to account for the pattern of agricultural activities surrounding pre-industrial German cities.

<sup>217</sup> Ibid, 8.

of European whalers and early settlers whose development model was similarly based on existing natural resources, albeit on a greatly increased level of exploitation. Phase Two lasted to around 1840 when open range sheep farming and exports of wool to London commenced, a match with the third stage of von Thunen's model. But by the late 1870s Phase Three was largely exhausted, and from the early 1880s a fourth stage of agricultural development commenced in the form of frozen sheep meat exports. To von Thunen, wheat was the classic example of the extensive agricultural phase but as a perishable foodstuff, sheep meat has many of the same characteristics. From the early 1900s, a fifth stage of agricultural development emerged, one that lasted to approximately 1945. Phase five was typified by the export of intensive agricultural products from the horticultural and arable sectors (both fresh and canned). Although wartime demand from US forces was significant, the foremost market for the primary products remained the United Kingdom with London emblematic as the Metropolis.

**Figure 1.3. Von Thunen's "Isolated State." Schematic model of Hawke's Bay agricultural development prior to 1945.**



Source: Johann Heinrich von Thunen (1826).

Importantly, apart from the unsustainable practise of whaling, staples of preceding phases were not necessarily surpassed or replaced by those of latter periods in Hawke's Bay. As a result, livestock farming as well as extensive and intensive agriculture existed alongside each other, albeit that each sector competed for the best land. Furthermore, it is worth noting that one of Hawke's Bay's most important primary activities, forestry/timber, is a less comfortable fit with von Thunen's model. Exploitation of the province's native forests continued unabated in 1945. As such, forestry did not exit the second phase of von Thunen's model (exploitation) until after the commencement of plantation plantings and the practical exhaustion of native forests. Similarly, apart from small exports of native timber to Australia, exports of forestry products were minimal and the sector did not engage at all with the then dominant Metropolis (the UK).<sup>218</sup> Consequently, in 1945, forestry was effectively marooned in Phase Two of von Thunen's model.

What then brought the majority of Hawke's Bay's primary industries ever closer to the core of von Thunen's model – the Metropolis? The answers: enhanced transport links and the application of new technologies, both of which lowered costs relative to those of British agriculture. Peet emphasised the importance of "innovation in transport" when he considered a dynamic version of von Thunen's land use model and investment in both shipping and ports played a vital role in the development of Hawke's Bay agriculture.<sup>219</sup> The inner harbour at Ahuriri provided the initial impetus but access to global distribution channels greatly improved following the construction of a deep-water port in Napier. Consequently, products such as pip-fruit were able to access the shipping routes pioneered by the wool and frozen meat trades. Technological developments such as refrigeration, cool stores and canning technologies were of comparable importance. These innovations greatly lengthened the storage period of perishable foodstuffs thereby further ameliorating the economic disadvantages of isolation. In this way, transport improvements, wedded to new technologies, extended the hinterland of the Metropolis

---

<sup>218</sup> Roche, *History of New Zealand Forestry*, 163.

<sup>219</sup> Richard Peet, "Von Thunen Theory and the Dynamics of Agricultural Expansion," *Explorations in Economic History*, Vol.8, Issue 2 (1970): 181.



to include ever more sectors of the Hawke's Bay agricultural economy, a theme that captures the essence of the province's economic history prior to 1945.<sup>220</sup>

## Conclusion.

A distinct province from the 1850s, Hawke's Bay provides an excellent basis upon which to explore numerous aspects of New Zealand economic history and specifically the role and evolution of its primary industries.<sup>221</sup> Most importantly, the formative economic history of the province is a story of land based primary production based on the comparative advantage of a climate conducive to the production of temperate zone soft commodities (foodstuffs and natural textiles). Given the dominance of sheep, pastoral farming was clearly the largest sector, but horticulture, viticulture and forestry rounded out a diversified portfolio of land-based staples. Although forestry differed in terms of sustainability, Hawke's Bay's suite of primary industries shared a crucial commonality – a land centric development model.

The existence of a Metropolis was crucial to the province's early development. A dynamic interpretation of von Thunen's model shows that the intensity of engagement between isolated settler economies and the core (or Metropolis) is heavily dependent on the effectiveness of transport. Investment in port infrastructure enabled the Hawke's Bay economy to move from a state of wilderness to intensive agriculture in 100 years. The provision of capital from the Metropolis was of equal importance. The two most significant industrial developments in the province prior to 1945, meat refrigeration and canning, gained greatly from British and American investment. Similarly, many of the early run holders relied on family monies from Britain. Although a group of early settlers comprised a landowning elite, greatly increased numbers of smaller sized, family farms emerged in the early 1900s as dominant estates were broken up. Disaggregation, which amplified an existing trend in favour of agricultural intensification, coupled with strong demand from the

---

<sup>220</sup> William Cronon, *Nature's Metropolis: Chicago and the Great West* (New York: W.W Norton & Co, 1991). Belich, *Replenishing the Earth*. Use of the term 'Metropolis' is a deliberate acknowledgement of Cronon and Belich and the belief that London and New York underpinned both the settler revolution and the subsequent rise of the two-pair Anglo world - the British West and the American West.

<sup>221</sup> An omission should be noted. One of the key components of the New Zealand primary sector – dairy – has never been a large part of the Hawke's Bay economy due to the relatively dry climate.

Metropolis for Hawke's Bay products, enabled the provincial economy to move rapidly through all stages of von Thunen's model.

To the extent that rapid development reflected the strength of business cash flows, staples production was highly profitable which in turn provided the capital required for the adoption of new technologies and processes. Examples included refrigeration, cool stores, distributed electricity, canning machinery and improved rootstocks. At the same time, entrepreneurial and innovative capabilities were extremely strong. Furthermore, Hawke's Bay agriculture was well placed to benefit from post-war recovery.<sup>222</sup> Crucially, in 1945 the province's primary sector was fully intact. Consequently, the province entered the post-war era in a highly advantageous position relative to European competitors. Similarly, investments in the food processing sector during WW2 gave participants the advantage of modern machinery. But it is equally noticeable that these positives occurred within the general bounds of individual primary cylinders. Cross sector linkages existed but these were largely restricted to agricultural services and related industries meaning economic diversification was limited in 1945.

Finally, although von Thunen's model is not essential to this thesis, it provides useful context and consequently it is worth re-emphasising that the settler economy of 1870s and that of 1945 share two important economic commonalities: the land-centricity of development and the continued dominance of staples. A gradual process of economic diversification occurred after 1870 but the structure of the provincial economy remained largely unchanged in 1945. Although a secondary processing sector was firmly in place it was focused on food manufacturing and thus relied on the primary sector for feedstock.

---

<sup>222</sup> Prime horticultural blocks on the Heretaunga Plains were priced around \$100/acre in 1945, little changed on pre-war levels.



# Chapter Two: Hawke's Bay Rural Land Use & Land Prices 1945-2010.

---

## Introduction.

This chapter examines land use patterns and rural land prices in Hawke's Bay from 1945 to 2010 and places these in the context of major political and economic events such as commodity cycles, UK membership of the European Economic Community (EEC) and economic reforms during the 1980s. Discussion of land use change requires the consideration of long periods of time. For example, once an orchard investment has been made it is more than likely the trees will remain in place until they reach the end of their biological life cycle, which in many cases exceeds twenty-five years. Despite the inevitable inertia of land use change, Chapter Two will use statistical intervals of five and/or ten years. The decision to use shorter periods reflects a desire to track the impact of major political and economic events on land prices which are more immediately responsive than land use.

Historical analysis of rural land values is important as capital appreciation is a key element of total farm returns and a driver of land use change and diversification, both of which provide a way for farmers to maximise the worth of their land. Chapter Two argues that land use change in Hawke's Bay has been substantial since 1945, a reflection in part of the province's bountiful soils and a climate that permits a wide range of agricultural activities on the same parcel of land. Furthermore, evidence in Chapter Two suggests that economic conditions, such as expected and real commodity prices, and government policies have been influential drivers of both land use change and valuation. It is equally apparent that agricultural land in Hawke's Bay delivered comparatively strong investment returns between 1945 and 2010.

Key primary sources used in this chapter include New Zealand Official Year Books and the archives of the New Zealand Valuation Department in Napier and those of Statistics New Zealand in Wellington. In several instances the archives of both have been synthesised to create new historical data. Secondary sources of importance in the chapter include

McAloon and Gribble<sup>1</sup> Local newspapers and industry publications have also been consulted.

### Data collection – explanatory notes.

A variety of useful archives are available but regional land use statistics are completely absent in the earliest periods under review and irregular in more recent decades. For example, horticulture was excluded from the 1999 agricultural production survey and data were not collected consistently from the mid-1990s to 2002.<sup>2</sup> Not surprisingly, Landcare Research (New Zealand’s largest geographical surveyor) suggests that “land use is always a bit of a challenge in this country since it is far more complex and variable than simple land cover AND getting information on what went on as far back as 1945 is very difficult. We are certainly not aware of any data prior to the 1970s.”<sup>3</sup> Furthermore, the Hawke’s Bay Catchment Board, predecessor to the Hawke’s Bay Regional Council (HBRC), did not undertake regional land use mapping.<sup>4</sup> Despite these difficulties, a combination of New Zealand Official Year Books (Year Books), HBRC records, industry sourced information, Statistics New Zealand archives and agricultural census data provide a means by which to assess land use patterns in the province, albeit the wide variety of source material leads to complexity.<sup>5</sup> Therefore, some brief explanatory notes have been provided in order to outline the processes adopted. As James Barringer of Landcare Research notes, an assessment of Hawke’s Bay land use since 1945 has not been undertaken before.<sup>6</sup>

### Pastoral Grazing.

As regional land use statistics in the two decades following WW2 are completely absent, estimates of the pastoral grazing area between 1945 and 1965 require a number of informed assumptions. Fortunately, the 1945 and 1946 Year Books provide a useful starting

---

<sup>1</sup> McAloon, *Judgements of All Kinds*; Ian W. Gribble, “Agricultural Productivity and Land Value.” *The New Zealand Valuers’ Journal*, Vol.27, No.1 (1986): 26-29.

<sup>2</sup> Lynne Mackie, Statistics New Zealand, e-mail to author, March 4<sup>th</sup>, 2016.

<sup>3</sup> James Barringer, Research Manager - Landcare Research, e-mail to author, March 15<sup>th</sup>, 2016.

<sup>4</sup> Ibid.

<sup>5</sup> An agricultural economics survey was run from 1981 to 1995. From 1981 to 1990 Statistics New Zealand conducted income and expenditure surveys for farm types not surveyed by either the Dairy Board or the New Zealand Meat and Wool Board Economic Service.

<sup>6</sup> James Barringer, in discussion with author, March 15<sup>th</sup>, 2015.

point as they describe the area of Hawke's Bay that was unimproved, in native grassland, native forest or fallow.<sup>7</sup> The geographically proven provincial area is 1.416m ha.<sup>8</sup> Subtracting the size of the aforementioned areas from this number, as well as those in horticulture, viticulture and arable uses, results in a balancing figure that approximates the pastoral estate (874,000ha) in 1945. Furthermore, Year Books indicate that the area of unimproved land increased by approximately 30,000ha between 1945 and 1955 and fell approximately 50,000ha between 1955 and 1960. Assuming these movements equate to matching oscillations in the size of the pastoral estate (as the dominant use) suggests a grassland area of approximately 847,000 ha in 1955 and approximately 898,000ha in 1965. After 1970, the availability of relevant statistics improved, and the 1975 Year Book provides the first statistical measure of the pastoral area of Hawke's Bay. The 1985 Year Book is similarly instructive as it confirms that the pastoral area peaked at approximately 925,000ha in 1983, just prior to the end of agricultural subsidies.<sup>9</sup> The source of the increase in the pastoral area that occurred between 1975 and 1985 is most likely unimproved but occupied land. In contrast, the plunge in the pastoral area that occurred after 1985 reflects the removal of these now uneconomic lands from production.

## Orchards.

Orchard data have been obtained from Year Books, Horticulture New Zealand and Statistics New Zealand. Importantly, reference to orchards includes pip-fruit, stone-fruit and summer-fruit. These sub-categories are consistent across periods and 'orchards' are used as a proxy for horticulture in the 1946, 1955 and 1966 Year Books. Unfortunately, due to the infrequent nature of agricultural surveys in New Zealand after 1965, archival statistics do not align with the discrete five-year periods outlined in Table 2.1. For example, the 1995 figure relates to 1996/97 season whilst the 2005 figure relates to the 2006/07 season. The same timing problem afflicts the 2010 figure which has been sourced from the 2012 New Zealand agricultural census. Another problem reflects the failure to collect detailed horticultural data in the mid-1980s. Consequently, it is necessary to make a number of informed assumptions when formulating the 1985 number. National hectares are available

---

<sup>7</sup> These figures were discontinued in 1960.

<sup>8</sup> Statistics New Zealand, *Hawke's Bay – A Regional Profile* (Wellington: Statistics New Zealand, 1999), 9.

<sup>9</sup> NZOYB, 1985, Chapter 15, section 14a.

for that year, but regional numbers are not. Fortunately, regional production numbers are available and from these it is possible to estimate the area of Hawke's Bay in orchard. As a means of cross check, these numbers approximate historical figures for the percentage of the national area located in the province. Despite these concerns, the figures shown in Table 2.1 represent reasonable estimates of land use by the orchard sector since 1945.

### Vegetable crops.

In order to present a coherent and consistent set of numbers for the area devoted to the vegetable sector, it has been necessary to restrict the category to vegetables for human consumption and/or processing. Importantly, for statistical purposes, land used for growing animal feed is classified as part of the pastoral estate.<sup>10</sup> As with other land use categories, data collection in the vegetable category suffers from the periodic and infrequent nature of agricultural surveys, most specifically 1995, 2005 and 2010. Furthermore, problems of incomplete data are present in the 1955 number (which uses survey data from both 1950 and 1955). Similarly, the 1975 data is from the 1972/73 season. The 1985 figure presents an altogether different challenge. Whilst the area dedicated to vegetables is available on a national basis, regional data were not collected. A further difficulty is that the detailed compilation of data was terminated in 1982 and did not recommence until 1997. As a result, it has been necessary to estimate the 1985 number based on figures from previous Year Books. Fortunately, a cross check is possible as approximately 60% of the national area allocated to vegetables was located in Hawke's Bay in that year. 1995 is another year that lacks comprehensive data and the figure shown represents a mix of numbers from 1997 to 1999. Similarly, 2005 and 2010 numbers partly reflect data from both the preceding and consequent year.

### Viticulture.

Data collection in viticulture shares many of the statistical challenges facing other land use categories: the cessation of data collection during crucial periods, most obviously the mid-1980s. Consequently, 1985 numbers are estimates, albeit partially backed by hard

---

<sup>10</sup> Includes maize, silage, barley, lucerne and oats.

data. It is fortunate that the area devoted to viticulture on a national basis is available in the 1985 Year Book and using Marlborough District Council data of the same year means it is possible to deduce the figure for Hawke's Bay. All other figures are sourced from a combination of Year Books and reports from New Zealand Winegrowers Inc. As a result, the numbers shown provide an excellent overview of growth in the Hawke's Bay wine industry since 1945.

### Forestry.

The 1969 *New Zealand Journal of Forestry* 14 (2), notes that large scale planting of exotic forests did not commence in Hawke's Bay until 1947.<sup>11</sup> Although "land had previously been set aside for afforestation at Mohaka in 1931, there was no major planting by the State in Hawke's Bay District until large-scale establishment commenced at Gwavas Forest in 1947, followed by Esk Forest (1950), Mohaka Forest (1960), and Kaweka Forest (1964)."<sup>12</sup> Consequently, the size of the planted area in 1945 was very small. From the mid-1970s, native logging was gradually replaced by plantation forestry. Unfortunately, statistics to back the assertion are not provided on a regional basis. Fortunately, the *New Zealand Journal of Forestry* provides a Hawke's Bay figure for 1969 and outlines the planting schedule completed in the previous three years (1,600 acres p.a) along with plans for the subsequent five years (5,000 acres p.a).<sup>13</sup> Working backwards it is possible to calculate the area of exotic forests in the province in 1965 and by working forward the number for 1975. Statistics New Zealand collected regional forestry numbers in 1985 but the survey was suspended shortly thereafter and did not restart until 1997. As a result, the 1995 figure relates to 1997. From this date forward the National Exotic Forestry Description (NEFD) was undertaken. The NEFD provides an extremely detailed account of Hawke's Bay regional forests, including an aged profile and tree planting by species. Nevertheless, the 2010 figure relates to the 2012 NEFD. Despite the misalignment, the data presented provide a most satisfactory means by which to assess growth in the area planted in exotic forestry from 1945 to 2010.

---

<sup>11</sup> Ian G. Trotman, "Species Siting in Hawke's Bay," *New Zealand Journal of Forestry*, Vol.14, No.2 (1969): 151.

<sup>12</sup> Ibid. Preceded by a small block at Gwavas in 1944.

<sup>13</sup> Ibid, 152 & 154.



## Rural land use in Hawke's Bay, 1945-2010.

Prior to 1945, growth in the Hawke's Bay agricultural estate relied on drainage improvements and the clearance of native forests, a trend particularly apparent in the pastoral category. But after 1945, two important changes occurred that capped the pastoral farming area. First, environmental pressures saw a greatly diminished level of native logging. Second, fertilisers, particularly the advent of aerial application, allowed existing farms to carry more stock thereby limiting the need for greater area.<sup>14</sup> The resulting intensification is apparent in stocking rates which continued to rise between 1945 and the early 1980s.<sup>15</sup> In 1983, as exotic forest planting gained traction, the agrarian area of the province reached an all-time high of 1.3 million ha.<sup>16</sup>

**Table 2.1. Estimated Agricultural Land Use: Hawke's Bay Province, 1945-2010 (Hectares).**

	1945	1955	1965	1975	1985	1995	2005	2010
Pastoral Grazing	874,000 (est)	847,000 (est)	898,000 (est)	879,000	757,000	729,000	667,000	617,000
Forest (exotic)	3,000	5,000	8,000	24,000	68,000	113,000	132,000	127,000
Orchards	1,178	1,462	1,581	3,819	7,076	7,959	7,352	6,837
Vegetable Crops	1,043	2,904	5,255	9,119	9,894	6,765	5,242	8,811
Viticulture	59	154	172	880	1,734	2,276	4,326	4,947
Other Ag	215,720	209,480	194,992	284,182	293,296	129,000	129,080	125,405
Agricultural Area *	1,095,000	1,066,000	1,108,000	1,201,000	1,137,000	988,000	945,000	890,000
Non-Agricultural	321,000	350,000	308,000	215,000	279,000	428,000	471,000	526,000

Sources: New Zealand Official Yearbooks (1945-2010), Statistics New Zealand, New Zealand Winegrowers, New Zealand Journal of Forestry. Non-agricultural includes unimproved land. Other Ag includes native grasslands & forests. \*2005 and 2010 are estimates based on changes in pastoral grazing and exotic forestry.

Land use change has been substantial since 1945. In a trend that first appeared in the late 1960s, and subsequently accelerated, the grazing area of Hawke's Bay fell sharply

<sup>14</sup> New Zealand Department of Agriculture, *Primary Production in New Zealand, 1957* (Wellington: Owen Publishing, 1957), 109. 359,000 tons of superphosphate fertiliser was applied to New Zealand farm land in 1930/31. By 1940/41 volume had risen to 678,000 tons. John Grenfell Crawford et al, *Wartime Agriculture in Australia and New Zealand 1939-50* (Stanford: Stanford University Press, 1954), 286.

<sup>15</sup> NZOYB, 1984, Chapter 15c & Table 2.2.

<sup>16</sup> Ibid, Chapter 15, section 14a.

after the mid-1980s whilst the exotic forestry estate continued to grow. Land use statistics on Table 2.1 do not, however, account for the entire decrease in the size of the grassland estate since 1985. A considerable amount of land was left fallow or retired from production following the cessation of agricultural subsidies. The fall suggests the pastoral sector was ‘over trading’ in the decades prior to the mid-1980s, an outcome most likely caused by artificially high minimum prices and incentives in favour of marginal land development.<sup>17</sup> Stocking rates per hectare also fell slightly but notably they did not collapse and the subsequent recovery in grassland intensity speaks to the adaptability and resilience of pastoral farming systems in the province (see Table 2.2). In the mid-1990s, the conversion of marginal farmland to forest slowed sharply, and between 2005 and 2010 the size of the exotic forestry estate fell slightly. Volatility is similarly apparent in other land use categories. Orchards grew rapidly after 1945 and peaked in 1995 but by 2010 the area was noticeably smaller. Similarly, vegetable growing has ebbed and flowed (marginally more flow than ebb). The category grew strongly until 1985 but slumped thereafter before staging a sharp recovery from 2005 onwards, and by 2010 the area devoted to all horticultural uses was not far off an all-time high. Similarly, viticulture hectareage reached a record in 2010 but, in common with other land use activities, growth has not been linear. The sector experienced a significant ‘blip’ in the mid-1980s but staged a substantial recovery from the late 1980s that led to a sharp rise in the area in grapes by 1995.

**Table 2.2. Pastoral stock numbers and grassland intensity: Hawke’s Bay, 1945-2010.**

Year	1945	1955	1965	1975	1985	1995	2005	2010
Sheep	4.49m	4.90m	6.07m	6.44m	6.28m	4.35m	4.05m	3.27m
Cattle	0.37m	0.53m	0.54m	0.77m	0.44m	0.53m	0.53m	0.49m
Dairy cows	0.05m	0.05m	0.06m	0.06m	0.01m	0.03m	0.08m	0.09m
Deer	nil	nil	nil	nil	0.03m	0.10m	0.12m	0.06m
Grassland intensity <sup>18</sup>	8.5	10.6	11.4	13.9	12.7	12.3	13.7	12.6

Source: New Zealand Official Year Books (1945-2010).

<sup>17</sup> This has historical precedent in New Zealand. Condliffe notes that rural land was inflated above underlying productive capacities during the land boom that ended in 1908. Condliffe, *New Zealand in the Making*, 253-257.

<sup>18</sup> Livestock intensity (stock units) based on 1 cow/deer = 7 sheep divided by the area of grassland.

## Hawke's Bay Rural Land Values, 1945-2010.

Rising land values, which create tax free capital gains, are an important component of total farm returns in New Zealand and compensate farmers for relatively small annual profits.<sup>19</sup> Therefore, both capital gains and profit are relevant when assessing the returns attributable to farming as well as accounting for the business behaviours engendered. Importantly, rural land values reflect fundamentals and non-fundamentals. Non-fundamentals, such as political decisions, can impact rural property markets significantly. For example, rural land controls (prices and sales) were introduced during World War Two and these remained in place until the early 1950s.<sup>20</sup> As far as fundamentals are concerned, cash flow is the most important. Finance theory holds that the value of an asset reflects the underlying cash flow, or net profit, derived from that asset discounted at an appropriate risk adjusted rate. Consequently, economic fundamentals such as commodity prices, exchange rates and interest rates contribute to farm profitability and hence influence farm valuations.

Technological progress and land use change are similarly important determinants of farmland values to the extent that innovation and new agricultural technologies stimulate both productive capacity and thus profitability. The link between technology and agricultural productivity is a theme with great historical resonance in New Zealand. Greasley and Oxley describe the way "higher productivity generated by the refrigeration-related pastoral boom was capitalised into higher land prices in the years prior to 1920."<sup>21</sup> The aerial application of superphosphate, the availability of which increased sharply when wartime restrictions ended in 1952, is a further example of the 'new technology' dynamic.<sup>22</sup> In New Zealand, the area of aerially top dressed farmland rose from 279,000 acres in 1950 to 2,783,802 acres in 1955.<sup>23</sup> The increased use of fertiliser, which stimulated output on most farms, coincided with a noticeable increase in rural land values in the early 1950s.<sup>24</sup> Alternative land uses are another fundamental. Although no two pieces of rural land are ever identical, land used for horticulture can, in a reasonably short time period, be

<sup>19</sup> Gribble, "Agricultural Productivity and Land Value," 26.

<sup>20</sup> Valuation Department of New Zealand, *Research Paper 72-2* (1972): 33.

<sup>21</sup> David Greasley and Les Oxley, "The Pastoral Boom, the Rural Land Market and Long Swings in New Zealand Economic Growth, 1873-1939," *The Economic History Review*, Vol.62, No.2 (May 2009): 327.


<sup>22</sup> Gribble, "Agricultural Productivity and Land Value," 27.

<sup>23</sup> Associated Press, "Aerial Top Dressing increases 1/3 in a Year," *Hawke's Bay Herald Tribune*, July 14<sup>th</sup>, 1955.

<sup>24</sup> *Ibid.* The per hectare value of Waikato dairy farms more than doubled between 1949 and 1954.

converted to other uses, such as viticulture, albeit this is likely only if alternative uses offer a higher return.

**Table 2.3. Hawke's Bay rural land values: 'all rural land' % movement & value per ha, 1945-2010.**

<u>Time period</u>	<u>Nominal</u>	<u>Inflation</u>	<u>Real</u>	<u>Actual/nominal</u>
1945-1950	-3.5%			
1951-1952	+231.8%	+47.3%	+181.0% (1945-1952)	\$46/ha
1953-1959	+57.2%	+25.8%	+31.4%	
1960-1964	+17.1%	+13.6%	+3.5%	
1965-1969	+38.6%	+21.7%	+16.9%	
1970-1974	+92.9%	+53.6%	+39.3%	
1975-1979	+118.2%	+92.0%	+26.2%	
1980-1984	+65.3%	+69.0%	-3.7%	
1985-1989	-22.3%	+60.6%	-82.9%	
1990-1994	+94.8%	+10.8%	+84.0%	
1995-1999	+32.4%	+6.1%	+26.3%	
2000-2004	+65.8%	+12.6%	+53.2%	
2005-2010	+23.5%	+19.3%	+4.2%	\$7,778/ha

Sources: New Zealand Official Year Books (1945-2010) , New Zealand Valuation Department (*Research Paper 83/4* (1983): 112, 125 & 108, Valuation New Zealand, *Rural Property Sales Statistics Half Year Ended June 1990*, 90 (all farm average of \$1,474/ha) & *Rural Property Sales Statistics Half Year Ended June 1995*, 84 (\$2,871/ha), Morice Ltd (Rural Report Period Ending January 2011), Reserve Bank of New Zealand inflation data. 1945-1952 numbers have been sourced from the NZOYB, 1956, Chapter 18, section 18, "Land Transfers," and are for New Zealand as a whole. Data from 1953-1969 have been sourced from Valuation Department of New Zealand, *Research Paper 72-2* (1972): appendix b(1), 72. Index reading was 1,000 in 1953 and 2,551 in 1969. Data from 1970-1994 have been sourced from Quotable Value New Zealand archives. The latter two sources relate to Hawke's Bay only. \$46/ha is the national average in December 1950 (1956 Year book).

Table 2.3 indicates that the nominal value of all rural land has risen strongly in Hawke's Bay since 1945. Similarly, the horticultural level of over \$50,000/ha reached in 2010 (see Table 2.4) must be seen in the context of prices paid in earlier decades. In contemporary terms, prime horticultural land in Pakowhai, near Napier, changed hands at \$100-\$120/acre (approx. \$247/ha) in 1945/46.<sup>25</sup> And in 1938, just before the imposition of land price controls, McDonald's Wines purchased five and a half acres of second grade

<sup>25</sup> Associated Press, "Is the Bubble in Land Values About to Burst," *Hawke's Bay Herald Tribune*, June 15<sup>th</sup>, 1960. Figures are expressed in contemporary terms to aid comparison between time periods.

grape land for \$67/ha.<sup>26</sup> These figures approximate those of Greasley and Oxley who found that “cultivated land” across New Zealand was valued around \$102/acre in 1929.<sup>27</sup> Importantly, Greasley and Oxley also note commonality between movements in the value of cultivated land and that of pastoral land in the period prior to 1945.<sup>28</sup> Another significant observation is that in nominal terms the rate of appreciation in rural land prices in New Zealand slowed significantly after 1979. In the decade from 1979 to 1989, prices per ha rose by a compound annual rate of 5.6%, substantially lower than the 13.7% rise between 1964 and 1974.<sup>29</sup> The slowdown in Hawke’s Bay was even sharper. From 1979 to 1989, the annual compound annual growth rate fell to 3.7%.<sup>30</sup>

**Table 2.4. Hawke’s Bay rural property values: price per ha, 2010.**

Land use Category	High	Low	Notes
Grapes – gravels (land & vine)	\$110,000	\$80,000	Light soils: prime grape land
Grapes – other (land & vines)	\$70,000	\$50,000	Heavy soils: less desirable
Orchards – land & trees	\$70,000	\$50,000	Pip-fruit
Cropping – prime	\$60,000	\$50,000	\$53,000 average
Cropping – secondary	\$40,000	\$30,000	
Cropping – third	\$25,000	\$15,000	
Pastoral - finishing	\$10,000	\$5,000	Median \$7,778/ha
Pastoral - breeding	\$7,000	\$2,500	
Forestry – pre 1989	\$3,500	\$2,500	Planted
Forestry – post 1989	\$2,300	\$1,000	Planted

Source: Morice Ltd, “Rural Report (Report Period Ending January 2011).” Cropping includes vegetables.

Unfortunately the discrete time periods shown in Table 2.3 understate change within respective decades, the most significant of which occurred during the 1980s. New Zealand rural land prices peaked at \$3,128/ha in 1983, a level that was not matched again until 1992 when they reached an average of \$3,178/ha.<sup>31</sup> From 1983 to 1989, farmland values fell 25% (to \$2,372/ha).<sup>32</sup> The decline is historically important as it exceeds the collapse in land prices that followed the speculative frenzy of the early/mid 1920s regarded as a precursor to the

<sup>26</sup> Sweet, *Wine: Stories from Hawke’s Bay*, 33 & 34. Based on the 1967 decimalisation conversion rate of \$2/£1.

<sup>27</sup> Greasley and Oxley, “The Pastoral Boom,” 335.

<sup>28</sup> Ibid.

<sup>29</sup> *Research Paper 83/4* (1983): 114, *Research Paper 85/4* (1985): 125, *Research Paper, 90/2* (1989): 110.

<sup>30</sup> *Research Paper 90/2* (1989): 108.

<sup>31</sup> Valuation New Zealand, *Rural Property Sales Statistics, Half Year Ended 30<sup>th</sup> June 1997*: 93.

<sup>32</sup> Ibid.

Great Depression.<sup>33</sup> The impact on specialist livestock properties was particularly extreme. Nationally, land values in the sector fell from \$12,948/ha in 1983 to a low of \$8,607/ha in 1988, a fall of 33.5%.<sup>34</sup> The decline was significant enough to threaten the equity that had been accumulated by several generations of sheep and beef farmers. As flexibility of rural land use is a key determinant of capital value, grazing farms, particularly those on hill country, suffered greater capital losses than multi-use properties on river valleys and plains.

Despite slowing appreciation rates after the late 1970s, the increase in Hawke's Bay rural land values between 1945 and 2010 exceeded inflation by a very wide margin. Similarly, returns are comparable if not better than alternatives. Based on a price of approximately \$247/ha in 1945 and \$53,000 in 2010, prime horticultural land on the Heretaunga plains delivered a nominal, compound, annual growth rate (CAGR) of +8.6% p.a.<sup>35</sup> The comparable figure on an 'all land' basis, which includes lower value hill country properties, was +8.1% p.a. Reserve Bank of New Zealand figures over the same period indicate that inflation averaged 5.7% p.a.<sup>36</sup> Real returns have, therefore, averaged 2.9% p.a. for horticultural land and 2.4% p.a. for hill country land. Returns from grape land are likely even greater based on the 1938 transaction levels described above. Returns are comparable to those of alternative investments. First, Gribble's analysis of Waikato dairy land indicates that real returns of 2.4%-2.9% p.a. compound were not uncommon for New Zealand rural land after 1945.<sup>37</sup> Second, over the very long term, New Zealand listed equities have returned just under 10% p.a. (nominal, dividends reinvested) and New Zealand Government Bonds have posted an average annual return of 5.8% p.a.<sup>38</sup> Given the general absence of capital gains tax in New Zealand, these comparatives understate the relative investment performance of rural land in Hawke's Bay.

---

<sup>33</sup> Malcolm McKinnon, *The Broken Decade – Prosperity, depression and recovery in New Zealand 1928-39* (Dunedin: Otago University Press, 2016), 28.

<sup>34</sup> *Rural Property Sales Statistics, Half Year Ended 30th June 1997*, 77.

<sup>35</sup> Compound calculation based on [http://www.moneychimp.com/calculator/discount\\_rate\\_calculator.htm](http://www.moneychimp.com/calculator/discount_rate_calculator.htm). Cross checking this rate of appreciation with the cumulative figures shown on Table 2.3 reinforces the accuracy of this calculation.

<sup>36</sup> "Inflation Calculator," Reserve Bank of New Zealand, accessed February 27<sup>th</sup>, 2017, <http://www.rbnz.govt.nz/monetary-policy/inflation-calculator>

<sup>37</sup> Gribble, "Agricultural Productivity and Land Value," 27.

<sup>38</sup> "Global Investment Returns Yearbook, 2010," Credit Suisse, last modified February 2010. <http://media.rtl.nl/media/financien/rtlz/2010/0813cs.pdf>. Farmers also 'reinvest' to the extent they make improvements to their properties. Very long run periods (in this case 1900-2010) enhance the integrity of annual average returns as equities are a more volatile asset class than land.

In recent decades rural land values have been a driver of land use change, the most notable being the conversion of pastoral land to forestry. Importantly, Table 2.4 explains the economic rationality behind the conversion of marginal (hill country) pastoral land to exotic forest. The median price of pastoral farmland in Hawke's Bay was \$7,778/ha in 2010 with lower quality pastoral breeding blocks priced as low as \$2,500/ha, a level in line with forestry land.<sup>39</sup> Wairoa District provides a good example of how forestry has acted as a valuation 'backstop' for Hawke's Bay's pastoral farmers. In 2010, sheep and beef properties in the district sold for an average \$4,172/ha<sup>40</sup> but a number of pastoral properties were sold at levels low enough to attract forestry investors.<sup>41</sup> The resulting conversion of sub-economic farmland to exotic forest has been so rapid that the Wairoa District Council expressed concern about an eroding ratings base.<sup>42</sup>

### Hawke's Bay rural land prices: co-relation with economic events.<sup>43</sup>

1945-1952: Nominal return: +228.3%, Real return: +181.0%.

For a large part of WW2 it was New Zealand government policy to "stabilise land and property prices so that servicemen returning to purchase farms and homes would not be disadvantaged."<sup>44</sup> The policy was motivated by a land boom during World War One that inflated prices to the detriment of returning soldiers.<sup>45</sup> Calls for controls first emerged in 1943 following evidence that rural land prices were moving sharply upwards.<sup>46</sup> From that year onwards a system of land valuation committees commenced, a structure that ensured rural land transactions were completed at sub-market prices.<sup>47</sup> Intervention worked admirably and between 1945 and 1950 land prices per acre declined 3.5%.<sup>48</sup> Taking advantage of suppressed prices, the New Zealand government used the period to acquire land considered suitable for returning soldiers, and by 1954 1.4 million acres (3.4m

<sup>39</sup> "Rural Report (Report Period Ending January 2011)."

<sup>40</sup> Ibid.

<sup>41</sup> Ibid.

<sup>42</sup> Author in discussion with Wairoa District Council Officials, October 15<sup>th</sup>, 2011. Forestry land typically attracts a lower rating than pastoral land.

<sup>43</sup> Inflation adjusted figures have utilised the Reserve Bank of New Zealand's Inflation calculator.

<sup>44</sup> Thompson, "Sharing the Sacrifice," 4.

<sup>45</sup> Ibid, 5.

<sup>46</sup> New Zealand Parliamentary Debates, August 21<sup>st</sup> 1943, 726, 859 & 860, 874.

<sup>47</sup> Thompson, "Sharing the Sacrifice," 11.

<sup>48</sup> Ibid.

hectares) had been purchased by the state.<sup>49</sup> But the economy began to normalise, a trend which coincided with political change: the National government elected at the end of 1949 deregulated land transfers. In 1950, the Servicemen's Settlement and Land Sales Act was repealed and land prices more than doubled in the two years 1951-1952.<sup>50</sup>

The rise in land prices in the decade after 1945 reflected both suppressed demand and strong fundamentals. New Zealand's terms of trade rose from an index level of 916 in 1945 to 1,406 in 1951.<sup>51</sup> Other stimulants included the Marginal Lands Act of 1950, which led to much improved access to development finance,<sup>52</sup> and a reduction in estate duties in 1952 from 40% to 32%.<sup>53</sup> Farmer confidence was further bolstered by the negotiation of a fifteen year meat supply agreement with the British government in February 1952.<sup>54</sup> Despite the absence of official land valuation data for Hawke's Bay region prior to 1953, a shortfall confirmed by New Zealand Valuation Department pamphlet 72-2 (1972), Hawke's Bay land prices appear to have performed similarly to those of New Zealand as a whole between 1945 and 1953.<sup>55</sup> Provincial newspaper articles from 1952 refer to rampant land price inflation and increases in official valuations of "100% in most areas."<sup>56</sup> As the increase matched a nationwide trend, national land value statistics have been used as a proxy for Hawke's Bay.

1953-1959: Nominal return: +57.2%, Real Return: +31.4%.

The early to mid-1950s were extremely positive for both New Zealand agriculture and rural land prices. Greasley and Oxley suggest that New Zealand rural land values are correlated with food commodity and raw material prices and evidence from 1953 to 1959 supports their position. Most obviously, during the Korean War booming wool prices and the end of land controls aligned with an explosive increase in the value of Hawke's Bay

---

<sup>49</sup> *Ibid*, 9. As part of Servicemen's Settlement and Land Sales Act, 1943.

<sup>50</sup> *Ibid*.

<sup>51</sup> "Terms of Trade." The 1951 Korean War wool boom was followed by a bust and in 1952 New Zealand's terms of trade collapsed 26.2%.

<sup>52</sup> *NZOYB*, 1972, Chapter 13, section 13b.

<sup>53</sup> Death Duties Amendment Act 1952, s2(1).

<sup>54</sup> *Research Paper 72/2* (1972): 33. Meat prices were not, however, guaranteed beyond 1954.

<sup>55</sup> *Research Paper 72/2* (1972).

<sup>56</sup> Associated Press, "Effects of Land Revaluations Causing Concern," *Hawke's Bay Herald Tribune*, December 15<sup>th</sup>, 1952.



farmland.<sup>57</sup> Other positives included the abolition of succession duties in 1955.<sup>58</sup> At the same time, land productivity rose sharply. When wartime controls ended, the availability of grass fertilisers improved greatly as did the efficacy of aerial application systems.<sup>59</sup> Although fertiliser was not new to Hawke's Bay, aerial topdressing opened hitherto inaccessible areas. The area of the province fertilised rose from 25,000 acres in 1925 to 390,000 acres in 1948.<sup>60</sup> But nearly 50,000 acres of Hawke's Bay farmland was top dressed by aircraft in 1955 against a mere 5,000 in 1950.<sup>61</sup> Moreover, the establishment of the Awatoto Fertiliser plant in 1954 guaranteed a local supply of price competitive superphosphate.<sup>62</sup>

Global demand for New Zealand's basket of food commodities remained healthy until the mid-1950s but by the late 1950s the boom in rural real estate was ebbing.<sup>63</sup> Most importantly, in 1955 mounting agricultural protectionism combined with recovery in food production in Europe and the disposal of surplus food stuffs by the United States, coincided with a noticeable decline in rural land inflation.<sup>64</sup> In 1956, Hawke's Bay rural land prices fell by 9.3%.<sup>65</sup> The fall was reinforced by further negatives. In 1957, credit availability was slashed by the State Advances Corporation, a move that matched higher interest rates and sharp falls in wool and dairy prices which, collectively, drove New Zealand into recession.<sup>66</sup> Nevertheless, towards the end of the 1950s, the rural land market began to stabilise. Prices in Hawke's Bay fell in 1959 but the decline (-0.3%) was minor.<sup>67</sup>

1960-1964: Nominal return: +17.1%, Real return: +3.5%.

The market for rural real estate in Hawke's Bay remained relatively constrained in the early 1960s. Export prices for food commodities rebounded noticeably in late 1959 and by 1960 the New Zealand economy had fully recovered from the 1957 recession.<sup>68</sup> The

---

<sup>57</sup> *Research Paper 72/2* (1972): 33.

<sup>58</sup> Estate and Gift Duties Act 1955, First Schedule.

<sup>59</sup> *Research Paper 72/2* (1972): 33.

<sup>60</sup> Associated Press, "Sheep Industries Growth Linked to Fertiliser Use," *Hawke's Bay Herald Tribune*, September 9<sup>th</sup>, 1951.

<sup>61</sup> Associated Press, "Aerial Top Dressing Increases 1/3 in a Year."

<sup>62</sup> Associated Press, "Awatoto Opens," *Hawke's Bay Herald Tribune*, October 5<sup>th</sup>, 1954.

<sup>63</sup> McAloon, *Judgements of All Kinds*, 95.

<sup>64</sup> *Research Paper 72/2* (1972): 34.

<sup>65</sup> *Ibid.*

<sup>66</sup> *Ibid.*, 35.

<sup>67</sup> *Ibid.*

<sup>68</sup> McAloon, *Judgements of All Kinds*, 108.

economy was improving but nervousness regarding British membership of the EEC appears to have dampened farmer confidence and after a tentative lift in farmland prices in 1960 and 1961, prices fell by an average -5.6% in 1962.<sup>69</sup> In 1963/64, capital availability improved significantly. Following the 1963 Agricultural Development Conference, the New Zealand government lifted the availability of rural finance at both the State Advances Corporation and Marginal Lands Board.<sup>70</sup> The measure appears to have restored farmer confidence and small increases in rural land prices occurred in both 1963 and 1964. Although fundamentals were much improved, the early 1960s did not see a return to the exuberant rural land market of the mid-1950s. Hawke's Bay land prices rose 17.1% in the period from 1960 to 1964, an increase that has commonality with the 15.3% rise in New Zealand's terms of trade in the same period.<sup>71</sup> Less positively, in real terms, land values increased by only 3.5%.

1965-1969: Nominal return: +38.6%, Real Return: +16.9%.

Commodity prices remained an important determinant of rural land prices in the mid/late 1960s. But non-fundamentals, such as credit availability and government policy settings, continued to exert a significant influence. For example, the combination of enhanced credit availability measures in 1964 and booming wool prices in 1963/64 are closely matched with an 11.4% rise in Hawke's Bay rural land prices in 1965<sup>72</sup> and a further rise of 8.5% in 1966.<sup>73</sup> Unfortunately political and economic events soon intervened. The wool price collapse of 1966-68 and renewed efforts by the UK government to join the EEC were major hits to both farmer confidence and rural real estate.<sup>74</sup> Therefore, it is surprising to note that Hawke's Bay rural land prices recorded a small rise in both 1968 and 1969.<sup>75</sup> The most probable explanation is the 19.45% devaluation of the New Zealand dollar that occurred in November 1967.<sup>76</sup> The adjustment, which increased local currency returns to farmers, lifted New Zealand meat schedule prices by a similar degree in 1968.<sup>77</sup> Less

---

<sup>69</sup> *Research Paper 72/2* (1972): 34.

<sup>70</sup> *Ibid*, 35 & 36. Also mentioned in McAloon, *Judgements of All Kinds*, 117.

<sup>71</sup> *Research Paper 72/2* (1972): 34. Also see - "Terms of Trade."

<sup>72</sup> *Ibid*.

<sup>73</sup> *Ibid*.

<sup>74</sup> McAloon, *Judgements of All Kinds*, 122 & 126. A second application was made by the UK in 1967 with confirmation achieved in 1972. Also see - Statistics NZ, wool\_price\_time\_series\_(long).xls.

<sup>75</sup> *Research Paper 72/2* (1972): 34.

<sup>76</sup> McAloon, *Judgements of All Kinds*, 129-134. New Zealand decimalised its currency in July 1967.

<sup>77</sup> *Research Paper 72/2* (1972): 37.

compellingly, from 1965 to 1969 New Zealand's terms of trade slipped markedly.<sup>78</sup> Consequently the rise in Hawke' Bay rural land prices that occurred after 1965 is difficult to rationalise in terms of market fundamentals, most importantly product prices. In explanation, it is worth noting that incentives for farm development were ramped up following the 1963 Agricultural Development conference and that McAloon suggests these non-fundamental inducements became "more generous" from 1963 onwards.<sup>79</sup>

1970-1974: Nominal return: +92.9%, Real return: +39.3%.

Rural assistance measures became common during the late 1960s as the New Zealand government became increasingly wary of market access problems stemming from UK membership of the EEC. Following the 1968 National Development Conference, numerous tax allowances were introduced to encourage diversification from dairy to beef, a product believed to have wider international appeal.<sup>80</sup> But other government initiatives were less well grounded. Fertiliser subsidies and a land tax exemption were introduced despite high prices for farm exports in the late 1960s.<sup>81</sup> The EEC 'issue' remained problematic throughout the 1960s but even more so in the early 1970s. The resulting uncertainty was unhelpful but New Zealand was given a reasonable deal by the EEC including "satisfactory five year transitions," positives that align with the strong performance of Hawke's Bay rural land in the early 1970s.<sup>82</sup>

Although UK membership of the EEC presented problems, intense economic volatility in the early 1970s proved a larger threat to New Zealand agriculture. Between mid-1972 and early 1973, a global commodity boom unfolded that led to a sharp rise in inflation and the price of farmland. In nominal terms, Hawke's Bay rural land prices doubled between 1970 and 1974.<sup>83</sup> Commodity price strength was such that a currency revaluation occurred in September 1973.<sup>84</sup> In the same year, the newly elected Labour government ended

---

<sup>78</sup> "Terms of Trade." Reflects lower wool prices.

<sup>79</sup> McAloon, *Judgements of All Kinds*, 119.

<sup>80</sup> *Ibid*, 140.

<sup>81</sup> *Ibid*, 141. Also see - "Terms of Trade."

<sup>82</sup> *Ibid*, 142. See also Hall, *Emerging From An Entrenched Colonial Economy*, *passim*.

<sup>83</sup> *Research Paper 83/4* (1983): 114, "Farmland index since 1960."

<sup>84</sup> McAloon, *Judgements of All Kinds*, 152.

fertiliser subsidies and cut farm product subsidies by two thirds.<sup>85</sup> Nevertheless, the incoming Kirk led government continued to face spiralling inflation, a problem intensified by an expansionary fiscal policy following the introduction of new welfare initiatives.<sup>86</sup> The global boom of 1972/73 was followed by an inevitable bust and following a sudden and severe commodity price collapse as well as an oil shock, New Zealand was in economic crisis by the end of 1974. Described by McAloon as “the worst crisis since the Great Depression,”<sup>87</sup> New Zealand’s terms of trade plunged 23% in the year to June 1974<sup>88</sup> and in September 1974 the New Zealand dollar was devalued.<sup>89</sup> New Zealand’s terms of trade fell 31% in 1975, the steepest annual decline since records began in 1926.<sup>90</sup> Despite the slump in soft commodity prices, the price of Hawke’s Bay rural land rose by over 90% in nominal terms during the highly inflationary early/mid 1970s. The reason appears relatively simple – rural land, as with all property and physical assets, provides a highly effective inflationary hedge.

1975-1979: Nominal return: +118.2%, Real return: +26.2%.

Following the economic collapse of 1974, the New Zealand government introduced an ever-increasing range of compensatory measures. The 1975 budget included additional price support for farmers and reintroduced fertiliser subsidies.<sup>91</sup> In the same year, the New Zealand dollar was devalued by a further 15%, a measure that lifted both farmer confidence and farm income.<sup>92</sup> Following the National Party’s victory in the election of November 1975, ongoing farm support was justified by PM Muldoon on the basis that pastoral farming would remain New Zealand’s most important export.<sup>93</sup> Consequently, government policy under National actively encouraged increased primary production.<sup>94</sup> National’s suite of policies proved highly successful and pastoral incomes rose by 62% in 1976.<sup>95</sup> The rise was

---

<sup>85</sup> Ibid, 153.

<sup>86</sup> Ibid.

<sup>87</sup> Ibid, 150.

<sup>88</sup> Ibid, 155.

<sup>89</sup> Ibid, 157.

<sup>90</sup> “Terms of Trade.” Also see - “New Zealand Terms of Trade 1957-2016,” Trading Economics, accessed March 17<sup>th</sup>, 2016, <http://www.tradingeconomics.com/new-zealand/terms-of-trade>.

<sup>91</sup> McAloon, *Judgements of All Kinds*, 157.

<sup>92</sup> Ibid.

<sup>93</sup> Ibid, 161.

<sup>94</sup> Ibid, 165.

<sup>95</sup> Ibid, 166.

accompanied by a mild increase in underlying commodity prices which underpinned an 8.5% lift in the terms of trade in 1977.<sup>96</sup> National's budget of the same year offered yet more farm support and export incentives were extended beyond pastoral farming to include horticulture as part of a push in favour of agricultural diversification.<sup>97</sup> In the late 1970s, an explicit subsidy scheme was introduced with the aim of shielding New Zealand's pastoral sector from the impact of commodity price volatility. In 1978, the Muldoon government introduced Supplementary Minimum Prices (SMPs), a policy justified by a Ministry of Agriculture recommendation to lift farm support by 250%.<sup>98</sup> Fortunately for farmers these policies coincided with a recovery in global demand for farm products.<sup>99</sup> National subsequently won the November 1978 election, albeit it was an "ambiguous" victory.<sup>100</sup> But the positive economic times did not last. Shortly thereafter a second oil shock hit leading to a recession in New Zealand and internationally.<sup>101</sup>

Although the global economy was in recession, rural land prices continued to appreciate, a rise largely attributable to government policy settings. In 1979, trading in the New Zealand dollar was altered from a fixed to a crawling peg system.<sup>102</sup> Although the reform created a more efficient means by which to communicate commodity price signals to farmers, farm revenues remained grossly inflated by SMPs and other support mechanisms. The resulting disconnect between market fundamentals and rural land prices is most apparent in the price of second grade rural land. The value of hill country land (often known as 'marginal' land) rose by more than any other category during the SMP era but all land use categories benefitted.<sup>103</sup> Driven by an intoxicating mix of production subsidies and high inflation, Hawke's Bay rural land prices rose by an explosive 118.2% in nominal terms and 26.2% in real terms between 1975 and 1979.

---

<sup>96</sup> "Terms of Trade." Given the disruptions of the twin oil shocks of 1975 and 1978, it is interesting to note that in the five-year period to the end of 1979, New Zealand's terms of trade rose 10.5%.

<sup>97</sup> McAloon, *Judgements of All Kinds*, 168.

<sup>98</sup> *Ibid*, 170.

<sup>99</sup> *Ibid* & "Terms of Trade."

<sup>100</sup> *Ibid*, 174.

<sup>101</sup> *Ibid*, 176.

<sup>102</sup> *Ibid*, 177.

<sup>103</sup> Gribble, "Agricultural Productivity and Land Value," 27.

1980-1984: Nominal return: +65.3%, Real return: -3.7%.

Despite tentative attempts at reform, rapidly rising SMP payments were the single most important theme in the primary sector between 1980 and 1984. Under Muldoon, National continued to favour generous farm support and, as McAloon notes, “after 1981 SMPs became extravagant.”<sup>104</sup> Even so, SMPs were not the only policy lever used by Muldoon. In 1980, to end collusion between processors and improve efficiency, the meat industry was deregulated.<sup>105</sup> Furthermore, National backed diversification and new market development to such an extent that Muldoon said, “our foreign policy is trade.”<sup>106</sup> Despite the claim, SMPs remained Muldoon’s foremost primary sector policy. Fortuitously for farmers, National’s now well established preference for subsidies coincided with excellent climatic conditions and McAloon refers to “two very good farming seasons” in 1980 and 1981 which led to “continued high farm expenditure.”<sup>107</sup> In 1981, despite a period of three years when farm product prices exceeded the minimum SMP threshold, subsidy payments were lifted “dramatically.”<sup>108</sup> The increase, which ran counter to the schemes original purpose, created a high water mark for farm incomes that did not last. By 1984, New Zealand’s terms of trade were 12.8% lower than 1979.<sup>109</sup>

In July 1984 a new Labour government, under the leadership of David Lange, introduced far reaching economic reforms that stripped the highly subsidised agricultural sector of almost all support mechanisms and deregulated much of the economy. Between June 1982 and February 1984, the Muldoon government had enforced a wage/price/rent freeze.<sup>110</sup> The policy was indicative of an inflexible economy unable adjust to changed economic circumstances and in the lead up to the 1984 election a major economic crisis took hold. The most obvious manifestation of impending disaster was to be found in foreign exchange markets. Treasury and Reserve Bank of New Zealand papers from 1984 suggest the New Zealand dollar was 15%-20% over valued.<sup>111</sup> Concurrently, a number of major

---

<sup>104</sup> McAloon, *Judgements of All Kinds*, 196.

<sup>105</sup> *Ibid*, 178.

<sup>106</sup> *Ibid*, 179.

<sup>107</sup> *Ibid*, 186 & 187.

<sup>108</sup> *Ibid*, 187.

<sup>109</sup> “Terms of Trade.”

<sup>110</sup> McAloon, *Judgements of All Kinds*, 193. Land prices were not frozen.

<sup>111</sup> Brian Easton, *From Run to Float: The Making of the Rogernomics Exchange Rate Policy* (Auckland: Auckland University Press, 1989), 92-113.

financial institutions were believed close to insolvent.<sup>112</sup> Muldoon's refusal to devalue the New Zealand dollar, despite frequent official advice to do so (and a similar request by the incoming Lange government), reinforced a run on the New Zealand dollar that had started in the lead up to the 1984 general election.<sup>113</sup> Muldoon's eventual acquiescence in July 1984 resulted in a 20% devaluation.<sup>114</sup> But unlike previous devaluations, which bolstered the agricultural sector, the positive effect was short lived as the new government moved to reform farm support, end fertiliser subsidies and introduce financial deregulation. Shortly thereafter, in the 1984 fiscal budget, SMPs and other farm support mechanisms were abolished completely.<sup>115</sup> At the same time, rural tax incentives were suspended. The latter reform had a disproportionate impact on the value of horticultural properties which were favoured as tax shelters, a way to offset farm losses against other earnings.<sup>116</sup>

1984 was a watershed year for New Zealand agriculture and the turmoil of the time had an enormous impact on the value of farmland. In the twenty-year period ended 1984, farmland rose by an average 12.2% p.a (nominal/compound).<sup>117</sup> The same theme was apparent in Hawke's Bay. From 1960 to 1983, the province's rural land index rose from 115 to 1,488.<sup>118</sup> Nevertheless, the golden weather of the post war period was fast coming to an end. The same index fell to 1,266 in 1984 (a fall of 14.9%) – the first appreciable fall in rural land values in the province since 1945.<sup>119</sup> In total, rural land values fell 3.7% on an inflation adjusted basis from 1980 to 1984.

1985-1989: Nominal return: -22.3%, Real return: -82.9%.<sup>120</sup>

The end of the Supplementary Minimum Price (SMP) scheme was a colossal shock for New Zealand farmers. Rural land values collapsed, and the primary sector was forced to reappraise the use of low productivity pastoral land. Hawke's Bay provides an excellent

---

<sup>112</sup> Ibid.

<sup>113</sup> Ibid.

<sup>114</sup> McAloon, *Judgements of All Kinds*, 195. The RBNZ closed foreign exchange markets immediately after the election.

<sup>115</sup> Ibid, 202. A process already started by Muldoon.

<sup>116</sup> Gribble, "Agricultural Productivity and Land Value," 28.

<sup>117</sup> *Research paper 85/4* (1985): 127.

<sup>118</sup> Ibid, 125. Also see - Valuation Department of New Zealand, *Rural Real Estate Market in New Zealand* (December 1985): 108.

<sup>119</sup> Ibid. Also see – *Research Paper 72/2* (1972): 72.

<sup>120</sup> The Reserve Bank of New Zealand calculates inflation of 60.6% between Q1 1985 and Q4 1989.

example of these dynamics. Prior to the Lange government, support mechanisms were generous, wide ranging and well established.<sup>121</sup> Accordingly, taxpayer generosity had become embedded into farmers' revenue expectations, a belief that not only inflated land values but the area devoted to agriculture, especially pastoral uses. In the four years following the abolition of SMPs, the price of rural land in Hawke's Bay fell by 82.9% in real terms. Furthermore, the end of agricultural subsidies led to significant land use change. Growth in the pastoral estate during (and before) the SMP era effectively depended on income support and subsidised fertilisers. Their use was a necessity if the productivity of marginal lands was to be maintained and as such these areas were only economic under the subsidy regime.<sup>122</sup> Unsurprisingly, the size of the pastoral estate in Hawke's Bay peaked in size in 1982/83. Thereafter the conversion of marginal land to exotic forestry gained significant traction.

The flotation and subsequent rise in the value of the New Zealand dollar, coupled with sharply weaker commodity prices, were additional problems for farmers. In 1985, the New Zealand dollar was floated. The measure was accompanied by extremely tight monetary policy with high interest rates used to reduce inflation. The policy, which led to a surge of portfolio investment into New Zealand, drove up the value of the New Zealand dollar by nearly 30% between late 1986 and mid-1988.<sup>123</sup> The rise diluted the positive impact of the 1984 devaluation much to the dismay of the export dependent rural community.<sup>124</sup> The impact in Hawke's Bay was severe and even the very best quality land fell in value. Although demand for established horticultural properties remained relatively solid in the mid/late 1980s the value of prime mixed-use land slumped badly. In 1986, the price of bare land on the much sought after Heretaunga plains was near \$21,000/ha.<sup>125</sup> By

---

<sup>121</sup> Gribble, "Agricultural Productivity and Land Value," 27. Support was \$2.50 per lamb and \$4.70 per mutton carcass. This was equivalent to 10% and 30% respectively of the market price achieved in the 1984/85 season.

<sup>122</sup> "The Grasslands Revolution," EnvirohistoryNZ, last modified November 29<sup>th</sup>, 2009, <https://envirohistorynz.com/2009/11/29/the-grasslands-revolution/>. Also see "Amount of superphosphate applied to New Zealand Farms," Figure NZ, accessed November 16<sup>th</sup>, 2016, <https://figure.nz/chart/OM970pROzZ63TuIN-pflozhXL6WF5cLWL>  
New Zealand Superphosphate volumes peaked in 1985 at 3m tonnes. The comparable figure for 2012 was 2.0m tonnes.

<sup>123</sup> The New Zealand dollar rose from US\$0.5245 in December 1986 to US\$0.6760 in June 1988. Source: IRESS.

<sup>124</sup> McAloon, *Judgements of All Kinds*, 202.

<sup>125</sup> "Hawke's Bay Property Market Report," *The New Zealand Valuers' Journal*, Vol.27, No.7/361 (December 1987): 362 & 363.



early 1987, similar parcels of land were being sold at \$17,000/ha, close to 20% lower.<sup>126</sup> The fall was reinforced by deteriorating fundamentals. Key pastoral product prices weakened considerably between 1984 and 1986 (see Table 2.5) and in the same year New Zealand's terms of trade reached a post war low.<sup>127</sup>

**Table 2.5. New Zealand's key pastoral product prices, 1984/5 vs. 1985/6.**

	1984/85	1985/86	% change
Mutton per head	\$15.00	\$3.00 est	-80.0%
Lamb per head	\$24.30	\$14.93 est	-38.6%
Beef per head	\$538.85	\$451.00 est	-16.3%
Wool per kg Greasy	377.40¢	320.79¢ est	-15.0%

Source: Gribble, "Agricultural Productivity and Land Value," 26.

By late 1987, commodity prices began to recover but the rise did little to restore land values. New Zealand's terms of trade index rose from 825 in the first quarter of 1986 to 1,075 at the end of 1989, lifting the five-year increase to 20.8%.<sup>128</sup> Less positively, the index remained well below levels seen in the 1940s and 1950s, a fact that indicated a structural decline in soft commodity prices. The realisation had a strongly negative impact on rural land prices. From 1960 to 1982, Hawke's Bay rural land appreciated by an annual average of 12.49% compounded.<sup>129</sup> In the twenty year period from 1969, the average annual compound increase in the value of Hawke's Bay farmland was 9.68%.<sup>130</sup> In the ten years from 1979, annual growth fell to 3.73% and in 1989 the rural land index stood at 1,105 compared to a pre-reform level of 1,488 in 1983, a decline of over 25%.<sup>131</sup> The stock market crash in 1987 was a further shock, albeit the impact was by way of secondary effect given the paucity of listed agricultural stocks on the New Zealand Stock Exchange.

Not all farm subsidies ended in 1984. Of particular relevance for Hawke's Bay, a government compensation scheme sponsored the removal of most of the Germanic style sweet white varieties that dominated the New Zealand wine industry but had fallen victim

<sup>126</sup> Ibid.

<sup>127</sup> "Terms of Trade."

<sup>128</sup> Ibid.

<sup>129</sup> *Research paper 83/4* (1983): 112.

<sup>130</sup> *Research Paper 90/2* (1989): 108.

<sup>131</sup> Ibid. Hawke's Bay rural land values peaked in 1982/83 and then fell 14.9% by 1983/84. It took until 1992 for New Zealand farmland values as a whole to match the 1982 level, *Valuation New Zealand Rural Property Sales Statistics, Half Year Ended 30<sup>th</sup> June, 1995*: 93 & 94 (table TR3). Lower inflation rates were also influential.

to changing consumer tastes. George Fistonich, CEO of Villa Maria, notes that 534 ha of Hawke's Bay grapes were destroyed with the Government paying growers a most generous \$6,175/ha to do so.<sup>132</sup> The programme greatly aided the transformation of the small Hawke's Bay wine industry. Even so, the wine industry rescue package was not matched by other schemes. The neo-liberal, ideological thrust of economic restructuring did not waver despite a period of significant leadership instability within the Labour Party following its re-election in 1987.<sup>133</sup>

1990-1994: Nominal return: +94.8%, Real return: +84.0%.

Following the election of a National government in 1990, under the leadership of Jim Bolger, the primary sector policies of the previous administration were maintained.<sup>134</sup> In political terms, the farm sector remained disconnected from government priorities between 1990 and 1994. Disinterest in the primary sector is clear in the Treasury's 1990 briefing to the incoming government which was disparaging as to the wealth creation prospects of New Zealand agriculture.<sup>135</sup> The rural sector was perceived to be a sunset industry (despite the fact Prime Minister Bolger was a farmer himself). Furthermore, economic policy at the time was heavily influenced by the free market dogma of Bolger's Finance Minister, Ruth Richardson. The early 1990s were years of low inflation,<sup>136</sup> 'Ruthanasia' and the "mother of all budgets" in 1991 in which Richardson oversaw significant welfare reform.<sup>137</sup> Consequently, although not ideologically opposed to agriculture, the sector was not Richardson's priority. The only significant policy change was the abolition of estate duties in 1993 but, as Littlewood notes, the tax was always widely avoided, suggesting the positive impact on rural property prices was muted.<sup>138</sup>

<sup>132</sup> Kerry R. Tyack, *The Winemaker – George Fistonich and the Villa Maria Story* (Auckland: Random House, 2012), 199.

<sup>133</sup> New Zealand had three Prime Ministers between August 1989 and the general election in November 1990.

<sup>134</sup> "Briefing to Incoming Government (1990)," New Zealand Treasury, accessed May 13<sup>th</sup>, 2016, 34, <http://www.treasury.govt.nz/publications/briefings/1990>

<sup>135</sup> Ibid.

<sup>136</sup> Anne-Marie Brook, Sean Collins and Christie Smith, "The 1991-97 business cycle in review," *Reserve Bank of New Zealand Bulletin*, Vol.61, No.4: 284, accessed December 2nd, 2016, <http://www.rbnz.govt.nz/-/media/ReserveBank/Files/Publications/Bulletins/1998/1998dec61-4brookcollinssmith.pdf>

<sup>137</sup> Colin James, "National Party - Shifting rightwards," Te Ara - The Encyclopedia of New Zealand, last modified December 1<sup>st</sup>, 2016, <http://www.TeAra.govt.nz/en/photograph/33885/the-mother-of-all-budgets>

<sup>138</sup> Adrian Littlewood, "The History of Death and Gift Duty in New Zealand," *Journal of Taxation Law and Policy*, Vol.18 (March 2012): 102. Estate Duties represented 4.7% of government revenues in 1945 but 0.3% in 1990.

The early/mid 1990s were tough for New Zealand agriculture but paradoxically rural land prices performed strongly, a pre-emptive signal that the underlying fundamentals of the sector were improving. Commodity prices remained weak during the Bolger years and New Zealand's terms of trade fell 4.6% between 1990 and 1994.<sup>139</sup> Consequently, farm equity remained under considerable pressure. The New Zealand Treasury noted in a 1990 briefing that "the agricultural sector has been adjusting to the reduction in assistance and the 20% fall in land prices that occurred between 1983 and 1988."<sup>140</sup> The twin pressures of falling pastoral land values and weak prices reinforced the conversion of marginal grassland into forestry (see Table 2.1). Although fundamentals remained generally unhelpful to New Zealand agriculture, rural land prices in Hawke's Bay rose 94.8% between 1990 and 1994. The rise was at odds with disappointing agricultural prices. Nevertheless, the Reserve Bank of New Zealand suggests the New Zealand economy began a period of economic expansion in 1991.<sup>141</sup> At the same time, domestic business confidence and trading partner growth rebounded.<sup>142</sup> The latter point is particularly important given the export dependant nature of New Zealand agriculture. By the early 1990s demand for New Zealand primary products was becoming vastly more positive, most particularly from China. Consequently, there are three possible explanations for the recovery. First, land values anticipated rising commodity prices. Second, the rebound was a recovery from 'oversold' levels following the 1980s reforms and the unprecedented decline in rural land values between 1985 and 1989. Third, land use change, most obviously the switch into forestry, underpinned capital values in the pastoral estate. The most likely explanation is that all three played a role. Either way, the increase in Hawke's Bay rural land values suggests that an agricultural resurgence was underway by the early 1990s.

1995-1999: Nominal return: +32.4%, Real return: +26.3%.

In November 1997, the Bolger-led National government became the Shipley-led National government, but New Zealand's economic direction remained broadly

---

<sup>139</sup> "Terms of Trade."

<sup>140</sup> "Briefing to Incoming Government (1990)," 19.

<sup>141</sup> "The 1991-97 business cycle in review," 269.

<sup>142</sup> *Ibid*, 280-282.

unchanged.<sup>143</sup> The period was notable for New Zealand's first Mixed Member Proportional (MMP) coalition government with Winston Peters as Treasurer before he was acrimoniously ousted from cabinet in mid-1998. Priority economic policies under Shipley included the corporatisation of government trading entities such as the Ministry of Works and NZ Post. With government attention directed elsewhere Shipley's 'hands off' approach was welcomed by an agricultural sector anxious for stability.

The primary sector remained in the political background and commodity prices low in the late 1990s. Despite these negatives (plus drought), land use change continued to underpin a strong rise in the value of Hawke's Bay farmland. Commodity prices during the period were largely unhelpful and real prices were little changed in 1999 against a decade earlier.<sup>144</sup> Similarly, from 1995 to 1999, New Zealand's terms of trade fell 3.7% to 964, a level comparable to that of 1971.<sup>145</sup> Despite weak fundamentals, rural land prices in Hawke's Bay continued to rise between 1995 and 1999, a rise mostly attributable to the continued conversion of low productivity, low profitability grassland into forestry. But unlike the previous half decade, the pace of land diversification into forestry was ebbing. In contrast, the conversion of land from horticulture to viticulture gathered pace. The change was driven by low profitability. In 2000, the average Hawke's Bay orchard lost approximately \$2,000/ha.<sup>146</sup>

2000-2004: Nominal return: +65.8%, Real return: +53.2%.

The November 1999 election resulted in a Labour led government under Prime Minister Helen Clark. Despite the election of a new government, the direction of agricultural policy remained (again) largely unchanged. Consequently, the most important agricultural theme after 2000 is the significant improvement in primary sector fundamentals that took hold in 2003/04. The rise was a long-awaited positive that provided the profitability needed to justify the increase in rural land prices that had first emerged in 1990. Led by dairy, real

<sup>143</sup> M.J Haywood, "Prime Ministerial Leadership in New Zealand During a Time of Change; 1984-2000; a Comparison of Leadership Styles" (PhD Diss., Victoria University of Wellington, 2004), 262. National remained in power until December 1999.

<sup>144</sup> "Analytical note series AN 2014/2," (April 2014): 7, Daan Steenkamp, Reserve Bank of New Zealand, accessed November 15<sup>th</sup>, 2016, <http://www.rbnz.govt.nz/-/media/ReserveBank/Files/Publications/Analytical%20notes/2014/an2014-02.pdf>

<sup>145</sup> "Terms of Trade."

<sup>146</sup> "Rural Report (Report Period Ending January 2011)."

prices for New Zealand agricultural commodities, including wool and meat, surged.<sup>147</sup> The increase is easy to explain. Other commodity producing states such as Australia and Norway experienced the same boom, courtesy of rapidly rising Chinese demand.<sup>148</sup>

Although profitability was at last a key driver of industry dynamics, the familiar theme of land use change continued apace in the early/mid 2000s, most notably the rise of viticulture at the expense of horticulture (see Table 2.1). With the problems of the late 1980s a fading memory, wine industry fundamentals were now excellent. Industry benchmark Sauvignon Blanc averaged circa \$1,800/tonne in 2002/03, a rise of \$500/tonne in just five years. At the same time, areas of the Heretaunga plains to the west of Hastings (Gimblett Gravels) once considered of little agricultural value emerged as a highly prized location for Syrah.<sup>149</sup> In contrast, the area of the province devoted to fruit growing continued to fall in the early/mid 2000s reflecting an ongoing slump in orchard returns that reached a nadir in late 2004.<sup>150</sup> Similarly, the area devoted to vegetables declined significantly between 1995 and 2005 (see Table 2.1). The dynamic again underlined an important feature of the Heretaunga plains, namely the inter-changeability of land use. Although the area in vegetables and orchard fell after 1995, the price of arable land in Hawke's Bay increased from approximately \$21,000 in 1999/2000 to approximately \$40,000 in 2004/05, a reflection of rising demand for horticultural land suitable for conversion to viticulture.<sup>151</sup> Forestry was the other land use category to increase in size in the early 2000s although at a greatly reduced rate of growth.<sup>152</sup> As for other land use categories, the grassland estate continued to decline in size, albeit at a slower pace than the late 1990s (see Table 2.1).

2005-2010: Nominal return: +23.5%, Real return: +4.2%.

Labour remained in office until November 2008 when it was replaced by a National led Government under John Key but once again agricultural policy saw little discernible change. Most importantly, although New Zealand was in recession in 2007, the period saw a

<sup>147</sup> "Analytical note series AN2014/2," 7. Also see – "Terms of Trade."

<sup>148</sup> Ibid.

<sup>149</sup> Barry Hoy, Esk Valley grape grower, in discussion with author July 15<sup>th</sup>, 2016.

<sup>150</sup> "Rural Report (Report Period Ending January 2011)."

<sup>151</sup> Ibid.

<sup>152</sup> This may also reflect confusion regarding the durability of the proposed Emissions Trading Scheme (ETS).

continuation of the dairy boom which allowed the economy to recover in 2008 despite the Global Financial Crisis. In contrast, viticulture experienced tougher times. Emblematically, Hawke's Bay Sauvignon Blanc prices collapsed to a low of \$500/tonne and prices remained below the cost of production in 2010.<sup>153</sup> Likewise, low returns in the pip-fruit sector continued.<sup>154</sup> More positively, demand for vegetables remained extremely strong between 2005 and 2010 and the planted area rebounded sharply.<sup>155</sup> Despite the blend of positives and negatives, New Zealand's terms of trade remained at levels not seen since the 1950s,<sup>156</sup> largely due to the continuation of high dairy prices.<sup>157</sup> Consequently, the period from 2005 to 2010 was generally favourable for New Zealand's soft commodity basket. Importantly, real returns for meat and wool reached a fifteen year high in 2010,<sup>158</sup> albeit the rise was partly negated by a firmer New Zealand dollar.<sup>159</sup> Hawke's Bay rural land prices continued to appreciate between 2005 and 2010 but at a slower pace than the previous decade; however, the price of most land use categories finished the decade at all-time highs (see Table 2.4).

## Conclusion.

Four important observations can be made about rural land prices in Hawke's Bay, 1945-2010. First, rural land prices rose almost continuously from the 1950s, albeit at ever slowing rates of capital appreciation, until a massive downward shock in 1984/85. The ensuing collapse in farmland values was enormous, greater in magnitude than that of the 1930s. Fortunately the decline was brief and in the early 1990s a tentative recovery emerged, a positive that coincided with a long period in which government policy became far less influential in the agricultural sector. Furthermore, it is striking that Hawke's Bay rural land prices were not always well co-related with commodity prices. Farm profitability is

---

<sup>153</sup> New Zealand Winegrowers Inc, Annual Reports 2008-2010. Also see – Barry Hoy, Esk Valley grape grower, in discussion with author July 8<sup>th</sup>, 2016. The 'Savalanche' of 2008 was problematic for all growers but wineries showed a clear preference for Marlborough grapes over Hawke's Bay.

<sup>154</sup> Eva Bradley, "Struggling Hawke's Bay Growers ready to pull up roots," *Hawke's Bay Today*, July 13<sup>th</sup>, 2005, accessed May 13<sup>th</sup>, 2016, [http://www.nzherald.co.nz/hawkes-bay-today/news/article.cfm?c\\_id=1503462&objectid=10926794](http://www.nzherald.co.nz/hawkes-bay-today/news/article.cfm?c_id=1503462&objectid=10926794)

<sup>155</sup> "Fresh Facts - 2010," HortResearch, 3 & 27, accessed December 2<sup>nd</sup>, 2016, <http://www.freshfacts.co.nz/files/fresh-facts-2010.pdf>

<sup>156</sup> "Terms of Trade."

<sup>157</sup> "Analytical note series AN 2014/2," (April 2014), 6 & 7.

<sup>158</sup> *Ibid.*

<sup>159</sup> *Ibid.*

certainly important; nevertheless, other significant influences included government policies, alternative land uses, foreign exchange rates, inflation and international events such as trade access arrangements. Of these, subsidies and price controls were particularly distortionary after 1945.

Second, it is apparent that rural land prices can, by a number of years, anticipate a subsequent rise in soft commodity prices. The 1990s, a period of intense land use change, provides the best example when it took a prolonged period for food commodity prices to 'catch up' to land prices. The fluidity of land use explains why Hawke's Bay rural land prices can rise even when the demand for an existing land use category is low and/or the underlying commodity price is weak. For example, in the mid-2000s, the price of horticultural land rose as failing pip-fruit properties were converted to the more lucrative alternative of grapes. Consequently, the multiple use nature of land on the Heretaunga plains has been a crucial (positive) influence on Hawke's Bay rural land prices since 1945.

The difference between land on the plains and land on the Hawke's Bay hill country is a third important point. Crucially, the latter has a narrower range of alternative uses and capital returns since 1945 have been better on the 'plains' than the 'hills,' a reflection of the multi-use potential of lowland properties. Hill country farmers have shown a willingness to embrace alternative pastoral uses such as deer and to adjust the mix between cattle and sheep. But forestry is the only realistic 'buyer of last resort' for hill country farmland. Furthermore, it is important to consider the manner in which technological advances have been 'baked' into higher pastoral land prices. Relevant productivity enhancing developments include fertilisers and improved fertility. These positives have allowed the value of most hill country farms to continue appreciating even when product prices have been weak. As a result, many marginal sheep and beef farms successfully avoided the 'clutches' of the forestry sector in periods of low commodity prices. Consequently, the value of most hill country pastoral farms in Hawke's Bay remained too high to warrant switching to exotic forests. Crucially, improved prospects for hill country farms explains why, after a long period of expansion, the area in exotic forest fell between 2005 and 2010.

Lastly, it is important to reiterate that rural land in Hawke's Bay has generally been an excellent investment since 1945. Circumstances have changed greatly since the end of

WW2 but a constant willingness to adapt has enabled capital returns on agricultural land to approximate those of comparable assets. Although it is important to stress the necessity of a long investment horizon and a willingness to embrace alternative land uses, rural land in Hawke's Bay has been a credible investment since the end of World War Two.





# Chapter Three: Hawke's Bay Pastoral Farming 1945-2010.

---

## Introduction.

This chapter will examine the history of Hawke's Bay pastoral farming from 1945 to 2010. The chapter begins with a discussion of the immediate post war period, one that started with great prosperity but ended in gloom. Subsequent sections discuss the disruptive years of the 1970s and 1980s and the restructuring of the pastoral industry that followed the abolition of government subsidies. The chapter concludes with a discussion of the pastoral renaissance from the early/mid 1990s. The key pastoral products of sheep meats and wool will be discussed separately at times but given their biological indivisibility their economic inter-relationship will be a prime consideration. Crucially, the relative importance of each product to farmers has oscillated over time.

Another key argument is the extent to which the concept of productivism has shaped the Hawke's Bay pastoral sector since 1945. High profits immediately following WW2 motivated farmers to lift sheep numbers but in less prosperous times the emphasis on absolute growth persisted. The ingrained belief in ever rising production volumes was shared with government and provided the ideological foundation of the subsidy era that ended in the mid-1980s. Unfortunately, productivism left Hawke's Bay's pastoral sector poorly placed to cope with the loss of state support. But more positively the abolition of subsidies saw the rejection of productivism in favour of higher productivity and quality, albeit the industry remained prone to bouts of income volatility.

Important primary sources used in this chapter include New Zealand Official Yearbooks, the archives of Statistics New Zealand and Hawke's Bay Federated Farmers, regional newspapers, relevant parliamentary debates and acts of parliament. Again, several statistical archives have been synthesised to create historical data. The archives of the New Zealand Wool Board, Beef & Lamb New Zealand (and its forerunners) as well as research from industry bodies and government departments have also been utilised. Secondary

sources used include the industry histories of Calder & Tyson and Hayward, and scholarly contributions from Hawke and Gould.<sup>1</sup>

### 1945-1975: Continuity and Change.

From 1945 to 1975, sheep numbers in Hawke's Bay rose by approximately two million head, an increase of nearly 45% (see Table 2.2). Unfortunately, the rise disguised a number of negative trends. In the late 1960s, pastoral productivity growth slowed, and the profitability of sheep meats fell, a reflection of rising costs and falling prices in real terms. Furthermore, beef prices outperformed those of sheep meats. Similarly, synthetic fabrics began to threaten wool. Together these changes suggested the need for diversification and new ways of doing business. But Hawke's Bay pastoral farmers were slow to adjust their farming models, a reluctance that led to increased vulnerability.

An era of high pastoral profitability but declining productivity growth.

At the conclusion of WW2, the operating environment for New Zealand sheep farmers was extremely positive. The value of pastoral produce, with an index set to 100 in 1938/39, jumped from 49 in 1932/33 to 132 in 1943<sup>2</sup> before reaching 150 in 1945/46.<sup>3</sup> The rise was based on established strengths in both sheep meats and wool, the prices of which contributed to record pastoral returns in the 1945/46 season.<sup>4</sup> Underlining the boom conditions that applied at the time, the average New Zealand pastoral property delivered an 18% return on equity or approximately 15% in real terms.<sup>5</sup> High returns continued into the 1950s, and in 1960 sheep farmers earned an average net income of £1,905 p.a, the fifth highest of thirteen statistical categories.<sup>6</sup> Only four groups of professionals earned more.<sup>7</sup> Pastoral earnings were similarly high in Hawke's Bay, and in 1960 the province's sheep

---

<sup>1</sup> Mick Calder & Janet Tyson, *Meat Acts: The New Zealand Meat Industry 1927-1997* (Wellington: Meat New Zealand, 1999); Dai Hayward (ed), *Golden Jubilee, New Zealand Meat Producers Board First Fifty Years* (Wellington: Universal Printers, 1972); Hawke, *The Making of New Zealand*; Gould, *The Rake's Progress?*

<sup>2</sup> NZOYB, 1946, Chapter 19, section 17, "Gross Farming Income."

<sup>3</sup> Ibid.

<sup>4</sup> NZOYB, 1946, Chapter 19, section 17.

<sup>5</sup> Bryan Philpott (Meat Board Economic Service), "Average Return on Equity Estimated," *Hawke's Bay Herald Tribune*, July 4<sup>th</sup>, 1958.

<sup>6</sup> "NZ Farmers Monopolise Top Bracket in Annual Income Survey," *Hawke's Bay Herald Tribune*, February 3<sup>rd</sup>, 1960.

<sup>7</sup> Ibid.

farmers earned an average of £1,707.<sup>8</sup> The success of pastoralism was matched with broader prosperity. In 1955, average per capita income in Hawke's Bay (£390.2) exceeded both major urban centres such as Auckland (£363.2) and a rural-urban province such as Canterbury (£369.1).<sup>9</sup> Similarly, in the late 1950s, the average Hawke's Bay pastoral property delivered a return on farm equity of approximately 11%, a figure well above comparable regions.<sup>10</sup> The success of Hawke's Bay farming was based on a narrow range of sheep related commodities. Alternatives, such as dairy cattle, were relatively insignificant in the province following WW2 and agricultural statistics from 1945 make no mention of deer or other 'non-traditional' farm stock, a situation that remained unchanged into the 1950s and 1960s (see Table 2.2).<sup>11</sup>

Although the profitability of sheep farming was indisputable, high earnings disguised a less compelling metric: declining pastoral productivity growth. Motivated by strong pastoral earnings, the pursuit of higher sheep numbers became an instrument of economic development in New Zealand during the 1960s and following the 1963 Agricultural Production Conference the New Zealand government adopted a target of 100m sheep by 1980.<sup>12</sup> An example of productivism, the policy underplayed important productivity measurements such as lambing percentages. In 1945/46, Hawke's Bay's 2.820m breeding ewes produced 2.523m tailed lambs.<sup>13</sup> By 1975, the number of sheep in the province had risen by 50% yet the number of lambs produced was little more than 8% greater at 2.734m.<sup>14</sup> Disappointing reproductive productivity was a nationwide trend. From an average of near 100% in 1945, New Zealand lambing percentages dropped noticeably after the mid-1960s<sup>15</sup> and by the 1970s levels were 8%-9% lower.<sup>16</sup> Gould suggests that the surge in pastoral productivity that followed the introduction of aerial fertilising after WW2 was

<sup>8</sup> "True Picture Not Given in Take Home Pay of Hawke's Bay Farmers," *Hawke's Bay Herald Tribune*, May 16<sup>th</sup>, 1959.

<sup>9</sup> G.M Neutze, "Provincial Income Estimates," *New Zealand Geographer*, Vol.17, Issue 2 (October 1961): 223-228.

<sup>10</sup> *Ibid*

<sup>11</sup> *NZOYB*, 1946, Chapter 19, section 17c.

<sup>12</sup> Calder and Tyson, *Meat Acts*, 16. Productivism: the pursuit of absolute growth rather than growth in productivity and profit.

<sup>13</sup> *NZOYB*, 1946, Chapter 19, section 17c.

<sup>14</sup> *NZOYB*, 1978, Chapter 15, section 14c.

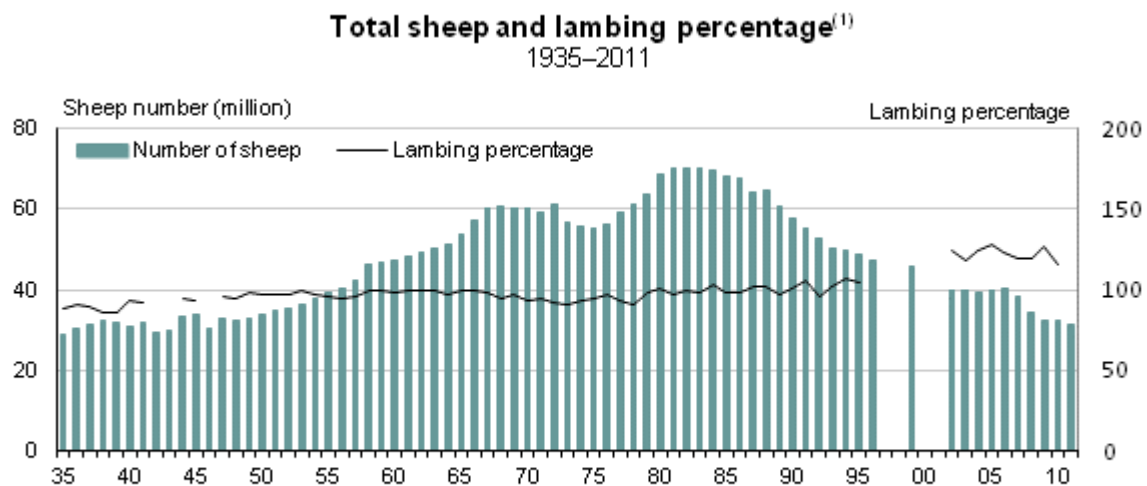
<sup>15</sup> "Off the Sheep's Back," Statistics New Zealand, accessed March 15<sup>th</sup>, 2017,

[http://www.stats.govt.nz/browse\\_for\\_stats/economic\\_indicators/prices\\_indexes/historical-wool-export-prices-volumes-2011.aspx](http://www.stats.govt.nz/browse_for_stats/economic_indicators/prices_indexes/historical-wool-export-prices-volumes-2011.aspx)

<sup>16</sup> Hawke, *The Making of New Zealand*, 237.

largely over by 1970 and national statistics support his contention.<sup>17</sup> As Figure 3.1 shows, the peak in pastoral productivity growth in the late 1960s noted by Gould is matched with a plateau in sheep numbers and followed by a decline in the early/mid 1970s. Other productivity measures were similarly disappointing - average meat yield per animal stagnated after 1964.<sup>18</sup>

**Figure 3.1. Sheep numbers & lambing percentages, 1935-2011 (%).**



1. There was no agricultural survey conducted in 1997, 1998, 2000, or 2001.

Source: Statistics New Zealand

[http://archive.stats.govt.nz/browse\\_for\\_stats/economic\\_indicators/prices\\_indexes/historical-wool-export-prices-volumes-2011.aspx](http://archive.stats.govt.nz/browse_for_stats/economic_indicators/prices_indexes/historical-wool-export-prices-volumes-2011.aspx). Note: 2011 figures relate to 2010 season.

Declining pastoral productivity growth was accompanied by a structural decline in sheep meat prices but Hawke's Bay farmers were very slow to respond. Between 1960 and 1968, the value derived from sheep meat production underperformed other agricultural products by a substantial margin. Most importantly, sheep meats lagged beef (see Table 3.1). Similarly, the price of lamb was under pressure. In real terms, New Zealand's sheep meat benchmark (medium weight - 14.5kg lamb), peaked in 1945 at \$11.80/head and slipped slightly to \$11.05 in 1960 before plunging to \$7.02 in 1975.<sup>19</sup> The decline is supported by Agriculture New Zealand figures that suggest pastoral prices reached a peak in the early/mid 1960s.<sup>20</sup> The relative and real term decline in sheep meat prices signalled the

<sup>17</sup> Gould, *The Rake's Progress?*, 138.

<sup>18</sup> Coriolis et al, "Investors Guide to the New Zealand Meat Industry," June 2017: 29.

<sup>19</sup> Colin Brown, "Financial Viability – a long term view," Agriculture New Zealand, *New Zealand Grasslands Association*, Vol.58 (1996): 9, accessed February 12<sup>th</sup>, 2017, [http://www.grassland.org.nz/publications/nzgrassland\\_publication\\_648.pdf](http://www.grassland.org.nz/publications/nzgrassland_publication_648.pdf).

<sup>20</sup> *Ibid*, 9.

need for greater diversification and encouragement to do was both influential and persistent. Proponents included the Chairman of the New Zealand Meat Board, John Ormond (in 1952),<sup>21</sup> London meat wholesalers (1953),<sup>22</sup> Hastings electorate MP Edwin Keating (1958)<sup>23</sup> and visiting British official J. Eaton (1959).<sup>24</sup> Sensing the need for change, a small number of Hawke's Bay farmers invested in improved cattle genetics. Success was such that exports of live breeding cattle occurred as early as 1955; nevertheless, diversification was hesitant.<sup>25</sup> Hawke's Bay cattle numbers were little changed between 1945 and 1975 (see Table 2.2), a fact at odds with Hawke's observation that a rise in Hawke's Bay cattle numbers was "amongst the biggest visual changes in New Zealand agriculture in the post-war years."<sup>26</sup>

**Table 3.1. Value of New Zealand agricultural produce, 1938-1968 (adjusted for change in livestock numbers).**

Year	Wool	Beef	All Farm	Grain & Field Crops	Sheep Meats	Horticulture, Bees & Poultry	Dairy
1938/39	100	100	100	100	100	100	100
1959/60	911	515	447	417	407	373	331
1967/68	718	1017	592	669	629	662	432

Source: NZOYB 1969, Chapter 14a, figure 14.2. Data was not collected in the 1940s. The first, middle and last statistical data points are shown. Constant values rebased to 1938/39.

Why were Hawke's Bay farmers generally reluctant to diversify in the 1950s and 1960s despite weakening sheep meat prices and the existence of a viable alternative, most importantly cattle? The most plausible reason is that Hawke's Bay's highly profitable sheep farmers saw little need to change their wool based business model, one they believed had served them well since the 1880s. The sentiment is clear in comments from regional farming leaders. In 1955, the Head of Hawke's Bay Federated Farmers cast doubt on the viability of beef with the comment that "beef prices offer no incentive."<sup>27</sup> Farmer reticence was further strengthened by spikes in wool prices during the 1950s and 1960s. In an important observation, former Richmond Meats CEO and Meat Industry Association Chairman, John Loughlin, suggests wool was so profitable that farmers regarded sheep meats as little more

<sup>21</sup> "NZ Meat Board Chairman Speaks Out on Bulk Purchase," *Hawke's Bay Herald Tribune*, December 12<sup>th</sup>, 1952.

<sup>22</sup> "NZ urged to develop trade in chiller beef," *Hawke's Bay Herald Tribune*, March 18<sup>th</sup>, 1953.

<sup>23</sup> "Hawke's Bay Farmers urged to diversify," *Hawke's Bay Herald Tribune*, June 23<sup>rd</sup>, 1958.

<sup>24</sup> "NZ should expand beef says visitor," *Hawke's Bay Herald Tribune*, March 18<sup>th</sup>, 1959. First name not provided.

<sup>25</sup> "Napier Cattle Shipment," *Hawke's Bay Herald Tribune*, September 29<sup>th</sup>, 1954.

<sup>26</sup> Hawke, *The Making of New Zealand*, 237.

<sup>27</sup> "Beef shipments on owners account sought," *Hawke's Bay Herald Tribune*, May 21<sup>st</sup>, 1955.

than a “by-product” at the height of the Korean War wool boom in 1951.<sup>28</sup> In real terms, wool prices tripled between 1948/49 and 1950/51, driving the sale price of a single lamb to a record of nearly \$200/head.<sup>29</sup> Although the ‘twin booms’ of 1951 inevitably meant beef cattle were a less profitable alternative, beef production finally gained greater traction in the mid-1970s. Although little changed between 1955 and 1965, cattle numbers increased by approximately 200,000 head or 40% in the following decade (see Table 2.2). The rise was a long-awaited vote of confidence in beef and an indication that some farmers were beginning to recognise the advantages of pastoral diversification, a positive that reflected new opportunities in Japan and the United States as well as the outperformance of the beef prices relative to those of sheep meats (see Table 3.1).<sup>30</sup>

The rise in cattle numbers in Hawke’s Bay after 1965 suggested that the economics of sheep meat production (hogget, mutton and lamb) were in decline.<sup>31</sup> Given the importance of sheep farming to the economy and fearful that falling profitability would curtail growth, the New Zealand government intensified pastoral support mechanisms. In 1972, sheep meat prices fell 20% (see Figure 3.4) and in 1973 a report by the NZIER found that New Zealand sheep meat farmers received 53% of the final retail value, down from 61% a decade earlier due rising processing and handling costs.<sup>32</sup> Recognising that farmers were heavily exposed to surging inflation, as well as falling product prices, the New Zealand government introduced an explicit farm income support mechanism. The scheme was extremely generous. A system of guaranteed minima started in November 1974 and in 1978 the Supplementary Minimum Price (SMP) scheme (see also chapter two), commenced with a minimum support price of \$7/lamb, equivalent to nearly 100% of the price of a single animal.<sup>33</sup> Unfortunately, the economic malaise of the mid-1970s was such that beef was unable to offset the decline of sheep meat prices. In the mid-1970s, beef prices nearly

---

<sup>28</sup> John Loughlin in discussion with author, April 6<sup>th</sup>, 2017.

<sup>29</sup> Statistics New Zealand, see wool\_price\_time\_series\_(long).xls.

<sup>30</sup> Hayward (ed), *Golden Jubilee*, 119.

<sup>31</sup> Lamb = 12 months or less in age, Hogget = one to two years in age, Mutton = two years plus.

<sup>32</sup> T.R O’Malley, C Gillion & W.D Rose, *Farming and Inflation*, New Zealand Institute for Economic Research, Research Paper No.8 (Wellington: NZIER, 1973), 19.

<sup>33</sup> Calder & Tyson, *Meat Acts*, 65-67. For a flavour of the policy debate see McAloon, *Judgements of All Kinds*, 170.

halved with the consequence that Hawke's Bay meat producers, like their counterparts elsewhere in New Zealand, became reliant on state support.<sup>34</sup>

Wool underpins the expansion of sheep farming in Hawke's Bay.

As the economics of sheep meats declined after 1945, wool production became increasingly important for Hawke's Bay farmers, a change in emphasis that led to surging production. Meat remained an integral part of sheep farming but it was wool rather than meat that drove the expansion of pastoralism in Hawke's Bay after WW2. Underlining the importance of wool, between 1945 and 1975 approximately 65% of the pastoral farming area of Hawke's Bay was configured for wool production.<sup>35</sup> Store sheep, supplied to lowland farmers in Hawke's Bay and nearby Manawatu, were a secondary, although profitable, focus.<sup>36</sup> Wool was of particular importance for properties located in the hill country areas to the north, west and south west of the province, areas known as the "pioneer fringe."<sup>37</sup> In contrast, farms located in northern Hawke's Bay (Wairoa & Tutira) and those on the Heretaunga and Ruataniwha Plains, aimed to produce a more even mix of meat and wool.<sup>38</sup> Nevertheless, described in 1955 as Hawke's Bay's "most important" farming system, falling sheep meat profits meant increased wool production became a priority for these farms as much it was for farms on the fringe of the province.<sup>39</sup> The broad based primacy afforded wool drove a sharp rise in output. Between 1945 and 1965, wool production in the province increased by 50% (see Table 3.2).

**Table 3.2. Huge growth: Hawke's Bay wool production, 1945-1975 (estimated million lbs).**

1945	47.0m lbs	n/a
1955	57.0m lbs	+21.3%
1965	70.4m lbs	+23.5%
1975	76.0m lbs	+8.0%

Sources: NZOYBs 1945-1975 & Statistics NZ - HB Wool Exports.ods.

The relative importance of wool had a significant impact on the type of sheep farmed in Hawke's Bay. Between 1920 and 1955, the percentage of breeding ewes (the

<sup>34</sup> Ibid, 63 & 81

<sup>35</sup> R.H Scott, "Farming in Hawke's Bay," *New Zealand Grassland Association*, Vol.17, Napier (1955): 19, 29 & 30.

<sup>36</sup> Ibid, 29. For fattening prior to slaughter.

<sup>37</sup> Ibid.

<sup>38</sup> Scott, "Farming in Hawke's Bay," 30.

<sup>39</sup> Ibid.



main producers of wool) on Hawke’s Bay sheep farms rose from 43% to 63%.<sup>40</sup> Furthermore, the focus on wool production meant dual purpose breeds dominated.<sup>41</sup> In 1955, Romney cross-bred sheep were “predominant” in Hawke’s Bay, accounting for an estimated 80%-90% of the provincial flock.<sup>42</sup> The comparable figure for New Zealand as a whole was some 15% to 20% lower.<sup>43</sup> The balance, between 10% and 20%, was rounded out by smaller numbers of other dual purpose breeds such as Southdown and Cheviot, most probably located on the lowland plains.<sup>44</sup> As producers of coarse grade fibre, the dominance of cross-bred sheep meant high micron wools were almost totally dominant in Hawke’s Bay after WW2. Ironically, given the importance of wool revenues to farmers, wool only breeds were extremely uncommon. Although Merinos were the first sheep in the province in 1849, the breed was rare by 1945 on account of their susceptibility to foot rot.<sup>45</sup> Consequently, the primacy of the Romney continued throughout the 1960s and 1970s. Although “cross breeding with other breeds of higher genetic potential” was common it was insufficient to alter the historical mix of the Hawke’s Bay flock.<sup>46</sup>

**Table 3.3. Dual purpose breeds dominate: New Zealand sheep breeds, 1962 & 1979 (% of total).**

	1962	1979	
<b>Romney</b>	<b>73.4%</b>	<b>44.7%</b>	<b>Dual purpose breed</b>
<b>Perendale</b>	-	<b>17.9%</b>	<b>Dual purpose breed</b>
<b>Coopworth</b>	-	<b>17.8%</b>	<b>Dual purpose breed</b>
Other crossbreeds	13.0%	3.3%	
Corriedale	5.0%	7.8%	
Halfbred	4.5%	3.7%	
Southdown	2.0%	0.3%	
Merino	1.9%	2.0%	Wool only breed
Border Leicester	0.2%	1.2%	
Drysdale	-	0.9%	Wool only breed
Cheviot	-	0.2%	
Other downs	-	0.2%	
	100%	100%	

Sources: New Zealand Wool Board, Department of Statistics: Annual sheep returns (1962 & 1979).

<sup>40</sup> Ibid, 28.

<sup>41</sup> “About Us,” Perendale Sheep Society of New Zealand, accessed October 18<sup>th</sup>, 2018  
<http://www.perendalenz.com/about-us.html>

<sup>42</sup> L.J Dowling, “Farming in Hawke’s Bay,” *New Zealand Grassland Association*, Vol.37, Hastings (1975): 234, accessed June 30<sup>th</sup>, 2018, [https://www.grassland.org.nz/publications/nzgrassland\\_publication\\_522.pdf](https://www.grassland.org.nz/publications/nzgrassland_publication_522.pdf).  
 Romneys produce economic quantities of both meat and wool.

<sup>43</sup> *NZOYB*, 1957, Chapter 20c.

<sup>44</sup> Scott, “Farming in Hawke’s Bay,” 30. Also see – “Sheep Breeds in New Zealand,” Clive Dalton, last modified March 28<sup>th</sup>, 2010, <http://woolshed1.blogspot.co.nz/2010/03/sheep-breeds-in-new-zealand.html>

<sup>45</sup> Scott, “Farming in Hawke’s Bay,” 26.

<sup>46</sup> Dowling, “Farming in Hawke’s Bay,” 234.

The preference for Romney sheep was based on strong fundamentals in the wool market. As wartime surpluses cleared and consumer markets reopened, prices for coarse wool firmed noticeably.<sup>47</sup> Higher prices sparked a lift in production and the surge in wool output seen in Hawke's Bay after 1945 was matched nationally. By 1949 the volume of New Zealand wool exports was 155% greater than pre-war levels.<sup>48</sup> Moreover, geographical demand was diversifying. Although the UK market remained significant, the competitiveness of the UK textile industry had been falling since the end of the WW2.<sup>49</sup> Consequently, after 1945 the importance of the UK market fell as exports to France, Germany and other European states resumed (see Table 3.4).<sup>50</sup> Furthermore, demand exceeded supply in important markets. As Hall notes, US wool production was unable to meet domestic demand by the late 1940s.<sup>51</sup> Together these positives underwrote a steady rise in coarse wool prices (relative to total export prices) between 1945 and 1949 before an aggressive spike took hold in 1950/51 in response to demand associated with the Korean War.

**Table 3.4. New Zealand wool export destinations: 1939-1975 (% of total).**

	1939	1946	1959	1975
UK	56%	47%	34%	19%
France	14%	14%	18%	8%
Other Europe	11%	6%	16%	33% *
Australia	5%	neg	1%	2%
USA	5%	18%	17%	3%
Other states	4%	7%	1%	8%
Japan	3%	0%	4%	8%
Germany	2%	8%	7%	9%
USSR	0%	0%	0%	10%
China	0%	0%	2%	0%

Source: NZOYBs 1939-1975. \* Mostly Greece and The Netherlands.

The 1951 boom reinforced the position of wool as New Zealand's most important pastoral product. Between 1945 and the peak of the boom, Hawke shows that gross wool revenues rose by 700%.<sup>52</sup> In contrast, gross meat receipts rose by 165%.<sup>53</sup> The rising importance of wool relative to sheep meats was similarly apparent at important

<sup>47</sup> Baker, *War Economy*, 213 & 215. Also see - Statistics NZ, see wool\_price\_time\_series\_(long).xls.

<sup>48</sup> NZOYB, 1950, Chapter 9b.

<sup>49</sup> Geoffrey Owen, *From Empire to Europe: The Decline and Revival of British Industry Since the Second World War* (London: Harper Collins, 1999), 66. Includes woollen yarn.

<sup>50</sup> NZOYB, 1950, Chapter 9b.

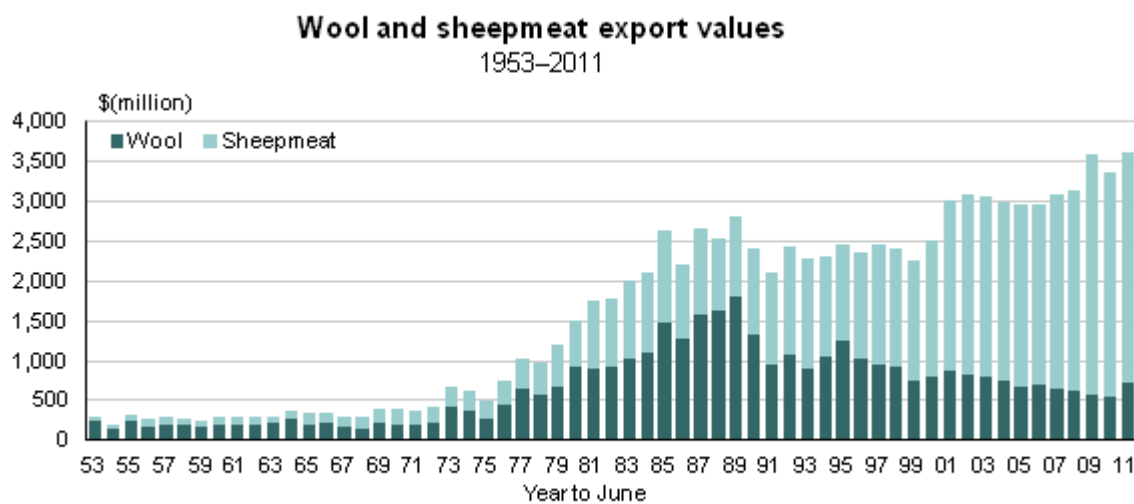
<sup>51</sup> Hall, *Emerging From An Entrenched Colonial Economy* (Cham: Palgrave, 2017), 221.

<sup>52</sup> Hawke, *The Making of New Zealand*, 34.

<sup>53</sup> *Ibid*, 86.

benchmark/research farms in Hawke's Bay such as Smedley Station. Typical of farms located on the lowland plains, wool receipts at Smedley in the 1950s exceeded those of sheep meats by some 65% against a more even balance in the early 1940s.<sup>54</sup> Furthermore, the importance of coarse wool outlasted the Korean War. As late as 1957, Hawke's Bay wool brokers were still describing prices as "silly,"<sup>55</sup> and in the same year wool production in the province reached a new record.<sup>56</sup> The combination of rising nominal prices and surging production ensured that wool remained the senior pastoral export every year from 1953 to 1975, the first year since the Korean wool boom to feature a more even balance between meat and wool exports (see Figure 3.2).

**Figure 3.2. Meat & wool export values compared, 1953-2011 (absolute values).**



Source: StatisticsNewZealand

[http://archive.stats.govt.nz/browse\\_for\\_stats/economic\\_indicators/prices\\_indexes/historical-wool-export-prices-volumes-2011.aspx](http://archive.stats.govt.nz/browse_for_stats/economic_indicators/prices_indexes/historical-wool-export-prices-volumes-2011.aspx). Note: 2011 figures relate to 2010 season.

The rising contribution of wool to farm receipts after 1945 shaped New Zealand's pastoral production system at the farm level. Relative to total export prices (a basket of goods dominated by primary products), wool retained most of the gains of 1950/51 until 1965 and it was not until 1970 that wool prices relative to other exports retraced to 1945 levels. Even then the fall was brief. By 1975, export wool prices relative to total export prices had recovered back to levels typical of the period prior to the 1965 price collapse that followed a second spike in wool prices in 1963/64 (see Figure 3.3). As a consequence,

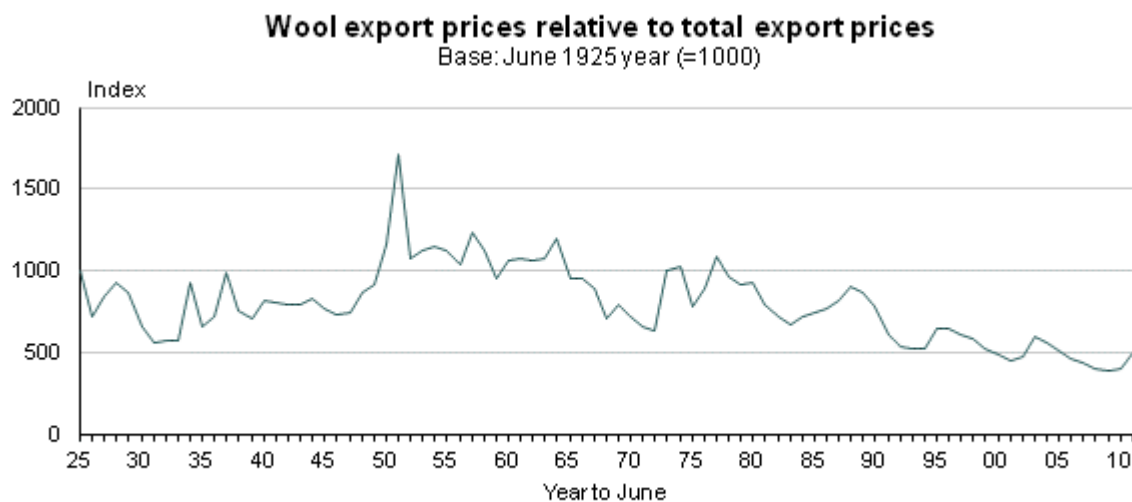
<sup>54</sup> "Big Development Programme at Smedley," *Hawke's Bay Herald Tribune*, December 10<sup>th</sup>, 1957.

<sup>55</sup> "Wool prices reflect firming market," *Hawke's Bay Herald Tribune*, November 20<sup>th</sup>, 1958. The comment is backed by statistical observations. See Statistics NZ, wool\_price\_time\_series\_(long).xls.

<sup>56</sup> "Wool production last season set record," *Hawke's Bay Herald Tribune*, November 9<sup>th</sup>, 1957.

between 1945 and 1975 it became standard for farmers to focus on wool production by prioritising feed supplies for ewes, the key producers of wool. Crucially, lambing percentages, the main measurement of meat production, remained lower in 1975 than 1955, and at no time between 1945 and 1975 did lambing percentages in New Zealand rise above 100%. It is particularly telling that lambing percentages declined for five consecutive years after both the 1951 boom and the 'echo' boom of 1963/64 (see Figure 3.1).

**Figure 3.3. Short Boom(s) & Long Bust: relative New Zealand wool export prices, 1925-2010.**



Source: StatisticsNewZealand

[http://archive.stats.govt.nz/browse\\_for\\_stats/economic\\_indicators/prices\\_indexes/historical-wool-export-prices-volumes-2011.aspx](http://archive.stats.govt.nz/browse_for_stats/economic_indicators/prices_indexes/historical-wool-export-prices-volumes-2011.aspx)

Farmers are complacent as synthetic fibres gain and real wool prices decline.

The entrenched belief in wool led to complacency among Hawke's Bay farmers. Importantly, Hawke's Bay Federated Farmers saw little justification for product promotion or market diversification.<sup>57</sup> But it was the tardy reaction to synthetic fibres that truly highlighted farmer complacency. In 1939, the New Zealand Department of Agriculture issued the first of many warnings regarding the threat of nylon alternatives.<sup>58</sup> But it was not until 1950 that the Hawke's Bay branch of Federated Farmers was truly confronted by the synthetic threat. In April of that year, New Zealand's representative to the International Wool Secretariat, Reginald Lund delivered an explicit warning that high wool prices were

<sup>57</sup> "Claims for Synthetic fibres should be accepted with reserve," *Hawke's Bay Herald Tribune*, May 15<sup>th</sup>, 1953.

<sup>58</sup> New Zealand Department of Agriculture, Annual Report, (1939/40), H-29, 13 & 14.

stimulating demand for synthetic textiles.<sup>59</sup> The warning gained little traction in Hawke's Bay, and in 1951 the provincial branch of Federated Farmers formally rejected a national remit in favour of an additional marketing levy to confront synthetics.<sup>60</sup> Council member F.N.H Beamish typified the consensus of the time, contending that "not one farmer in 1,000 would be happy with this proposal."<sup>61</sup> Although Hawke's Bay farmers were reluctant to accept the validity of the synthetic threat, Lund's warning, nonetheless, raised the profile of the issue, and by 1953 Hawke's Bay Federated Farmers grudgingly accepted that synthetics were indeed taking market share from wool.<sup>62</sup> Concern was sufficient to motivate a group from Hawke's Bay Federated Farmers to visit a nylon factory in the United States in 1953. But the trip did little to change their established position. Collectively unimpressed with the quality and appearance of nylon, the group was extremely dismissive of the rival material.<sup>63</sup> The view was vigorously adopted by Hawke's Bay Federated Farmers. At the 1953 provincial conference Chair William Petrie described suggestions that "synthetics were superior" as "propaganda" and "misleading."<sup>64</sup>

Others shared Hawke's Bay's complacency regarding the rise of synthetics and the position of Hawke's Bay Federated Farmers was reinforced by national bodies and a lack of belief in multilateral wool marketing. In 1955, Mr W Horrobin, a senior member of the New Zealand Wool Board, told a meeting of Hawke's Bay Federated Farmers that "synthetics use was increasing but there is good evidence that wool was holding its own as a premier fibre."<sup>65</sup> Similarly, other figures in the New Zealand wool industry suggested that synthetic fibre manufacturers were struggling to make competitive quantities of nylon despite massive investment in capacity.<sup>66</sup> These doubts were reflected in farmer perceptions of global marketing structures. Formed in 1937 and supported by levies drawn from growers in New Zealand, Australia, Uruguay and South Africa, the International Wool Secretariat (IWS)

---

<sup>59</sup> "What Does Future hold for Wool," *Hawke's Bay Herald Tribune*, April 9<sup>th</sup>, 1951 & "Synthetic fibres seen as a real threat to wool," *Hawke's Bay Herald Tribune*, April 14<sup>th</sup>, 1951.

<sup>60</sup> "Wool Marketing Remit Unpopular with Hawke's Bay Farmers," *Hawke's Bay Herald Tribune*, November 9<sup>th</sup>, 1951.

<sup>61</sup> "Wool Marketing Remit Unpopular." The national levy was, nonetheless, introduced.

<sup>62</sup> "Wool Boom Delayed Beef," *Hawke's Bay Herald Tribune*, May 19<sup>th</sup>, 1950.

<sup>63</sup> "Wool Mans View," *Hawke's Bay Herald Tribune*, May 15<sup>th</sup>, 1953.

<sup>64</sup> "Claims for Synthetic fibres should be accepted with reserve."

<sup>65</sup> "Rise of Synthetics," *Hawke's Bay Herald Tribune*, June 17<sup>th</sup>, 1955.

<sup>66</sup> *Ibid.*

was primarily responsible for the global promotion of wool.<sup>67</sup> The threat of synthetics was therefore a key reason for the establishment of the IWS.<sup>68</sup> But as levies were already being paid to IWS to confront synthetics, requests for additional fees were inevitably regarded with great suspicion.<sup>69</sup> Furthermore, although the IWS was a collaborative body, the nations involved were increasingly diverse and in some regards, competitors, bringing into question the payment of multinational levies in any form.<sup>70</sup> Consequently, many Hawke's Bay farmers believed poorly crafted and confused marketing was the real problem - not the threat of synthetics.<sup>71</sup>

Synthetics remained a controversial issue throughout the post war decades but confidence in the long-term future of coarse wool remained high in the 1960s and early 1970s. Unfortunately, the underlying reality was less positive. In 2010 terms, wool prices fell from a peak of \$64.52/Kg in 1951 to \$26.82/Kg a year later. But relative to other exports they did not slump (see Figure 3.3) and prices remained in a range between \$30/Kg and \$27/Kg for a further six years.<sup>72</sup> In 1963/64 an 'echo' boom, in which real prices reached a peak of \$25.11/kg, reinforced the belief in farming circles that high wool prices were a structural certainty.<sup>73</sup> Unsurprisingly, wool production in Hawke's Bay continued to rise, and by the early 1970s the Napier wool centre was selling around 250,000 bales of cross-bred coarse wool per season, an increase of 80% on amounts sold in the 1950s.<sup>74</sup> By 1975, wool production in the province was an estimated 62% greater than 1945 (see Table 3.2). But the outward appearance of prosperity disguised underlying decay. Notwithstanding periodic booms, the real price of coarse wool had been sliding since the early 1950s, and by 1971 prices reached a post war low of \$9.48/Kg.<sup>75</sup> At last the decline gained the attention of farmers and New Zealand wool production in that year fell by an estimated 10%, the most

---

<sup>67</sup> "Wool Secretariat," *Evening Post*, November 9<sup>th</sup>, 1937 (Page 11).

<sup>68</sup> "Artificial Wool," *Evening Post*, November 18<sup>th</sup>, 1937 (Page 27).

<sup>69</sup> Julian Roche, *The International Wool Trade* (Cambridge: Woodhead Publishing, 1995), 180.

<sup>70</sup> Hall, *Emerging From An Entrenched Colonial Economy*, 285 & 286. For example, Australian merino wool is very different product to that of New Zealand coarse wool. Furthermore, Uruguay and Argentina were active competitors for New Zealand growers.

<sup>71</sup> "Claims for Synthetic fibres should be accepted with reserve."

<sup>72</sup> Statistics NZ, see wool\_price\_time\_series\_(long).xls.

<sup>73</sup> *Ibid.* The above statistics show that the 'echo' boom was much smaller in size than the boom of 1951, as was the impact of the subsequent wool price decline (1965).

<sup>74</sup> Simon Ville, *The Rural Entrepreneurs*, 129. Wellington was a much larger wool auction centre than Napier during the period 1945-75.

<sup>75</sup> Statistics NZ, see wool\_price\_time\_series\_(long).xls.

significant annual decline since WW2.<sup>76</sup> Following the commodity boom of 1973/74, which lifted real term prices back to where they had been in the early 1960s, volumes recovered.<sup>77</sup> But the respite was brief. In the mid-1970s, prices plunged again effectively ending the ‘Great Wool Rush’ of the post-war era.

**Table 3.5. NZ wool output lbs (m) & prices (cents/Kg), 1945-2010 (main subsidy period in bold italics). Rebased to 2010.**

Year	1945	1955	1965	1970	<b>1975</b>	<b>1980</b>	<b>1985</b>	1995	2005	2010
Output	372m	455m	623m	723m	<b>648m</b>	<b>787m</b>	<b>822m</b>	670m	509m	408m
Nominal	n/a	\$1.27	\$1.07	\$0.78	\$1.28	\$3.70	\$5.08	\$5.54	\$4.38	\$4.21
Real	n/a	\$28.96	\$18.57	\$11.11	\$11.50	\$16.78	\$10.45	\$7.71	\$5.04	\$4.21

Sources: *NZOYBs* 1945-2010, Statistics New Zealand, ANZ Agrifocus. Output in 1995 has been adjusted upwards by 30% to reflect the approximate difference between clean and greasy wool. Available statistic records clean wool only. Refer: “Difference in Weight,” Department of Commerce, accessed July 19<sup>th</sup>, 2019, <http://nvlpubs.nist.gov/nistpubs/nbstechnologic/nbstechnologicpaperT57.pdf>.

### Summary 1945 – 1975.

Pastoral farming in Hawke’s Bay was highly profitable in the decades immediately following WW2. Although sheep meat prices declined in real terms, nominal wool prices were high enough to drive pastoral expansion on the fringe of the province and intensification on the plains. Unfortunately, these prosperous times led to complacency, and Hawke’s Bay’s wealthy farming community was slow to recognise the structural impact of declining pastoral productivity, the threat of synthetic fibres and falling prices in real terms. Wool booms in 1951 and 1963 were distortions to the extent that they overstated the appeal of wool relative to synthetics and understated pastoral alternatives such as cattle. Additionally, the declining economics of sheep meats explains why reproductive productivity fell for lengthy periods following each boom, suggesting wool production - not sheep meat – remained the priority. Consequently, based on the Romney, wool remained by some margin the senior pastoral product between 1945 and 1975. Nevertheless, the role of sheep meats should not be understated given the indivisibility of sheep meats and wool. Farms located in prime areas of the province aimed to produce a combination of medium

<sup>76</sup> *NZOYB*, 1978, Chapter 14c, “Wool Production.”

<sup>77</sup> Statistics NZ, see [wool\\_price\\_time\\_series\\_\(long\).xls](#) & *Ibid*.

weight (14.5kg) lambs and coarse wool.<sup>78</sup> As long as output growth and wool prices remained high enough to offset declining sheep meat returns, the system was highly profitable. But when the full range of pastoral prices slumped in the early 1970s, the consequent lack of diversification placed the sector at great risk.

### 1975-1995: Disruption and Adjustment.

In the mid-1970s, New Zealand's primary based economy became extremely volatile and inflation prone. Although some agricultural sector reforms were implemented, the New Zealand government's main reaction was to 'defend and subsidise.'<sup>79</sup> After 1975, as New Zealand's terms of trade slumped, subsidisation and price stabilisation measures were intensified in the hope intervention would compensate for weaker pastoral prices and declining productivity growth. The policy was not unknown. Similar measures had been introduced to New Zealand agriculture since the mid-1960s.<sup>80</sup> But under the Muldoon government, Hawke's Bay sheep farmers, in common with farmers elsewhere in the country, became reliant on the state. In 1985, abolition of farm support mechanisms and lower commodity prices led to a collapse in sheep numbers. In response, most pastoral farmers changed the focus of their businesses and, in a reversal of earlier decades, meat became the most important component of pastoral farm income by 1995.

A new productive model emerges as wool prices slump and subsidies end.

As aforementioned (p 92), subsidies, paid in the form of the Supplementary Minimum Prices (SMP), became an extremely important part of farm incomes in the late 1970s. Introduced in 1978, SMP payments were assessed on the basis of production.<sup>81</sup> Consequently, SMPs were an emphatic expression of productivism, a policy that prioritised

<sup>78</sup> With feed prioritised for ewes (the main wool producers) lambs were typically unable to reach weights above 13kg.

<sup>79</sup> Wool Industry Act, 1977 (No.92). Also see – "Wool Industry Review (June 1981), 230 & 231. The 1978 merger of the New Zealand Wool Marketing Corporation and New Zealand Wool was a bid to create a more focused organisational and marketing structure. The New Zealand Wool Board itself was established in 1944 to conduct research and promotion and stabilise prices when required.

<sup>80</sup> Ibid.

<sup>81</sup> "1980/1981 Meat Industry Review," Reserve Bank of New Zealand, last modified June 1981, 205 & 206. <https://www.rbnz.govt.nz/-/media/ReserveBank/Files/Publications/Bulletins/1982/1982june451980-81meatindustryreview.pdf>



absolute growth in agricultural output. The volume focus of the scheme led to a sharp increase in the number of sheep in Hawke's Bay, which rose nearly 25% to 7.85m<sup>82</sup> between 1975 and 1983.<sup>83</sup> Volume growth did not, however, compensate for declining prices. Subsidies soon became indispensable to farm incomes and by the middle of the 1980s SMPs were the single most important component of pastoral sector revenues.<sup>84</sup> Expansion of the scheme was an influential driver of rising dependency. Beef producers received their first SMP payment when the vital US market was hit by recession in 1981.<sup>85</sup> Similarly, in the 1981/82 season, wool joined sheep meats as an SMP participant and through to the termination of all subsidies in 1984/85, wool growers received payments totalling NZ\$439.7m.<sup>86</sup> Although later to join the scheme than sheep meats, wool was no junior player. Subsidy payments were lower than the amount paid to sheep meat producers (NZ\$657.3m) but substantial nonetheless.<sup>87</sup> SMP payments were gratefully received by a struggling sector. Peaking in 1982, "producer subsidy equivalents" averaged 25% of total farm income from 1979 to 1986.<sup>88</sup> Furthermore, subsidies provided a vital means by which to cover the 400% rise in farm operating costs from 1971 to 1981/82.<sup>89</sup>

The productivist focus of the SMP scheme reached far beyond farm economics, influencing both the quality of sheep meat production and reversing decades of pastoral diversification. In the quest for ever higher sheep numbers and therefore greater income, pastoral farmers in Hawke's Bay prioritised quantity over quality.<sup>90</sup> The problem was particularly apparent in the excessive production of fat lambs, the supply of which ran counter to market trends in favour of leaner cuts.<sup>91</sup> At the same time, the scheme had a

---

<sup>82</sup> NZOYB, 1984, Chapter 15c.

<sup>83</sup> NZOYB, 1978, Chapter 14c.

<sup>84</sup> Sheppard & Biggs, "Supplementary minimum prices: A production incentive?" 47.

<sup>85</sup> "1980/1981 Meat Industry Review," 206.

<sup>86</sup> G.R Griffiths & T.P Grundy, "The Supplementary Minimum Price Scheme: A Retrospective Analysis," *Agribusiness and Economics Research Unit (Lincoln College)*, Research Report No.191 (January 1988): 5, accessed January 15<sup>th</sup>, 2017, [https://researcharchive.lincoln.ac.nz/bitstream/handle/10182/191/aeru\\_rr\\_191.pdf;jsessionid=E3985017C56EAF52CB06D07F2C355CEF?sequence=1](https://researcharchive.lincoln.ac.nz/bitstream/handle/10182/191/aeru_rr_191.pdf;jsessionid=E3985017C56EAF52CB06D07F2C355CEF?sequence=1)

<sup>87</sup> Ibid.

<sup>88</sup> Ron L. Sheppard, "New Zealand Agricultural Policy Change: Some Effects," *Agribusiness and Economics Research Unit, Lincoln University, Discussion Paper 35* (July 1993): 5, 9 & 10.

<sup>89</sup> Sheppard & Biggs, "Supplementary minimum prices: A production incentive?" 47.

<sup>90</sup> Craig Hickson, CEO Progressive Meats, in discussion with author, March 2<sup>nd</sup>, 2017. Farmers produced light weight (13kg) lambs.

<sup>91</sup> Calder & Tyson, *Meat Acts*, 85.

severe impact on pastoral diversification. Over the life of the scheme, SMP payments for beef (NZ\$80.2m) were virtually immaterial compared to those of sheep meats and wool which together totalled approximately NZ\$1.1 billion.<sup>92</sup> The emphasis on sheep had a detrimental impact on diversification. In 1975, the number of cattle in Hawke's Bay was 770,000 but by 1985 numbers had fallen to 440,000 as farmers, reacting to SMP incentives, focused on sheep. By 1995, cattle numbers had rebounded (530,000) but the total was little more than those of 1955 (see Table 2.2).

Subsidies clearly intended to compensate for the structural decline in sheep farming. But SMPs could not alter the deteriorating economics of pastoralism, a trend particularly apparent in wool growing. Although still dominant, the relative importance of wool to New Zealand's net export position had been declining since the early 1960s and the negative trend continued after 1975. Despite describing the outlook for wool in 1981 as "reasonably bright," the RBNZ's own statistics indicated that wool receipts, as a percentage of total export income, had fallen from 34.7% in 1960 to 18.8% in 1980.<sup>93</sup> By the mid-1990s, the real price of coarse wool was trading at a fifty year low and, relative to total export prices, wool prices were effectively half that of 1975 (see Table 3.5 & Figure 3.4). The cessation of subsidies after 1985 exposed Hawke's Bay sheep farmers to the true economics of their industry and the impact was catastrophic. Between 1985 and 1995, sheep numbers virtually halved and wool output fell approximately 45% (see Table 3.6). In the period 1990 to 1994 alone volumes fell by 16%.<sup>94</sup>

**Table 3.6. Hawke's Bay wool production, 1985-1995 (estimated tonnage).**

1985	34,500 tonnes	5.50kg/head
1995	18,890 tonnes	4.36kg/head

Sources: NZOYB 1985-1995 & Statistics NZ, see HB Wool Exports. ods.

The termination of SMPs forced substantial reform in the business model employed by Hawke's Bay pastoral farmers, leading to a renewed focus on sheep meats and ending a long-term trend in favour of land intensification. Table 3.7 indicates that the negatives of declining real and relative coarse wool prices were matched against the positive of rising

<sup>92</sup> G.R Griffiths & T.P Grundy, "The Supplementary Minimum Price Scheme," 5.

<sup>93</sup> "Wool Industry Review (June 1981)," 231.

<sup>94</sup> "Agriculture/Hawke's Bay Region/Wool shorn (kg)/1990-1994," Statistics New Zealand, accessed April 15<sup>th</sup>, 2017, <http://www.stats.govt.nz/infoshare/ViewTable.aspx?pxID=57a6f1a8-dd72-44b2-b38f-52f73203c963>.

lambing percentages, a key indicator of sheep meat production. Although reproductive productivity in Hawke's Bay did not regularly exceed 100% until 1988, it is clear a step change had occurred by 1990, and by 1995 lambing percentages were structurally higher. In the process, pastoral farming revenues migrated from a reliance on subsidised sheep meats and wool to unsubsidised meat. Similarly, the quality of Hawke's Bay meat improved as farmers began to focus on producing higher weight (18kg+) lambs.<sup>95</sup> Meanwhile, in a reversal of a forty year trend, the size of pastoral farms in Hawke's Bay gradually increased as farmers sought scale advantages to offset the loss of subsidy income.<sup>96</sup> The rise was in sharp contrast to the era of high wool prices during the 1950s. Scott shows that the size of the average Hawke's Bay sheep farm fell from 271 ha in 1920 to 194 ha in 1955.<sup>97</sup> After 1970, intensification ceased and by 1995 the average pastoral farm in the province was more than twice as large as it was in 1955.

**Table 3.7. Gross farm profit/ha, farm size & lambing %, Hawke's Bay 1971-1995.**

Season	Effective hectares	Gross farm profit/HA	Lambing %
1970/71	374	\$25.32	97.3%
1972/73	364	\$77.04	101.1%
1974/75	354	\$21.97	97.2%
<b>3 year avg</b>	<b>364</b>	<b>\$41.44</b>	<b>98.5%</b>
1976/77	348	\$86.37	100.1%
1978/79	338	\$90.96	96.6%
1980/81	352	\$95.92	104.7%
<b>3 year avg</b>	<b>346</b>	<b>\$91.08</b>	<b>100.5%</b>
1982/83	376	\$88.19	105.0%
1984/85	364	\$128.21	101.4%
1986/87	371	\$95.70	94.1%
<b>3 year avg</b>	<b>370</b>	<b>\$104.03</b>	<b>100.2%</b>
1988/89	369	\$91.48	103.7%
1990/91	400	\$89.73	104.4%
1992/93	398	\$162.70	103.2%
1994/95	427	\$99.06	111.1%
<b>4 year avg</b>	<b>399</b>	<b>\$110.74</b>	<b>105.6%</b>
<b>25 year avg</b>	<b>372</b>	<b>\$84.64</b>	<b>99.9%</b>

Source: Rob Gibson, Beef & Lamb New Zealand Economics Service, *Hawke's Bay Class 4 Sheep & Beef Farm Survey*, 1970-2010. Note: Strong gross profitability in 1972/73 reflects a brief spike in coarse wool prices.

<sup>95</sup> Craig Hickson in discussion with author, March 2<sup>nd</sup>, 2017.

<sup>96</sup> C.G.R Chavasse (keynote speaker NZ Institute of Foresters AGM, May 8<sup>th</sup>, 1984), "Forestry and the small grower: Diversification in forestry," *New Zealand Journal of Forestry*, Vol.30, No.1 (1985): 33. In 1980, 57% of farm land sold in Hawke's Bay was aggregated.

<sup>97</sup> Scott, "Farming in Hawke's Bay," 28.

Although the emphasis and structure of sheep farming in Hawke's Bay began to change after 1975, one element of the successful farming model of the 1950s remained unaltered - Romney sheep. Despite the slump in both meat and wool prices the breed remained dominant in the province.<sup>98</sup> Cross breeding with sheep of higher "genetic potential"<sup>99</sup> was common after 1975 but doing so did not generate a material increase in lambing rates and meat yield.<sup>100</sup> In contrast, specialist Romney studs in Hawke's Bay showed that genetic improvement within the existing Romney flock could achieve excellent results.<sup>101</sup> At a practical level long established farms in Hawke's Bay, such as Gwavas Station, experimented with other breeds in the 1980s but returned to the Romney in the decade that followed.<sup>102</sup> Even when farmers sought to develop non-traditional breeds, the Romney remained a core aspect of cross breeding programmes.<sup>103</sup>

Genetic improvements within the existing Romney flock lifted lambing rates but the increase did not compensate for the structural decline of pastoral prices, most importantly wool. From 1975 to 1995, the average gross profit on a Hawke's Bay pastoral farm increased from \$41.44/ha to \$110.74/ha, or 267% in nominal terms (see Table 3.7). The rise was seemingly adequate but in real terms farmers were going backwards - inflation was 455% over the same two decades.<sup>104</sup> Moreover, as a percentage of land value, pastoral returns fell from 7.9% in 1975 to 3.9% in 1995.<sup>105</sup> The decline was matched with weaker wool prices which more than halved in real terms in the same period.<sup>106</sup> By 1995, reluctance to accept the impact of synthetics had finally been replaced by the realisation that wool production was in mortal danger. Accordingly, the unbeatable belief in wool so typical of the post war decades was in serious jeopardy and in a sign of increasing desperation and willingness to try new approaches, price stabilisation measures ended on the 20<sup>th</sup> of December 1995.

---

<sup>98</sup> Dowling, "Farming in Hawke's Bay," 234.

<sup>99</sup> Ibid. Dowling notes cross breeding stabilised in the 1980s and that sheep meat focused breeds such as Finn, Texel and East Friesian's were introduced.

<sup>100</sup> D.C Dalton and S Ball, "Performance of Romney and crossbred sheep on east coast hill country," *New Zealand Journal of Experimental Agriculture*, Vol.4 (1976): 36-40.

<sup>101</sup> "Hill Country Romney Rams," Hildreth Romney's, accessed October 17<sup>th</sup>, 2017. <http://www.hildrethromneys.co.nz/>

<sup>102</sup> Jon Morgan, "Hawke's Bay Heritage," *The Dominion Post*, December 2<sup>nd</sup>, 2004, accessed July 19<sup>th</sup>, 2019, <https://www.kiwitech.co.nz/TechnoGrazing/PressDocs/Hawke%27s%20Bay%20heritage.htm>

<sup>103</sup> Kate Taylor, "Business Beats Nostalgia," *New Zealand Farmer*, July 26<sup>th</sup>, 2017.

<sup>104</sup> "RBNZ inflation calculator."

<sup>105</sup> Valuation NZ, see HB rural property valuations 1945-2010.ods

<sup>106</sup> Statistics NZ, see wool\_price\_time\_series\_(long).xls

The end of an era: Last stockpile bale sold.

“When the Wools of New Zealand sales manager knocked down the last bale of the Wool Board's stockpile on 20 December 1995, it marked the end of an era. The 123 kilogram bale of scoured 35 micron crossbred wool sold for \$6,150 or \$50 a kilogram. It was a price far greater than even the sky-high prices of the Korean War wool boom in the 1950s. However, the buyer said he would have even paid double the price: ‘We were buying history, not merchandise.’ Wool stockpiles rose and fell several times during fifty years of market intervention by statutory New Zealand wool marketing bodies. Successive organisations—the post-war Joint Organisation, the New Zealand Wool Commission, the New Zealand Wool Marketing Corporation, and the New Zealand Wool Board—bought and sold wool to minimise price fluctuations and provide guaranteed returns to woolgrowers. The most recent peak stockpile level was 655,000 bales in 1991.”<sup>107</sup>

Summary 1975-1995.

Between 1945 and 1995 the Hawke’s Bay pastoral sector, experiencing a structural decline in sheep farming profits and the abolition of agricultural subsidies, restructured aggressively. By 1985, pastoral farmers had become heavily reliant on state support, a policy based on the concept of productivism whereby volume growth rather than quality was rewarded. In a further distortion, SMP incentives reversed several decades of pastoral diversification in favour of cattle. Reform in the mid-1980s sparked a transition to a sharply different productive model based on meat not wool, an adjustment that led to a pointed increase in reproductive productivity of the Romney based flock as well as greater focus on the quality of sheep submitted for slaughter. At the same time, Hawke’s Bay pastoral farms became bigger. Improved productivity and larger scale farms enabled profitability on a

---

<sup>107</sup> NZOYB, 1996, Chapter 18.4.

nominal basis to rise. But adjustment was not without ongoing trauma. Returns on invested capital declined noticeably between 1975 and 1995 as did profitability in real terms.

### 1995-2010: Recovery and Stabilisation.

In the mid/late 1990s glimmers of recovery began to appear. Sheep meat prices began to improve, and pastoral productivity continued to rise. Although the fundamentals of pastoral farming were now more stable, not all indicators were supportive. Wool prices remained weak and diversification continued to struggle, meaning Hawke's Bay pastoral farmers were increasingly leveraged to a single soft commodity - sheep meats, a reliance that led to bouts of earnings volatility.

#### Earnings volatility rises and diversification stumbles.

The decline in Hawke's Bay sheep numbers that began in 1985 continued after 1995. Although sheep numbers rose by 3.5% to a little over 4.5m between 1995 and 2000, the decline recommenced thereafter and by 2005 the total had fallen to a sixty year low of 4.05m (see Table 2.2).<sup>108</sup> The early years of the new millennium were no better. A severe drought in Hawke's Bay forced many smaller farmers from the industry and accelerated the decline. Real estate data between 1999 and 2002 shows a six-fold increase in the number of sheep and cattle farms sold in the Hastings and Central Hawke's Bay districts with activity concentrated among small lots.<sup>109</sup> In these two years alone sheep numbers fell by 720,000 or 16% and by 2010 sheep numbers had retreated to their lowest level since the 1920s.<sup>110</sup>

Plunging sheep numbers were not, however, an indicator of pastoral diversification. After falling during the SMP era, cattle numbers stabilised after 1995 but notably they did not rise. Although deer began to appear in statistics for the first time during the 1980s and 1990s, numbers remained inconsequential compared to sheep and cattle. Off a very small base, deer numbers rose strongly prior to 2005 but growth stumbled thereafter due to

---

<sup>108</sup> NZOYB, 2002, Chapter 18.2, table 18.8 (2000 figure).

<sup>109</sup> Morice and Co, *Rural Report*, Period ending January 2011: 2.

<sup>110</sup> NZOYB, 2002, Chapter 18.2, table 18.8 & NZOYB 2004, Chapter 18.2, table 18.05.

lower venison and velvet prices and numbers halved between 2005 and 2010.<sup>111</sup> Importantly, all categories of livestock declined between 2005 and 2010 (see Table 2.2). Furthermore, in contrast to other sheep dominant provinces such as Southland, dairy conversions were uncommon in Hawke's Bay. In 2010, the provincial dairy herd numbered just over 90,000, larger than the 65,000 recorded in 1965 and the 50,000 recorded in 1945, but again insignificant relative to both sheep and cattle. Even deer were more numerous than dairy cows. In 2005, deer numbered approximately 120,000 against approximately 80,000 dairy cows.<sup>112</sup>

As stock numbers declined and diversification efforts struggled, productivity gains remained essential to the viability of pastoral farming in Hawke's Bay. From 1995 to 2010 lambing percentages averaged 117% (see Table 3.9) against an average of 99.9% between 1970 and 1995 (see Table 3.7), and in 2004/05 lambing rates posted an all time high of 132%.<sup>113</sup> Similarly, grassland intensity reached a thirty year high of 13.7/ha in the same year (see Table 2.2). Higher lambing numbers did not, however, come at the expense of quality and the productivist mistakes of the SMP era were not repeated. Progressive Meats in Hastings noted an average lamb size of 18kg in the 2000s vs. 13kg in 1987.<sup>114</sup> Larger sheep reflected improved genetics, the use of which became essential to the economics of pastoral farming.<sup>115</sup> Although sheep meat prices relative to total export prices began to recover after 1996 (see Figure 3.4), coarse wool prices continued to fall during the 1990s and by 2010 prices were at a 100 year low in real terms.<sup>116</sup> Fortunately productivity gains continued. Davison notes that, nationally, kilograms of meat per lamb increased an average 3.2% p.a. from 1990 to 2000.<sup>117</sup> In the same period, fleece weights rose 0.7% p.a.<sup>118</sup>

---

<sup>111</sup> Deer are often regarded as difficult animals to raise due to low reproductive productivity (0.8).

Furthermore, the combination of velvet and venison is regarded as "super cyclical"- John Loughlin in discussion with author, April 6<sup>th</sup>, 2017.

<sup>112</sup> NZOYB, 1946, (s17c), 1966, section 14c & 2012 Agri-yearbook, NZOYB, 2006, Section 18.2, Chapter 2, table 2.

<sup>113</sup> "Performance indicators, East Coast North Island," Beef & Lamb Economic Service, accessed March 21<sup>st</sup>, 2017, <https://beeflambnz.com/data-tools/sheep-beef-farm-survey>

<sup>114</sup> Craig Hickson in discussion with author, March 2<sup>nd</sup>, 2017.

<sup>115</sup> Jon Morgan, "Pioneer NZ sheep breeder was criticised and ostracised," *The Dominion*, July 6<sup>th</sup>, 2017.

<sup>116</sup> ANZ Bank & Statistics NZ, see Wool\_Price\_Time\_Series (Long).xls

<sup>117</sup> R Davison, "Is there room to move? Sector performance and benchmarking," *Canterbury Sheep Council Annual Meeting* (2001), accessed April 28<sup>th</sup>, 2017, 10,

[https://www.grassland.org.nz/publications/nzgrassland\\_publication\\_256.pdf](https://www.grassland.org.nz/publications/nzgrassland_publication_256.pdf)

<sup>118</sup> Ibid.

Productivity gains thereby ensured that wool production in Hawke’s Bay remained largely stagnant between 1995 and 2010 despite the sharp fall in sheep numbers (see Table 3.8).

**Table 3.8. Hawke’s Bay wool production, 1995-2010 (estimated tonnage).**

1995	18,890 tonnes	4.36kg/head
2005	23,432 tonnes	5.79kg/head
2010	19,516 tonnes	5.97kg/head

Sources: NZOYBs 1985-2010 & Statistics NZ, see HB Wool Exports.ods. On a per head basis, Hawke’s Bay performed well. The national average was 5.12 in 2005 and 5.03 in 2010.

**Table 3.9. Hawke’s Bay pastoral farm size, profitability & lambing percentages, 1995-2010.**

Season	Effective hectares	Gross farm profit/ha	Lambing %
1995/96	440	\$97.00	112.4
1996/97	439	\$121.72	118.3
<b>1997/98</b>	444	<b>\$38.86</b>	<b>114.1</b>
1998/99	473	\$74.30	104.3
1999/00	476	\$165.60	111.4
2000/01	476	\$242.10	108.5
<b>2001/02</b>	497	<b>\$346.93</b>	<b>120.5</b>
2002/03	485	\$250.04	126.0
2003/04	423	\$178.03	115.0
2004/05	493	\$228.04	131.9
2005/06	506	\$136.51	125.3
2006/07	469	\$56.51	126.5
<b>2007/08</b>	454	<b>-\$27.95</b>	<b>109.1</b>
2008/09	467	\$96.51	111.9
2009/10	480	\$152.13	119.4
15 year avg	468	\$143.8	117.0%

Source: Rob Gibson, Beef & Lamb New Zealand Economics Service, *Hawke’s Bay Class 4 Sheep & Beef Farm Survey*, 1970-2010. Numbers in bold indicate periods of earnings volatility.

Although rising pastoral productivity was a notable positive, the relatively limited extent of diversification meant Hawke’s Bay pastoral farmers were now highly exposed to a narrow and volatile mix of sheep meat prices and lambing percentages. By the late 1990s, export prices for sheep meats, relative to total export prices, had recovered to levels similar to that of the early 1970s (see Figure 3.4).<sup>119</sup> But the rise was in stark contrast to wool which remained close to an all-time low (see Figure 3.3). Consequently, in a reversal of earlier decades, pastoral profitability was now leveraged to sheep meats, a reliance particularly evident in 1997, 2001 and 2007 (see in bold – Table 3.9). Following a slump in sheep meat prices and drought in 1997, the profitability of Hawke’s Bay pastoral farms dropped by over

<sup>119</sup> “Off The Sheep’s Back.”



70% to less than \$40/ha.<sup>120</sup> Conversely, in 2001, a year in which sheep meat prices spiked and lambing percentages reached a ten-year high, profits exceeded \$345/ha. Volatility re-emerged in 2007 when disappointing lambing percentages coincided with weaker lamb prices, a combination that led to widespread losses.<sup>121</sup> Morris describes New Zealand pastoral farming profits in that season as the lowest in fifty years.<sup>122</sup>

**Figure 3.4. Sheep meat prices rebound: New Zealand sheep meat prices relative to total export prices, 1971-2011.**



Source: StatisticsNewZealand

[http://archive.stats.govt.nz/browse\\_for\\_stats/economic\\_indicators/prices\\_indexes/historical-wool-export-prices-volumes-2011.aspx](http://archive.stats.govt.nz/browse_for_stats/economic_indicators/prices_indexes/historical-wool-export-prices-volumes-2011.aspx). Notes: The 30-year period highlights long term trends. 2011 figures relate to 2010 season.

Earnings volatility on Hawke's Bay pastoral farms reflected the greatly increased economic contribution of sheep meats relative to coarse wool. Whereas the farming model of the 1950s was primarily focused on wool, meat production was, nonetheless, important. In contrast, with wool prices at historic lows, farm revenues had become substantially less diversified. The collapse in wool receipts as a percentage of total pastoral farm revenues in Hawke's Bay is stark. In the 2009/10 season, wool accounted for an average 18% of pastoral

<sup>120</sup> New Zealand Ministry of Agriculture and Fisheries (MAF): *Hawke's Bay operating surplus \$/HA – pastoral farm profitability model*, 2003.

<sup>121</sup> Lamb prices fell from NZ\$2.15/Kg in 1997 to NZ\$1.90/Kg in 1998 before recovering to NZ\$2.75/Kg in 2001. Prices fell from \$3.00/Kg in 2007 to \$2.35/Kg in 2008. See "Agribiz – Sheep and Beef Outlook," Westpac New Zealand, last modified January 2013, 1, [https://www.westpac.co.nz/assets/Business/Economic-Updates/2013/Bulletins-2013/Agribiz\\_Jan201301.pdf](https://www.westpac.co.nz/assets/Business/Economic-Updates/2013/Bulletins-2013/Agribiz_Jan201301.pdf)

<sup>122</sup> Stephen T. Morris, "Economics of Sheep Production," *Small Ruminant Research*, No.6 (2009):61, accessed March 2<sup>nd</sup>, 2017, [https://www.researchgate.net/publication/240416869\\_Economics\\_of\\_sheep\\_production](https://www.researchgate.net/publication/240416869_Economics_of_sheep_production)

farm revenues and lamb 67%.<sup>123</sup> In the same year, wool accounted for little over 10% of revenues at the typical Class 4 Hill Country farm on the East Coast of the North Island.<sup>124</sup> The difference with the 1950s is significant. In 1957, wool revenues at benchmark Hawke's Bay farm, Smedley Station, represented 62% of total farm receipts a figure that was likely at least 50% higher during the wool booms of 1950/51 and 1963/64.<sup>125</sup>

Relatively limited diversification and bouts of earnings volatility resulted in low equity returns and forced Hawke's Bay's pastoral farmers to adopt further stabilisation strategies. In 2010, the capital return on an average sheep and beef farm located on the North Island's east coast was an extremely disappointing 0.9% p.a.<sup>126</sup> The region was not, however, unique. Between 1990 and 2010, the equivalent figure for the average New Zealand sheep and cattle farm was 1%-2% p.a.<sup>127</sup> Poor returns forced farmers to seek new sources of income. Virtually unheard of before 1985, off-farm income was estimated at approximately 12% of pastoral farm surplus in the mid-2000s.<sup>128</sup> Income such as spousal employment and farm stays became particularly important during the slump of 2007/08.<sup>129</sup> Another recovery strategy employed by Hawke's Bay pastoral farmers involved greater scale but unfortunately larger farms did not translate into better returns. In the period 1970-1995, the average Hawke's Bay pastoral farm was 372ha in size. In the fifteen years after 1995, the size increased to 468ha, a rise of 25.8%. The combination of pastoral productivity improvements and increased scale facilitated a significant increase in gross farm profit per ha. Between 1995 and 2010, profitability/ha averaged \$144/ha against an average of approximately \$85/ha in the twenty-five years prior to 1995 (see Tables 3.9 & 3.7 respectively). Unfortunately, a key financial vulnerability persisted. In 2010, the average

<sup>123</sup> "Sheppard Agriculture," Greg Sheppard, accessed October 31<sup>st</sup>, 2010 [http://www.paki-iti.co.nz/uploads/4/2/5/4/4254901/2009\\_focus.pdf](http://www.paki-iti.co.nz/uploads/4/2/5/4/4254901/2009_focus.pdf). 15% for beef.

<sup>124</sup> "Whole Farm Analysis: Eastern North Island, Class 4 Hill Country," Beef & Lamb New Zealand, accessed June 4<sup>th</sup>, 2017, <http://www.beeflambnz.com/information/on-farm-data-and-industry-production/sheep-beef-farm-survey/eni/>. Also see – MPI "HB/Wairarapa sheep & Beef model farm monitoring report 2012."

<sup>125</sup> "Big Development Programme at Smedley" *Hawke's Bay Herald Tribune*, December 10<sup>th</sup>, 1957.

<sup>126</sup> "Performance Indicators." Hawke's Bay figures not available.

<sup>127</sup> Stephen T. Morris, "Sheep And Beef Production Systems," Sheep and Beef Cattle Production, Institute Veterinary, Massey University, 82, accessed March 17<sup>th</sup>, 2017.

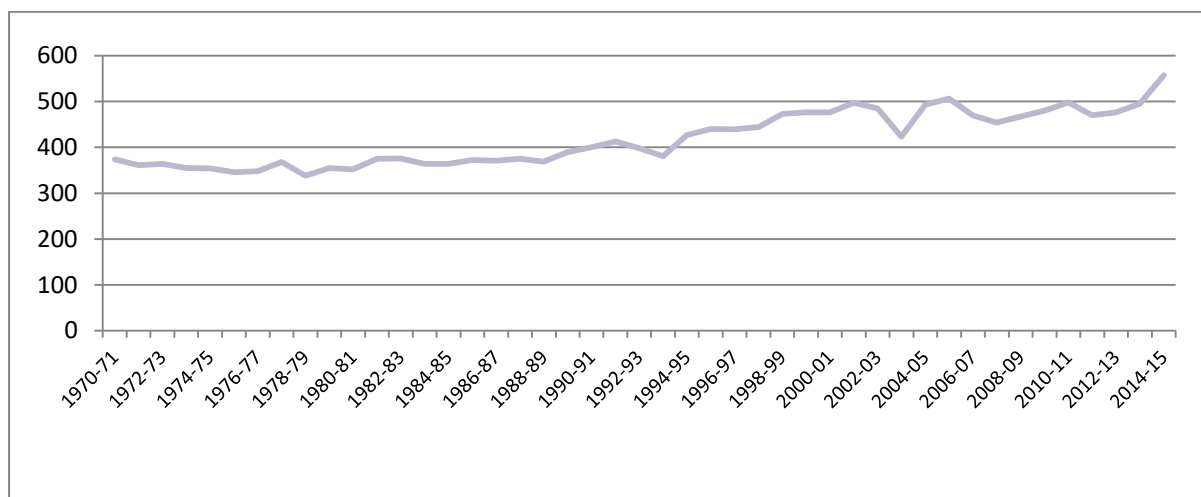
[https://www.landcareresearch.co.nz/\\_\\_data/assets/pdf\\_file/0020/77033/1\\_5\\_Morris.pdf](https://www.landcareresearch.co.nz/__data/assets/pdf_file/0020/77033/1_5_Morris.pdf)

<sup>128</sup> Lewis Evans & Eli Grace-Webb, "Meat Industry Performance and Organisational Reform," *The New Zealand Institute for the Study of Competition and Regulation* (November 2007): 20, accessed April 12<sup>th</sup>, 2017, [http://researcharchive.vuw.ac.nz/xmlui/bitstream/handle/10063/3979/Meat\\_Industry\\_Performance\\_and\\_Organisational\\_Form\\_Lew\\_Evans.pdf?sequence=1](http://researcharchive.vuw.ac.nz/xmlui/bitstream/handle/10063/3979/Meat_Industry_Performance_and_Organisational_Form_Lew_Evans.pdf?sequence=1).

<sup>129</sup> MAF, *Hawke's Bay operating surplus \$/HA – farm profitability model*, 2004-2008.

return on the value of a pastoral hectare in Hawke's Bay was a most unsatisfactory 1.96% p.a, little more than the rate of inflation, 50% lower than that of the 1970s and 25% lower than the 1990s.<sup>130</sup>

**Figure 3.5. Area of average sheep and beef farm in Hawke's Bay, 1970-2015 (effective ha).**



Source: Beef & Lamb New Zealand. Note: 35-year period utilised to highlight long term trend.

Although the scale, focus and profitability of sheep farming in Hawke's Bay in 2010 was significantly different to that of earlier decades, an enduring commonality should (once again) be noted - the dual-purpose Romney.<sup>131</sup> By 1999, the pre-eminent position of the Romney in New Zealand was much reduced due the rise of other breeds. In contrast, the Romney continued to dominate in Hawke's Bay, partly on account of its proven suitability to local conditions.<sup>132</sup> Consequently, fine wool breeds, such as the Merino, remained of negligible importance in the 2000s. The unbroken dominance of the Romney since 1945 reflected a simple fact - the breed continued to offer a remarkable degree of flexibility, a strength that enabled Hawke's Bay farmers to switch emphasis from meat to wool and back again. Importantly, specialist wool breeds, such as the Merino, do not produce desirable

<sup>130</sup> Valuation NZ, see *HB rural property valuations 1945-2010.ods*.

<sup>131</sup> Dowling, "Farming in Hawke's Bay." 233-39.

<sup>132</sup> Hugh Stringleman and Robert Peden, "Sheep farming: The Merino – the earliest breed," Te Ara - The Encyclopedia of New Zealand, last modified March 3<sup>rd</sup>, 2015, <http://www.TeAra.govt.nz/en/sheep-farming/page-3>. Also see – "Silver Fern Farms Pulls Out of Merino Meat Project," Radio New Zealand, last modified September 23<sup>rd</sup>, 2016, <http://www.radionz.co.nz/news/country/314021/silver-fern-farms-pulls-out-of-merino-meat-project>. The historical preference for Romneys in Hawke's Bay is well described in "NZ Farmer Profile: Tennent Family," *New Zealand Farmer*, accessed May 3<sup>rd</sup>, 2017, <http://www.nzromney.co.nz/organisation/Site/Files/a/06cc20404d351cbaa2520fcd0d5adc3/2f1f92bbde3bba8d56939d683d7822b/NZ%20Farmer%20Tennent%20Family%20Profile.pdf>

meats and thus offered less optionality. Fortunately, reliance on the coarse wool Romney did not prove costly. Fine wool prices were little changed between 2000 and 2010 in New Zealand dollar terms, better than coarse wool but certainly no panacea for hard pressed Hawke's Bay sheep farmers.<sup>133</sup>

#### Summary 1995 - 2010.

Pastoral farming in Hawke's Bay began to recover in the 1990s and by 2010 the sector had stabilised, albeit returns were structurally lower. Although sheep numbers (still dominated by Romneys!) continued to fall after 1995, the combination of rising lambing rates, larger farms and a recovery in sheep meat prices enabled the sector to trade successfully in terms of profitability per hectare. On the other hand, wool prices continued to decline, cattle numbers remained stagnant and deer numbers fell. The consequent lack of pastoral diversification meant farms were increasingly reliant on a single soft commodity - sheep meats, a vulnerability that exposed farmers to bouts of earnings volatility. Furthermore, farm profitability remained extremely low relative to land values, as little as a quarter of that achieved in the decades prior to 1975, a negative that forced farmers to develop off-farm sources of income.

#### Conclusion.

The story of pastoral farming in Hawke's Bay since 1945 is one of intense highs and lows. The decades immediately following WW2 were years of unparalleled prosperity based on pre-war continuities such as UK market access for New Zealand primary goods and strong demand for coarse grade wools. But underlying trends were highly disadvantageous. Notwithstanding the booms of 1950/51 and 1963/64, wool prices were slipping in real terms, a negative that went largely un-noticed by a complacent farming community. Unfortunately, the fundamentals of sheep meat production were no better and by the mid-1970s the halcyon years that followed WW2 were well and truly over. The ongoing fall in pastoral profitability was compensated by ever rising levels of government support. Government policy initiatives had never been unimportant to the sector but from the late 1970s intervention became the industry's single most important driver. In common with the

---

<sup>133</sup> "Fine Wool Monthly Price - New Zealand Dollar per Kilogramme," Indexmundi, accessed September 18<sup>th</sup>, 2018, <https://www.indexmundi.com/commodities/?commodity=fine-wool&months=240&currency=nzd>

volume focused strategies employed by farmers, government subsidies were based on a productivist ideology that sought to offset lower product prices and disappointing pastoral productivity growth with increased volumes. Payments were generous and Hawke's Bay farmers reacted predictably. By the mid-1980s, the number of sheep in the province reached an all-time high.

The emphasis of the SMP scheme was highly distortionary. As sheep numbers soared cattle numbers slumped, reversing several decades of diversification in Hawke's Bay and leaving pastoral farmers reliant on a narrow range of sheep-based commodities. Furthermore, the scheme's focus on volume rather than value resulted in a massive over build of poor-quality stock. In the mid-1980s, subsidies were abruptly abolished exposing Hawke's Bay pastoral farmers to the true economics of their industry. By the time SMPs ended, pastoral farmers had become dependent on state support and consequently they were poorly prepared for disruption. As an intense agricultural recession unfolded, the sector downsized aggressively, and farmers began to migrate from a business model focused on wool to one based on meat. Excess stock was culled, and farmers adjusted their focus towards fewer, better quality sheep and productivity enhancements.

Together these changes represented a comprehensive rejection by both farmers and the New Zealand government of productivism, a strategy that had dominated the pastoral sector since the 1860s. Less positively, farm profitability remained extremely poor relative to rates achieved in the 1950s and 1960s. Similarly, diversification, which stumbled during the SMP era, did not improve greatly following the abolition of state support and it is notable that cattle numbers in 2010 were slightly less than both 1955 and 1965. Consequently, the single cylinder pastoral model of 2010 had more in common with that of the 1880s, albeit meat, not wool, had become the critical pastoral product. Although earnings volatility was common after 1995, the change in emphasis in favour of sheep meats over coarse wool nonetheless worked reasonably well. Farmers had little choice but to downsize following the end of SMPs but by 2010 the sector had stabilised, albeit on a much-reduced scale relative to that of previous decades. One feature of pastoral farming in Hawke's Bay did, however, endure. The flexible productive capabilities of Romney sheep meant the breed was just as dominant in 2010 as in 1945.

# Chapter Four: Hawke's Bay Meat Processing Industry 1945-2010.

---

## Introduction.

This chapter will discuss the history of the Hawke's Bay meat processing industry from 1945 to 2010. Non-pastoral meats such as pork have always been produced in the province. Similarly, beef and venison output increased after WW2. But sheep meats, most particularly lamb, remained dominant. Given the importance of pastoral meats in Hawke's Bay, the chapter will examine the profitability and business strategies of sheep and beef processing companies and the influence of consumer trends in key markets. The approach will again be chronological, employing the same periods outlined in the introductory chapter.

This chapter argues that the meat processing industry in Hawke's Bay suffered from a state of structural inertia after WW2 that left freezing companies ill prepared for sharply changed business conditions after 1975. The most obvious change was UK membership of the EEC, but other issues were within the control of the processing industry itself. Most importantly, plants were over capitalised and inefficient, an extension of the same productivist approach employed by pastoral farmers. At the same time, participants were slow to react to changing consumer and market trends. Failure to appreciate these changes meant established processors in Hawke's Bay were totally exposed to the decline in sheep numbers that took hold after 1985. Eventually a new equilibrium was reached but not before enormous restructuring and the loss of thousands of jobs.

Primary sources used in this chapter include New Zealand Official Year Books, the Hawke's Bay Regional Resource Survey of 1971, Statistics New Zealand archives, and interviews with key figures in the Hawke's Bay meat industry. Other primary sources include local newspaper articles as well as the archives of Hawke's Bay Federated Farmers, the Hawke's Bay Regional Museum and the Hawke's Bay Knowledge Bank. Important secondary sources comprise industry histories by Calder and Tyson, Hayward, Ellis and Sulzberger,

annual reports from processing companies and research from academics, relevant government departments and consultancies.<sup>134</sup>

### 1945-1975: Continuity and Change.

Hawke's Bay meat processors benefitted from strong demand for sheep meats (deemed a priority product) during the Second World War and guaranteed UK volumes meant the industry was well placed in the immediate post war years. But from the early 1950s the business environment for New Zealand meat processors became more hostile. UK access arrangements were progressively dismantled, and processing costs rose sharply.<sup>135</sup> At the same time, retail trends were shifting to the detriment of established meat companies. In the mid-1970s, as the global economy became significantly more volatile, the vulnerabilities engendered by these changes began to undermine the foundations of the industry.

Growing stock numbers disguise structural weaknesses in the Hastings duopoly.

The Hawke's Bay meat processing industry operated as a regional duopoly in 1945, a structure with its origins in the Meat Export Control Act of 1921/22 that established New Zealand Meat Board control over all exports and introduced a licencing regime that entrenched incumbent processors.<sup>136</sup> Consequently, the number of primary processing plants in the province remained static between 1945 and 1975.<sup>137</sup> Two rival plants dominated the period, both of which were located on the eastern outskirts of Hastings close to the geographical centre of Hawke's Bay. Tomoana, established in 1880, was owned by the Vestey family of the UK.<sup>138</sup> Whakatu, established in 1912, was owned by the Hawke's Bay Farmers Meat Company (HBFMC), a farmer controlled co-operative.<sup>139</sup> Together these

---

<sup>134</sup> Calder & Tyson, *Meat Acts*; Hayward (ed), *Golden Jubilee*; Craig Ellis, *Who Dares Wins Freedom: Graeme Lowe of Lowe Corporation* (Napier, Formula New Zealand, 2004); Sulzberger, *Richmond Years*.

<sup>135</sup> David S. Hall, "Emerging from an Entrenched Colonial Economy - New Zealand Primary Production, Britain and the EEC, 1945-1975" (PhD diss., Victoria University of Wellington, 2016), 37.

<sup>136</sup> Meat Export Control Act, 1921-22, No.73. Regional monopolies were typical in the New Zealand meat industry at the time.

<sup>137</sup> Primary processors are responsible for slaughter and supply carcasses to secondary processors.

<sup>138</sup> Hayward (ed), *Golden Jubilee*, 209. Initially Nelson's NZ Ltd then Weddel NZ Ltd as a fully owned subsidiary of W & R Fletcher.

<sup>139</sup> Calder & Tyson, *Meat Acts*, 14 & 210. HBFMC was not a true co-operative - ownership was not restricted to suppliers alone.

‘twins’ exerted near total dominance. For farmers in the north of the province, the only alternative was a much smaller plant located in Wairoa. Opened in 1916 and owned by international food conglomerate Swift & Co since 1933, Wairoa, like its Hastings competitors, was an export licenced plant.<sup>140</sup> But, on account of its relative isolation, Wairoa was poorly placed to compete with Tomoana and Whakatu. A similar problem applied to farmers in the centre and south of the province. The nearest alternative export slaughter house was located in the adjoining province of Manawatu, some 150km away. Consequently, most farmers and secondary level processors, such as Richmond Meats and Dawn Meats, had little choice but to work with the Hastings duopoly.

The prime location of Tomoana and Whakatu enabled both plants to benefit from the rise in stock numbers that took hold after 1945. But it is difficult to assess the extent to which volume growth was converted to profitability due to the adversarial nature of industry relationships. Whakatu, New Zealand’s largest single site meat freezing plant, and Tomoana employed a seasonal peak of approximately 1,900 workers apiece in the mid-1960s.<sup>141</sup> The workforce conducted slaughter on an industrial scale. In 1944, 1.75 million (m) sheep and 14,000 cattle were processed in the province, 20% more than the late 1920s,<sup>142</sup> and in 1960 Hawke’s Bay throughput reached 2.24m sheep and 57,000 cattle.<sup>143</sup> Growth continued throughout the 1960s and in the 1967/68 season well over 3m lambs and 1m sheep were processed, a volume twice that of the late 1950s.<sup>144</sup> Throughput of such size created undeniable economies of scale, and profitability was sufficient to provide HBFMC shareholders with an adequate, although certainly not generous, flow of dividends during the 1960s.<sup>145</sup> But unlike dividend payments and supplier rebates, both of which were publicly available, Whakatu and Tomoana were not required to disclose their accounts. Consequently, the financial performance of Hawke’s Bay freezing works in the decades following WW2 is rather opaque.<sup>146</sup> The paucity of financial data reflected the adversarial

---

<sup>140</sup> Hayward (ed), *Golden Jubilee*, 209. Originally a farmer co-operative.

<sup>141</sup> *Hawke’s Bay Regional Resource Survey*, 154. Also see - Wilson, *History of Hawke’s Bay*, 193.

<sup>142</sup> Boyd, *City of the Plains*, 238.

<sup>143</sup> Burridge, “The Location of Meat Freezing Works in New Zealand,” 47.

<sup>144</sup> *Hawke’s Bay Regional Resource Survey*, 83.

<sup>145</sup> Hawke’s Bay Farmers Meat Company (HBFMC), *Annual Report*, 1967. A fixed 4% dividend was paid to shareholders. As the average compound rate of inflation from 1960-1970 was 4% p.a, the real return was effectively zero.

<sup>146</sup> Calder & Tyson, *Meat Acts*, 30. The 1967 HBFMC Annual Report is indicative as it contains very little financial information.



nature of industry relationships. Importantly, labour was (and still is) a large component of meat processing costs and, given the unionised seasonal and fulltime workforce, it was strategically beneficial for processors to limit the availability of profit data.<sup>147</sup> Similarly, it was equally useful to restrict financial information, such as the cost of production, from farmers.

In contrast throughput numbers were freely available, an emphasis that highlighted the inefficiency and over-capitalisation of the Hawke's Bay meat processing industry. HBFMC Annual Reports from the 1960s provide a detailed breakdown of "Total Killings" for every season since 1914.<sup>148</sup> An idle plant was costly for Whakatu and Tomoana and senior industry figures suggest profitability was highly dependent on reaching maximum capacity.<sup>149</sup> Although a seasonal industry, the 'volume imperative' was more acute in Hawke's Bay than elsewhere in New Zealand in the 1950s and 1960s, and Burrige suggests the predominance of sheep meats in the province resulted in a "marked dead season" following the early summer peak in lamb processing.<sup>150</sup> Over capitalisation was a further problem. Even at the nadir of the season, processing space was available within "a week or two," a structure that gave farmers a great deal of flexibility. Less positively, the arrangement was extremely costly for processors given the need to install plant of sufficient capacity to meet a relatively brief seasonal peak, most particularly for lamb.<sup>151</sup> Consequently, inefficiency and over-capitalisation were embedded in the Hawke's Bay processing industry, vulnerabilities that were well understood by the managers of plants such as Whakatu.<sup>152</sup> HBFMC worked hard to exclude new entrants and whenever possible the firm exploited its dominant position to squeeze the margins of secondary level processors such as Richmond Meats.<sup>153</sup>

Incentive structures were similarly problematic as HBFMC's Whakatu plant was effectively a toll slaughterhouse. Section 34 of the Meat Act 1964 required licensed

---

<sup>147</sup> Burrige, "The Location of Meat Freezing Works in New Zealand," 54.

<sup>148</sup> HBFMC, *Annual Report*, 1967, "Total Killings Since Opening of Works."

<sup>149</sup> John Loughlin in discussion with author, April 6<sup>th</sup>, 2017.

<sup>150</sup> Burrige, "The Location of Meat Freezing Works in New Zealand," 48.

<sup>151</sup> Calder & Tyson, *Meat Acts*, 15.

<sup>152</sup> Ellis, *Who Dares Wins Freedom*, 97. Quotes Peter Norman – Borthwick CEO.

<sup>153</sup> *Ibid*, 108 & 111. HBFMC is said to have threatened to restrict access if Richmond did not rebate 25% of retail profits.

processors such as HBFMC to accept “all such stock ... intended for export.”<sup>154</sup> The system gave farmers the benefit of price visibility but, as Calder and Tyson argue, the “open door” system separated “processing and marketing.”<sup>155</sup> Richmond, one of Whakatu’s key clients, was both a buyer of stock for slaughter and a marketer of finished product to the UK, albeit via agents.<sup>156</sup> In contrast, HBFMC, located in the middle of the supply chain, was poorly connected with both the supply side and demand end of the sheep meat market. Consequently, HBFMC had but two ways to increase profitability: either reduce key costs such as labour and/or pass rising costs onto farmers. As volumes soared during the boom years after WW2, processors were free to employ the later, less disruptive, option. In 1959, for example, processing charges at Whakatu nearly doubled following a Court of Arbitration wage rate ruling,<sup>157</sup> a fact in support of Gould’s contention that rising processing costs were an important cause of declining farm profitability during the 1960s.<sup>158</sup>

Sheep meats under threat from changing market dynamics.

Despite numerous structural vulnerabilities, rising sheep numbers after 1945 led to the expansion of Whakatu and Tomoana. Nevertheless, three disruptive trends threatened their success. First, smaller scale meat processing plants were displacing butchers, New Zealand’s traditional distribution channel in the UK. Similarly, demand for pre-packaged meat, a product then only available through supermarkets, was increasing.<sup>159</sup> Second, New Zealand agricultural products were at risk from rising UK production, a reflection of increased agricultural subsidies.<sup>160</sup> Third, consumer tastes changed towards poultry. In 1950, UK households consumed 1m chickens.<sup>161</sup> But by 1967 consumption had reached 200m p.a.<sup>162</sup> As poultry gained market share, consumers shifted away from the “over fat”

---

<sup>154</sup> Meat Act 1964, No.71, 583 & 584. Toll slaughter is a commission based killing arrangement whereby the freezing company has no presence in either procurement or subsequent distribution.

<sup>155</sup> Calder & Tyson, *Meat Acts*, 14 & 15. This is an important consideration as the structure meant that processing companies developed very little in the way of marketing skills. Unlike Whakatu, Tomoana was part of a vertically integrated supply line that connected procurement, processing and marketing.

<sup>156</sup> Sulzberger, *The Richmond Years*, 113, 115 & 128. Regulations excluded Richmond from primary slaughter.

<sup>157</sup> “Killing Charges Increase 100%,” *Hawke’s Bay Herald Tribune*, October 16<sup>th</sup>, 1959.

<sup>158</sup> Gould, *The Rake’s Progress?*, 138.

<sup>159</sup> “Canadian and US Housewives want pre-packaged meat,” *Hawke’s Bay Herald Tribune*, June 17<sup>th</sup>, 1955.

<sup>160</sup> “UK Production of Concern to all NZ Farmers,” *Hawke’s Bay Herald Tribune*, June 3<sup>rd</sup>, 1955.

<sup>161</sup> Andrew C. Godley and Bridget Williams, “The chicken, the factory farm and the supermarket: the emergence of the modern poultry industry in Britain,” *University of Reading Discussion Paper in Management and Economics* (2007): 2.

<sup>162</sup> *Ibid*, 2 & 10

sheep meats supplied by New Zealand processors.<sup>163</sup> The latter two problems were commonly understood in Hawke's Bay, but complacency was widespread. As early as 1955, Hawke's Bay Federated Farmers warned its membership that the poor quality of Hawke's Bay sheep meats placed the industry at risk from competing products, yet few tangible changes were implemented.<sup>164</sup>

Apathy in the face of changing market dynamics was equally apparent in the industry's response to UK membership of the European Economic Community (EEC). From the mid-1960s, industry leaders and New Zealand government bodies delivered explicit warnings that New Zealand's preferential access was threatened.<sup>165</sup> Unfortunately, preparations for a new era were tardy in Hawke's Bay, a fact apparent in the extremely slow adherence to regulatory changes. Upgraded hygiene standards were introduced by both the EEC and US in the mid-1960s; however, it was not until the early 1970s that the first hygiene improvements were made. In 1971, a major upgrade was conducted at Whakatu to meet the requirements of the US Wholesome Meat Act, a crucial precursor to market development efforts in the US beef market.<sup>166</sup> And it was not until 1975, the year the UK formally joined the EEC, that Whakatu finally met European hygiene standards.<sup>167</sup>

Soaring costs, complacency and inertia.

In the early/mid 1970s, the New Zealand sheep meat processors experienced rapidly rising costs, labour unrest and global recession. Estimates suggest processing charges increased by as much as 20%-30% p.a. between 1970 and 1974,<sup>168</sup> and in the mid-1970s costs became so high in Hawke's Bay that John Foster, CEO of Dawn Meats in Hastings, was prompted to say it was almost economic to ship livestock to Australia for slaughter.<sup>169</sup> Rising processing and handling costs reflected both poor industrial relations and transport

---

<sup>163</sup> "Does UK Chicken industry offer real threat to NZ lamb trade?" *Hawke's Bay Herald Tribune*, October 24<sup>th</sup>, 1959. Poultry production in the UK rose 10-fold inside a decade. Also see - "Global Animal Protein Consumption Per Capita, 1961-2009," Coriolis et al, Food and Beverage Information Project (2011): 16, accessed March 12<sup>th</sup>, 2017, [http://www.coriolisresearch.com/pdfs/iFAB\\_2011\\_meat-2011-v1.72.pdf](http://www.coriolisresearch.com/pdfs/iFAB_2011_meat-2011-v1.72.pdf)

<sup>164</sup> "Old Ewes Remain A Problem Declares Farmer," *Hawke's Bay Herald Tribune*, May 21<sup>st</sup>, 1955.

<sup>165</sup> Hall, "Emerging From An Entrenched Colonial Economy," 61-65.

<sup>166</sup> "New Processes were needed for American Market," *Hawke's Bay Herald Tribune*, September 24<sup>th</sup>, 1971.

Also see – Calder & Tyson, *Meat Acts*, 39.

<sup>167</sup> "\$11m Complex Meeting Future Needs," *Napier Daily Telegraph*, January 30<sup>th</sup>, 1975.

<sup>168</sup> Calder & Tyson, *Meat Acts*, 68.

<sup>169</sup> *Ibid*, 289 & 290.

inefficiencies. For processors reliant on high seasonal volumes for profitability, strikes were particularly devastating. Whakatu was large enough to be a distinct district of the New Zealand Meat Workers Union, one of only ten in the country,<sup>170</sup> and Ngahiwi Tomoana, Chair of Ngāti Kahungunu, recalls that union leaders such as Bill Bennett were extremely powerful.<sup>171</sup> In 1972, 56% of all worker days lost to strikes in New Zealand occurred in the freezing industry, an extraordinarily high number given that the industry accounted for just 2.5% of the national workforce.<sup>172</sup> With labour unrest rife, trust was in short supply and in 1970 Tomoana's management wrote a letter to union officials citing the presence of "communistic elements" in the workforce following the distribution of a pamphlet advocating "nationalisation" of the New Zealand meat freezing industry.<sup>173</sup> High transport costs were a further burden. In the early 1970s, Hawke's Bay meat exporters came under waterfront union pressure to ship via Wellington's container port, some 350km to the south, rather than through the nearby Port of Napier.<sup>174</sup> Unfortunately these problems coincided with recession. As the global economy buckled, the adverse market and consumer trends evident since the 1950s had a heightened impact on incumbent processors. Most importantly, sheep meats remained under pressure in the UK retail market, particularly the long-standing export carcass trade upon which Whakatu and Tomoana relied.<sup>175</sup> As forewarned, the trend towards supermarkets had become unstoppable amid soaring poultry sales and rising demand for leaner cuts.<sup>176</sup>

Although sheep meats were losing market share, small, nimble secondary level processing plants, equipped for a wide range of value-added products and export beef, remained competitive. Unfortunately, these features were quite unlike those of Hawke's Bay's dominant processors and to protect their market position, Whakatu and Tomoana successfully lobbied government to ensure the continued exclusion of primary level

---

<sup>170</sup> Cybele Locke, *Workers in the margins: Union Radicals in Post War New Zealand* (Wellington: Bridget Williams Books, 2012), 218.

<sup>171</sup> Ngahiwi Tomoana, "Unions held everything together through thick and thin," *New Zealand Herald*, October 24<sup>th</sup>, 2016 & "Killing Resumes at Whakatu," *Hawke's Bay Herald Tribune*, November 30<sup>th</sup>, 1972.

<sup>172</sup> Calder & Tyson, *Meat Acts*, 71 & 73. 24% of all disputes were believed to be wage related (quotes Nordmeyer Commission – 1973).

<sup>173</sup> O.W Knight, letter No.27 to New Zealand Meat Workers Union, February 9<sup>th</sup>, 1970.

<sup>174</sup> Calder & Tyson, *Meat Acts*, 56.

<sup>175</sup> *Ibid*, 79.

<sup>176</sup> *Ibid*.

entrants.<sup>177</sup> Although the structure of the primary processing sector suffered from considerable inertia between 1945 and 1975, a very small number of secondary level meat packers were established in the period. Of these Graeme Lowe, owner of Dawn Meats in Hastings, was the most notable. In 1964, Lowe expanded Dawn Meats beyond its origins as a family butcher to export beef, and working with cattle carcasses grudgingly supplied by the two big processors, Lowe sought to develop new offshore markets.<sup>178</sup> Moreover, a believer in flexible, smaller scale processing, Lowe purchased T & H Walker's low volume Hawera plant.<sup>179</sup> Lowe was not welcomed by Hawke's Bay big processors and they actively sought to stymie his business by restricting the availability of semi-processed carcasses, products in which they enjoyed a statutory monopoly.<sup>180</sup> But as new entrants such as Lowe were rare the dominance of Tomoana and Whakatu was not threatened to any great extent. As such, the dearth of new primary slaughtering plants in the period from 1945 to 1975 speaks to the complacency and restrictive trade practices present in Hawke's Bay. Consequently, the prevailing structure of the province's meat industry, based as it was on a small number of massive processing plants designed for a brief seasonal peak, remained in place in 1975.<sup>181</sup> Furthermore, despite falling market share, the industry remained reliant on exports of frozen sheep meat carcasses to the UK, a business model that had remained essentially unchanged since the 1880s.

Inadequate marketing and restrictive trade practices hinder innovation.

The distribution strategies of Hawke's Bay's two dominant processors, Vestey and HBFMC, illustrate how both firms were locked into rigid marketing structures. Tomoana's owners operated a large butchery chain in the UK (J.H Dewhurst) and unsurprisingly their New Zealand plants were configured for the supply of frozen lamb carcasses for use in Dewhurst's retail distribution channels.<sup>182</sup> HBFMC was similarly oriented towards the UK. But without a distribution chain of its own, the co-operative was focused on the wholesale

---

<sup>177</sup> Craig Hickson in discussion with author, March 2<sup>nd</sup>, 2017.

<sup>178</sup> Ellis, *Who Dares Wins Freedom*, 55-57, 65.

<sup>179</sup> *Ibid*, 62, 68 & 69.

<sup>180</sup> Craig Hickson in discussion with author, March 2<sup>nd</sup>, 2017. Also see Ellis, *Who Dares Wins Freedom*, 55 (as per Section 28).

<sup>181</sup> Tomoana and Whakatu were the only plants in the province to hold meat export licences, something that furnished them with immense power over pack-house operators such as Lowe.

<sup>182</sup> Calder & Tyson, *Meat Acts*, 25.

trade, a structure that came with a matching reluctance to invest in the development of new markets, value-added products and branded meats. Although not a unique approach, HBFMC employed London agents for distribution until 1975, effectively outsourcing the marketing of Hawke's Bay sheep meats to third parties.<sup>183</sup> As a consequence, the company lacked a lens through which to monitor trends in the UK market.

In an additional problem, both Vestey and HBFMC were focused on commodity sheep meats, an emphasis typified by the continued trade in frozen lamb carcasses.<sup>184</sup> Unfortunately, the strategy limited innovation. Cattle numbers rose after 1965 but sheep continued to dominate on Hawke's Bay farms. Therefore, as significant shareholders of HBFMC, Hawke's Bay farmers had a strong motivation to ensure lamb and mutton remained pre-eminent in terms of processing investment.<sup>185</sup> As a result, Hawke's Bay processors were under prepared for pastoral diversification (gradual as it was!), a point made clear during the early 1960s when a critical shortage of beef processing space at Tomoana and Whakatu led to recurrent delays.<sup>186</sup> The priority afforded sheep meats was a particular problem for innovative companies such as Richmond Meats. A long established, farmer controlled, meat packer based in Hastings, Richmond was a pioneer beef exporter. The company's first beef shipment to Japan occurred in 1960 and thereafter Japanese exports underpinned rising demand for prime cattle.<sup>187</sup> But from the start Richmond faced significant difficulty accessing beef processing capacity at Tomoana and Whakatu, and at the peak of the 1961 season 2,000 cattle destined for the Japanese market were still awaiting slaughter.<sup>188</sup> Fearful of government intervention, the major processors eventually added more capacity but in the mid-1960s the problem returned. When beef demand in the United States soared, Hawke's Bay farmers lifted cattle numbers and once again processing capacity proved insufficient. As in the past Richmond became the victim of predatory behaviour and by the late 1960s the firm had been "squeezed out" of the beef market altogether.<sup>189</sup>

---

<sup>183</sup> *Ibid*, 120.

<sup>184</sup> *Ibid*, 17. The contrast is with cut and chilled products.

<sup>185</sup> Sulzberger, *The Richmond Years*, 120.

<sup>186</sup> *Ibid*.

<sup>187</sup> *Ibid*, 119.

<sup>188</sup> *Ibid*, 121.

<sup>189</sup> Sulzberger, *The Richmond Years*, 121, 126 & 127.

The most obvious solution to the shortage of processing capacity lay in the building of a new primary level beef plant but New Zealand Meat Board consent was required and, given the lobbying power of incumbents, approval was nigh on impossible. In the fifty years prior to 1972, only three new meat processing plants were built in New Zealand,<sup>190</sup> a fact that owed much to Section 26 of the Meat Act, 1939 and Section 28 of the Meat Act, 1964 which required new processing plants prove their “economic necessity.”<sup>191</sup> With the profitability of Whakatu and Tomoana so reliant on volume, new capacity, be it sheep meats or otherwise, was a highly sensitive issue in Hawke’s Bay. But Section 28 exposed aspirant beef exporters to the Whakatu and Tomoana duopoly,<sup>192</sup> and in 1971 the shared frustrations of Dawn Meats and Richmond led to a joint application to build an export beef processing plant in Hastings to be known as Pacific Beef.<sup>193</sup> As required by the 1964 Meat Act, the New Zealand Meat Board commissioned a report (conducted by Southland farmer John Gillies) into the state of the Hawke’s Bay meat processing industry.<sup>194</sup> Tomoana and Whakatu fought hard to keep Pacific Beef out but in light of the long standing capacity shortfall approval was eventually granted. The duopoly was, nonetheless, successful in one regard – capacity was capped at 250 head per day, half the desired (and optimal) level.<sup>195</sup> As the first new processor in the province since 1916, Pacific Beef was the most important development in the Hawke’s Bay meat industry since WW2. Crucially, the arrival of a new primary level entrant with a focus on beef symbolised changing industry circumstances. Similarly, the involvement of Richmond, historically a sheep-centric secondary level firm with deep UK connections, illustrated the changing nature of processing and distribution systems in the province.

The partial breakdown of the Whakatu and Tomoana duopoly that occurred in 1971 would not have occurred without well placed individuals. Richmond CEO Les Fisher, a member of the New Zealand Meat Board Diversification Committee, led the New Zealand Meat Board’s effort in 1960 to develop the Japanese beef market, a strategy that

---

<sup>190</sup> Calder & Tyson, *Meat Acts*, 17 & 86.

<sup>191</sup> Meat Act, 1964, Section 28 (2a). The intention was to keep overseas companies to a minimum and protect local incumbents.

<sup>192</sup> Ellis, *Who Dares Wins Freedom*, 55, 99, 105 & 108.

<sup>193</sup> Calder & Tyson, *Meat Acts*, 32 & 86. The capacity cap was removed in 1976.

<sup>194</sup> *Ibid.*, 32 & 48.

<sup>195</sup> *Ibid.*

anticipated the creation of Pacific Beef a decade and a half later.<sup>196</sup> It is similarly useful to consider that another influential industry player of the time was based in Hawke's Bay. Sir John Ormond, Chairman of the Meat Board from 1951 to 1973, was an establishment figure who believed New Zealand had "claim to a favoured place as of right to the British market" due to imperial preferences established by the Ottawa agreement.<sup>197</sup> It is difficult to know the extent to which Ormond, a sheep farmer (predictably enough!), influenced the Hawke's Bay meat industry in the post war period but it is clear that Ormond was bitterly opposed to UK membership of the EEC and suggestions that the UK lamb trade was threatened.<sup>198</sup> Ormond's views are likely to have resonated strongly in his home province. Even so, evidence is at best anecdotal that Ormond influenced industry behaviours in Hawke's Bay. Nonetheless, members of the Hawke's Bay division of Federated Farmers were slow to diversify into beef and, like Ormond, dismissive of the 'EEC threat'. Furthermore, Ormond was not a strong advocate of value added processing.<sup>199</sup> On the other hand, he firmly believed that farmers, not the processors, should hold the majority of power in the industry.<sup>200</sup> The 1964 Meat Act did much to underwrite the power of processors but Ormond was adamant that the board would "inject itself on behalf of producers further into the marketing scene if that is what is needed."<sup>201</sup> After all, in Ormond's view, the New Zealand meat processing industry was run by farmers for farmers and Hawke's Bay was to be no exception.

#### Summary 1945-75.

The years from 1945 to 1975 saw a continuation of the pre-war structure of the Hawke's Bay meat industry. Focused on the UK market, Tomoana and Whakatu operated an aggressive, yet inefficient, regional duopoly made possible by ever rising sheep numbers and regulatory protection. Although an important new processor emerged late in the period, the structure, ownership and focus of the Hawke's Bay meat industry had changed little since the 1880s. Consequently, the industry was configured for the trade in frozen

---

<sup>196</sup> Sulzberger, *The Richmond Years*, 112.

<sup>197</sup> Hall, "Emerging From An Entrenched Colonial Economy," 54.

<sup>198</sup> *Ibid*, 60, 63 & 67.

<sup>199</sup> "Carcass Beef Exports Best Policy for New Zealand," *Hawke's Bay Herald Tribune*, April 14<sup>th</sup>, 1958.

<sup>200</sup> "Importance of Farmer Owned Freezing Works," *Hawke's Bay Herald Tribune*, October 22<sup>nd</sup>, 1958.

<sup>201</sup> Sir John Ormond, retirement speech, March 1972 (Source: *Meat Acts*, 20.)



sheep meat carcasses, a priority that resulted in enormous, capital intensive, narrowly focused plants where volume was the key measure of success. Unfortunately, the result was over capitalisation and complacency in the face of changing consumer demand.<sup>202</sup> Furthermore, battles against Richmond, Dawn Meats and Pacific Beef, the first new primary processor since 1916, showed that the industry lacked innovation and shunned new entrants with fresh ideas. Meanwhile, influential figures such as Sir John Ormond questioned the need for change. As if these problems were not enough, industry profitability was under threat from rapidly rising costs and an increasingly militant workforce.

### 1975-1995: Disruption and Adjustment.

The years from 1975 to 1995 were highly disruptive for the New Zealand meat processing industry as well as infamous for complex corporate machinations that reflected the pressing need for structural change. Yet surprisingly the catalyst that led to reform did not come from within the processing industry itself, but rather from a collapse in stock numbers that followed the end of agricultural subsidies. As one of the country's most important pastoral provinces, Hawke's Bay was destined to play a central role. The result was a period of intense disruption that shook the industry to its core.

Deregulation and new entrants threaten the dominance of Whakatu and Tomoana.

The subsidy era that grew ever more generous in the late 1970s drove a sharp rise in stock numbers, an increase that coincided with industry deregulation and the subsequent construction of several new processing plants in Hawke's Bay. The period was similarly notable for the activities of Brierley Investments, a meat industry outsider that launched an ultimately unsuccessful bid for Richmond Meats in 1977.<sup>203</sup> Brierley's core motivation was to force restructuring on an industry beset with inefficiency and in 1981 HBFMC and Brierley participated in the acquisition and subsequent closure of the antiquated Gear Meats plant at Petone.<sup>204</sup> In line with the intent of the 1964 Meat Act, net capacity in the lower North

---

<sup>202</sup> A high degree of complacency is apparent in a Television One compilation from 1979. See - WN.com. Tomoana Freezing Works, video. <https://knowledgebank.org.nz/653/720/33150>

<sup>203</sup> Sulzberger, *The Richmond Years*, 138.

<sup>204</sup> Calder & Tyson, *Meat Acts*, 89. Located in Wellington.

Island was largely unchanged.<sup>205</sup> But following the passage of the 1981 Meat Act a more permissive environment began. Abattoirs continued to be governed by a strict licencing regime and controls associated with the Meat Export Control Act of 1921/22 remained in place but crucially exporters were now permitted to buy existing processing assets and/or establish new plants without first proving the economics of their case to the New Zealand Meat Board.<sup>206</sup> In 1982/83, the size of New Zealand's pastoral estate peaked and Hawke's Bay sheep numbers reached an astonishing 7.853m.<sup>207</sup> Changed regulations and higher sheep numbers prompted the construction of three 'greenfield' slaughtering plants in Hawke's Bay: <sup>208</sup> Takapau (HBFMC, 1981); Waipukurau (Advanced Meats/Bernard Matthews/New Zealand Meat Board, 1984); and a much smaller plant at Frasertown near Wairoa (Farmer owned co-op, 1985).<sup>209</sup> Ominously for the two 'mega-plants' in Hastings, these new investments favoured both smaller 'works' and those located within sheep farming districts rather than urban areas, trends that were of sufficient concern to HBFMC that the company itself built a new plant in rural central Hawke's Bay.<sup>210</sup>

The plants built in response to the 1981 reforms heralded a new era, one that brought into question the 100 plus year trade in frozen sheep meat carcasses emblematic of Whakatu and Tomoana. Most importantly, the 1981 Meat Act that broke the regional duopoly of the Hastings 'twins' encouraged new secondary level entrants, the best example being Progressive Meats Hastings established by meat industry entrepreneur Craig Hickson. Predictably, Hickson's first product was lamb but, in a hopeful sign of diversification, venison was added a year later.<sup>211</sup> Progressive's strategy, like Dawn Meats before it, focused on a range of value-added products manufactured from carcasses supplied by HBFMC. Although

---

<sup>205</sup> Ibid.

<sup>206</sup> Meat Act, 1981, Sections 11 (f), 15, 16 & 25(1 & 2). Approval powers now rested with the Director General of Agriculture and Fisheries.

<sup>207</sup> NZOYB, 1984, Chapter 15c. Incidentally, the number was capped by a severe drought.

<sup>208</sup> Oringi, build in 1981 by Dawn Meats, is considered outside of the research area. Following the sale of Dawn Meats to Richmond in 1986, Graeme Lowe established Lowe Walker and invested in one small plant in Hastings and three meat plants outside of Hawke's Bay. Renamed Lowe Corporation in 1998, Lowe exited the meat industry completely in the same year.

<sup>209</sup> "The Hawke's Bay Farmer's Meat Company Limited - Takapau, A Landmark of Major Significance in the Centennial Year of the New Zealand Meat Industry, 1881 to 1981" *Hawke's Bay Herald Tribune*, November 10<sup>th</sup>, 1981. Also see - Calder & Tyson, *Meat Acts*, 184 & Bruce McDonald Curtis, "Producers, Processors and Markets: A Study of the Export Meat Industry in New Zealand," (PhD diss, University of Canterbury, 1996), 320. The Bernard Matthews plant supplied pre-packaged meals to UK supermarkets.

<sup>210</sup> Curtis, "Producers, Processors and Markets," 217 & 218.

<sup>211</sup> Craig Hickson in discussion with author, March 2<sup>nd</sup>, 2017.

not revolutionary, the approach minimised the amount of capital invested in expensive slaughtering chains, and Progressive claimed a breakeven point of 100,000 head p.a against as much as 1.3 million head p.a at Whakatu.<sup>212</sup> Moreover, Hickson fostered partnerships in a range of new Asian markets, and from inception all output was exported, none of which was in the form of frozen carcasses.<sup>213</sup> In addition, Hickson employed a selective procurement system that rewarded suppliers if they met quality requirements based on market trends.<sup>214</sup> The approach worked. In 1982, Progressive Meats, a minnow in comparison to Whakatu and Tomoana, accounted for a little over 50% of New Zealand's exports of high margin chilled meats.<sup>215</sup>

SMPs are abolished, stock numbers plummet and Whakatu closes.

After 1985, the final year of the SMP agricultural subsidy regime, idle plant became an industry defining problem that led to unprecedented restructuring. Excess capacity was particularly pronounced in the lower/central North Island where both new and established Hawke's Bay processors were actively competing for stock.<sup>216</sup> 1985 marked an important historical turning point for New Zealand agriculture.<sup>217</sup> SMPs had been used as a means to maintain the profitability of pastoral farming and their abolition proved devastating.<sup>218</sup> When subsidy revenues disappeared, capital stock was reduced in a one-off cull and processor profitability collapsed leading to an urgent need for plant rationalisation.<sup>219</sup> As newly constructed capacity was more efficient than older plant, the implications for Hawke's Bay were ominous when external consultants concluded that "nine to fourteen

---

<sup>212</sup> Ibid.

<sup>213</sup> Ibid.

<sup>214</sup> Calder & Tyson, *Meat Acts*, 276.

<sup>215</sup> Ellis, *Who Dares Wins Freedom*, 75.

<sup>216</sup> Geoff Taylor, "It gives him the shivers," *Hawke's Bay Herald Tribune*, October 12<sup>th</sup>, 1996. Also see - *Hawke's Bay Regional Resource Survey*, 86.

<sup>217</sup> Muldoon abolished SMPs on June 27<sup>th</sup>, 1984, albeit replaced by an equivalent lump sum paid to the Meat and Wool Boards as an interim measure in the 1984/85 season. These payments were not retained by the Lange Government. See "New Zealand Economic Chronology 1984," Reserve Bank of New Zealand, <http://www.rbnz.govt.nz/-/media/ReserveBank/Files/Publications/Bulletins/1985/1985jan48-1nzeconomicchronology1984.pdf>

<sup>218</sup> Ron L. Sheppard & J.M Biggs, "Supplementary minimum prices: A production incentive?" *Agricultural and Economics Research Unit, Discussion Paper No.6*, Lincoln College (1982): 19, accessed April 5<sup>th</sup>, 2017 <https://researcharchive.lincoln.ac.nz/handle/10182/690>

<sup>219</sup> Calder & Tyson, *Meat Acts*, 212. Consultants Pappas Carter Evans and Koop (PCEK) estimated GFM/Waitaki's return on equity was 6% p.a. Inflation in 1985 was 10.4% (Source: RBNZ).

chains needed to be closed” in the lower/central North Island.<sup>220</sup> Shutting a single site such as Whakatu, with its one beef and six sheep processing chains, rather than piecemeal closure across a number of sites, was regarded as the most effective answer.<sup>221</sup>

In early 1985, a process of restructuring commenced that led to the demise of Whakatu. The first act occurred when Richmond Meats bid for 100% of HBFMC and Waitaki International (a subsidiary of Goodman Fielder Wattie - GFW) agreed to sell its 53% stake.<sup>222</sup> As part of the deal, the land and buildings at Whakatu were to be on-sold by Richmond to Weddel Crown (Tomoana/Vestey) who would then close the plant.<sup>223</sup> As these three groups stood to gain the most from the end of Whakatu, closure costs were to be pro-rated according to their market shares in the lower North Island.<sup>224</sup> Whakatu was subsequently closed in October 1986. Although the slaughtering chains were shut down immediately, the fellmongery, freezing rooms and casing operation were retained whilst the freezers were kept for other uses.<sup>225</sup> The Whakatu closure nonetheless led to approximately 1,500 redundancies, a restructuring then unprecedented in New Zealand economic history.<sup>226</sup> Explanations for Whakatu’s demise are multiple. Keefe Ormsby suggests that meat industry deregulation and “political forces” were key reasons for the failure.<sup>227</sup> Clearly the mid-1980s introduced a new era in New Zealand policy making and business culture. Meat industry reforms, the abolition of SMPs and aggressive corporate activity are examples of both. But equally the scale of the Whakatu closure is suggestive of deep structural change. Importantly, Whakatu was unable to adapt to the range of adverse industry trends in train since the 1950s. Furthermore, the most obvious feature of the time, plunging stock numbers, meant industry restructuring was inevitable. The only question was where.

---

<sup>220</sup> Ibid, 213.

<sup>221</sup> Ibid, 14 & 213.

<sup>222</sup> It was originally envisaged that Waitaki would own Takapau but this was rescinded in a private agreement with Richmond (Source: Calder & Tyson, *Meats Acts*, 212-215). Waitaki’s interest in HBFMC was acquired when GFW bought Advanced Meats in 1986. Advanced Meats had earlier in the year launched a hostile bid for HBFMC (Ibid, 210).

<sup>223</sup> “50 more Whakatu staff go,” *Napier Daily Telegraph*, September 30<sup>th</sup>, 1987.

<sup>224</sup> Calder & Tyson, *Meat Acts*, 214. Waitaki 70%, Vestey 20%, Richmond 10%. John Loughlin suggests the benefits that accrued were in reverse. Graeme Lowe was not involved but also gained from the deal.

<sup>225</sup> “1500 jobs go with closure of Whakatu,” *New Zealand Herald*, October 11<sup>th</sup>, 1986.

<sup>226</sup> Ibid. Ironically Richmond had itself been saved from ruin by HBFMC in 1930. Sulzberger, *The Richmond Years*, 62.

<sup>227</sup> Vera Keefe Ormsby, “Tihei Mauri Ora: The Human Stories of Whakatu,” (M.A thesis., University of Otago 2005), 8 & 10.

Nevertheless, disagreement is sharp as to whether Whakatu was the right plant to close.<sup>228</sup> Waitaki International Managing Director Athol Hutton believed the closure was the best option, citing Whakatu's relative inefficiency and the belief "smaller, more versatile plants will always do better."<sup>229</sup> Others disagreed. The then chairman of HBFMC, Peter Wilson, believed that the wrong plant was shuttered and that a combination of closures involving other plants was more appropriate, a mix that would have retained swing capacity at the peak of the season.<sup>230</sup> Wilson's position was supported by Ian Cameron, Managing Director of HBFMC at the time of the Whakatu closure. "There were other options for GFW, they decided not to take them ... HBFMC was a profitable, successful company operating the most modern plant at Takapau and the largest plant in the country at Whakatu."<sup>231</sup> Moreover, Cameron alleges that GFW, owner of seventeen meat works including Wairoa in northern Hawke's Bay, used its controlling stake in HBFMC to orchestrate the closure of Whakatu and ensure the survival of its own plants.<sup>232</sup> Whilst other options were debated, such as closing Wairoa or Takapau and/or Pacific Beef, these alternatives were rejected.<sup>233</sup> The 1986 sale of Dawn Meats to Richmond was, therefore, an important sub-plot to the closure of Whakatu. Taking advice from investment bank Southpac, Graeme Lowe was a reluctant seller, but he subsequently avoided large scale Hawke's Bay investments in-line with a restraint of trade agreement that accompanied the divestment.<sup>234</sup>

The roles played by Richmond and Weddel Crown (which was created by the merger of W & R Fletcher and Crown Corporation) in 1986 remain similarly controversial. The obvious upside for Richmond was obtaining the modern Takapau plant, its first venture into primary slaughtering. Hamilton Logan, Chairman of Richmond at the time, was long reluctant to comment on the Whakatu closure except to reflect, a decade later, that "It was a very difficult time in the history of Hawke's Bay - it did affect a huge number of people. It's not for me to say ... what are the pluses and minuses except to say the processing industry was grossly overburdened (with excess capacity) at that time."<sup>235</sup> The Vestey's motivations

---

<sup>228</sup> Calder & Tyson, *Meat Acts*, 212.

<sup>229</sup> Taylor, "It gives him the shivers." Peak season is typically in the early months of summer.

<sup>230</sup> Geoff Taylor, "The wrong works closed?" *Hawke's Bay Herald Tribune*, October 12<sup>th</sup>, 1996. Also see – Ibid.

<sup>231</sup> Geoff Taylor, "A wrong decision was made," *Hawke's Bay Herald Tribune*, October 12<sup>th</sup>, 1996.

<sup>232</sup> Calder & Tyson, *Meat Acts*, 212.

<sup>233</sup> Ibid.

<sup>234</sup> Ibid, 212 & 213.

<sup>235</sup> Geoff Taylor, "Fears old wounds will be reopened," *Hawke's Bay Herald Tribune*, October 12<sup>th</sup>, 1996.

were closely related to Logan’s argument. Closure of Whakatu was seen as the easiest way to address the excess capacity that afflicted the industry in Hawke’s Bay and elsewhere. Simply put, Tomoana’s owners had a clear interest in the demise of a key competitor.

As for Hawke’s Bay farmers, they were “outraged” at the closure of *their* flagship Whakatu plant but in 1986 they had enough problems of their own to worry about – sheep farming was close to collapse.<sup>236</sup> Consequently, the closure of Whakatu reflected a unique and wide-ranging set of variables, many of which had been taking shape for decades. Plunging stock numbers were but a symptom of deeper problems. SMPs had simply delayed the day of reckoning for Hawke’s Bay’s monolithic sheep focused processing plants, a reflection of market changes that first emerged in the 1950s and 1960s. The creation of Pacific Beef was indeed the ‘canary in the coal mine’ to the extent its formation highlighted Whakatu’s shortcomings in the face of structural change.

Tomoana closes due to entrenched over capacity.

Sheep numbers continued to plunge after 1986 and the need for industry reform soon became a nationwide issue as processors from both islands struggled for dominance. In 1990, the Auckland Farmers Freezing Company (AFFCO) bought the Wairoa freezing works as part of the breakup of Waitaki.<sup>237</sup> The demise of Waitaki was indicative of the way in which battles between regional meat companies had been replaced by battles between New Zealand wide processors. Importantly, the purchase was the first time the giant Auckland meat processing co-operative had operated in Hawke’s Bay.<sup>238</sup> Elsewhere, following the demerger of Crown from Weddel Crown, Tomoana became one of five New Zealand freezing works managed by Weddel New Zealand Ltd, a company owned by Vestey family subsidiary, Union International.<sup>239</sup> Weddel had participated in the closure of Whakatu in the hope others, including Tomoana, would survive but by the early 1990s sheep numbers

---

<sup>236</sup> Calder & Tyson, *Meat Acts*, 214.

<sup>237</sup> *Ibid*, 312.

<sup>238</sup> “Richmond Meats,” Hamilton Logan (former Richmond Meats Chairman), Landmarks Trust History Forum, last modified March 17<sup>th</sup>, 2010. [http://hdclandmarkshistorygroup.blogspot.co.nz/2010/03/hamilton-logan-richmond-meats\\_16.html](http://hdclandmarkshistorygroup.blogspot.co.nz/2010/03/hamilton-logan-richmond-meats_16.html). AFFCO’s origins are in the north of the North Island (as Auckland Farmers Freezing Company).

<sup>239</sup> “Weddel New Zealand Ltd,” New Zealand Companies Office, accessed March 15<sup>th</sup>, 2017. <http://www.companiesnz.com/company/35469/weddel-new-zealand-limited>.

in Hawke's Bay had fallen by a further 2m,<sup>240</sup> a decline that led to bitter procurement battles that decimated processing profits.<sup>241</sup>

As a diversified family owned entity, with a core position in the New Zealand meat industry, Union International seemed well equipped to cope with such problems. The appearance was misleading. The Vestey family were once, reputedly, second only to the Windsors as Britain's wealthiest family.<sup>242</sup> Furthermore, as recently as 1988, Lord Vestey, speaking at the Hawke's Bay A&P Show, had expressed confidence in the "flagship" Tomoana plant and stressed the importance of the New Zealand meat industry to his family's business interests.<sup>243</sup> His confidence was misplaced. During the 1980s the Vestey family had added significant 'non-core' real estate and insurance investments to their established meat and food related interests.<sup>244</sup> Problematically, the diversification strategy was fuelled by debt and by the mid-1990s Union International was in serious financial trouble. Saddled with a weak balance sheet and numerous poorly performed businesses, 'Union' was unable to provide the capital needed to keep Weddel solvent and in August 1994 Weddel collapsed taking Tomoana with it.<sup>245</sup>

The closure of Weddel Tomoana Limited, first registered in 1920, brought to a conclusion 114 continuous years of operation on the Tomoana site dating back to William Nelson.<sup>246</sup> Classified as an unsecured creditor, worker redundancy was not paid, and the \$6,000 cap on other entitlements was of little help for the 1,214 workers that lost their jobs.<sup>247</sup> Unbeknown to its employees, the collapse of Tomoana followed many years of underperformance. Still registered as Nelson's Limited, in recognition of its founders, the closure of the Tomoana freezing works was the second economic shock to hit Hawke's Bay in less than ten years.<sup>248</sup> Although often regarded as an old plant, the core of the 'works'

---

<sup>240</sup> See Table 2.2.

<sup>241</sup> Calder & Tyson, *Meat Acts*, 348.

<sup>242</sup> Stuart Millar & Alex Brummer, "Heirs and Disgraces," *The Guardian*, August 11<sup>th</sup>, 1999.

<sup>243</sup> Lord Vestey, Speech to Hawke's Bay A&P Society Dinner, October 20<sup>th</sup>, 1988.

<sup>244</sup> Millar & Brummer, "Heirs and Disgraces."

<sup>245</sup> *Ibid.* ANZ Bank was Weddel's primary financier.

<sup>246</sup> "Weddel New Zealand Ltd."

<sup>247</sup> Te Röpü Rangahau Hauora A Eru Pōmare, "MAURI TU: THE TOMOANA RESOURCE CENTRE – AN INTERVENTION FOLLOWING JOB LOSS," *Social Policy Journal of New Zealand*, Issue 15 (December 2000): 59 & 62. Also see - Hansard, August 23<sup>rd</sup>, 1994, [www.vdig.net/hansard/content.jsp?id=42739](http://www.vdig.net/hansard/content.jsp?id=42739)

<sup>248</sup> "Weddel New Zealand Ltd." Weddel was incorporated on September 24<sup>th</sup>, 1935 and dissolved on August 19<sup>th</sup>, 1994. Weddel was not the only major processor in trouble in the mid 1990s. Alliance Group

had been rebuilt following a fire in 1989 and former management maintain Tomoana was as efficient as the new plants built in Hawke's Bay after deregulation in 1981.<sup>249</sup> But these claims are not backed by documents in the archives of the New Zealand Companies Office which strongly suggest the inevitability of the Weddel collapse. Tomoana was Weddel's largest asset and liquidation reports from the time show a shortfall of \$53.6m against bank loans from the ANZ of \$171m.<sup>250</sup> Although statutory requirements such as GST were covered by liquidation funds, the size of the deficit suggests that the company may have been trading whilst insolvent, a fact consistent with a lengthy period of financial distress.<sup>251</sup>

Whakatu & Tomoana: impressions of anonymous observers.<sup>252</sup>

Although scholars and observers often group Whakatu and Tomoana, the processing plants differed greatly with regards levels of capital and production flexibility. Whakatu is often described by meat industry observers as "gold plated," a claim that gives significant support to the contention the plant was over capitalised. For example, the meat freezers at Whakatu were full for only two – three weeks each year. Furthermore, Whakatu was regarded as relatively inflexible. Its six sheep processing chains were designed for small (13kg) lambs and the production of frozen carcasses. It was therefore ill equipped for the larger sized lambs (18kg) that became common after 1985 and the rising importance of value-added processing. Given its size, volume was crucial for the success of Whakatu and the plant was only efficient when close to full capacity. In contrast, Tomoana was run on leaner lines and its configuration more flexible. Despite being only slightly smaller than Whakatu, Tomoana's layout was compartmentalised, using technologies sourced from Union International, and thus capable of a wider range of products. Furthermore, family - owned Tomoana operated on lower levels of capital than Whakatu. Although "very well

---

passed a receivership resolution in 1994 and advised their banker John Anderson, CEO of ANZ. Anderson refused to accept the receivership on the basis that weaker groups should go first. Fortex and Weddel were subsequently foreclosed as they were the only processors the banks could "afford to let go." John Loughlin in discussion with author, April 6<sup>th</sup>, 2017.

<sup>249</sup> Ellis, *Who Dares Wins Freedom*, 99. Heinz Wattie CEO David Irving after buying Tomoana Meatworks for \$2.5m in 1996: "I was shocked by the squandering of money in the meat industry as represented by this plant ... one building had been built as recently as 1989 for \$39m."

<sup>250</sup> New Zealand Companies Office, *Receivers Final Report: Weddel New Zealand*, August 7<sup>th</sup>, 2001.

<sup>251</sup> Ibid. BNZ was a secondary level financier.

<sup>252</sup> Anonymity has been requested due to enduring commercial sensitivities.



appointed” following the 1989 fire, “the Vesteys ripped out as much as they could” from the business when the parent company struck financial difficulty in 1994.<sup>253</sup>

The cynical interpretation of Whakatu’s reputation as a “Rolls Royce” plant is that HBFMC management were determined to “give as little back to the farmers as possible,” a belief backed by suggestions a corrosive culture of “them and us” existed between those working at the plant (management as well as workers) and farmers.<sup>254</sup> For most of its life Whakatu operated within a regulated regional duopoly. As a consequence, management felt free to operate a ‘cost plus’ mentality. Furthermore, on several occasions, independent observers have commented that governance structures at HBFMC were “dreadful.”<sup>255</sup> An example was given whereby the HBFMC Board once debated for three hours the merits of various models of tractor for the Takapau plant but approved a \$13m investment in additional freezing capacity in two minutes! And not one HBFMC Director asked whether the additional capacity, equivalent to a half season of production, was actually needed. Another anecdote describes how a senior HBFMC manager’s first act, when visiting the Takapau plant, was to check that the blinds were straight! The lack of farmer engagement in anything beyond basic production metrics meant HBFMC developed an internal culture that was both insular and inflexible.

Summary 1975-1995.

The period from 1975 to 1995 is best remembered for the collapse of the twin giants Whakatu and Tomoana, plants that had dominated the Hawke’s Bay meat industry for over 100 years. Consequently, the sector was almost unrecognisable in 1995. The revolution reflected change in government policies and market conditions. First, deregulation in 1981 allowed smaller, more efficient processors such as Progressive to enter the sector. Second, in 1985 the abolition of SMPs led to plunging stock numbers. Configured to produce frozen sheep carcasses, a business model largely unchanged since the 1880s, Whakatu and Tomoana were reliant on high volumes for viability. When sheep numbers collapsed both plants were unable to adjust. In contrast, smaller scale processors, focused on meeting rapidly changing consumer and market conditions, survived the industry downturn that

---

<sup>253</sup> Ibid.

<sup>254</sup> Ibid.

<sup>255</sup> Ibid.

occurred after 1985. One final historical observation is worthy of note. The collapse of Tomoana removed the last vestige of foreign ownership in the Hawke's Bay meat processing industry.

### 1995-2010: Recovery and Stabilisation.

The closure of two iconic freezing works was traumatic for the province but the demise of Whakatu and Tomoana removed a total of twelve sheep processing chains from an industry beset with over-capacity.<sup>256</sup> In 1995, seven small/medium sized primary slaughtering plants operated in Hawke's Bay: Lowe Walker, Progressive, Pacific Beef (all Hastings), Frasertown, Wairoa, Waipukurau and Takapau. Hill Country Beef & Lamb and its owner, Richmond (Hastings), added a further two plants at the secondary level.<sup>257</sup> Collectively these nine plants employed 3,000 staff at the peak of the season, a number not much less than that of Whakatu and Tomoana in the 1960s.<sup>258</sup> That employment levels did not fall greatly despite their collapse is surprising but the growth in value added manufacturing that emerged after 1995 required more staff not less, an emphasis that reflected the displacement of mega-plants by numerous smaller, more flexible factories. Despite these changes yet more restructuring would follow. Sheep numbers continued to fall, and meat industry politics became shadowy as New Zealand's major processing firms continued to fight for survival. But by 2010 the industry had begun to stabilise, albeit with an ownership and industry structure markedly different to that of previous decades.

Industry relations become murky as sheep numbers plummet and processors jostle for control.

In 1995, the number of sheep in Hawke's Bay totalled 4.35 million (m), some 30% lower than 1985 (see Table 2.2). Consequently, the closure of Tomoana represented a much-needed capacity reduction. But it was still not enough. In 1995, 2.994m lambs were processed in the Hawke's Bay/Gisborne region compared to 3.755m in 1994 and nearly 5m

---

<sup>256</sup> Ellis, *Who Dares Wins Freedom*, 55.

<sup>257</sup> Craig Hickson in discussion with author, March 2<sup>nd</sup>, 2017.

<sup>258</sup> Coriolis et al, "Lamb Exports By Type," *Food & Beverage Information Project – Sector Stream: Meat* (2011): 28.

in 1989.<sup>259</sup> Numbers recovered in later years but never matched those of the mid/late 1980s – the height of the capital cull.<sup>260</sup> Although a recovery in cattle numbers provided an offset, the ongoing fall in sheep numbers triggered a further round of restructuring in the processing industry.<sup>261</sup> As the pressure of excess capacity mounted, industry politics became murky. In 1997, the New Zealand Meat Board (through subsidiary Freesia) tendered its 33.4% shareholding in Richmond Meats.<sup>262</sup> AFFCO and Dunedin co-operative PPCS lodged rival bids. But both parties were rebuffed, and the parcel was ‘sold’ to investment consortium HKM Nominees, an entity believed friendly to Richmond.<sup>263</sup> The ethics of the transaction were, however, highly questionable. According to John Loughlin, HKM was in reality ‘a stalking horse’ created by PPCS in response to fears Richmond would veto its shareholding as was allowed by the company’s constitution.<sup>264</sup> The shadowy involvement of HKM was the beginning of what would prove to be a bitter legal battle between Richmond and PPCS.

Strong interest in the Meat Board shareholding placed Richmond Meats at the centre of meat industry dynamics. In 1998, the company acquired most of the highly efficient slaughtering assets of Lowe Walker, New Zealand’s largest beef exporter.<sup>265</sup> The \$27m purchase added significant new business activities to Richmond.<sup>266</sup> Most importantly the deal added beef plants in Northland and Taranaki, provinces in which Richmond lacked representation.<sup>267</sup> Moreover, the deal was positive in terms of product mix, lifting Richmond’s beef processing capabilities four-fold.<sup>268</sup> At the same time, lamb and mutton processing was rationalised in the Napier/Hastings area whilst Hill Country Lamb was added

---

<sup>259</sup> “Regional council by kill, animal type,” Statistics New Zealand, accessed March 16<sup>th</sup>, 2017 <http://www.stats.govt.nz/infoshare/ViewTable.aspx?pxID=8776627c-8c1b-42dd-a547-0b570fb8d186> (Individual Hawke’s Bay data is not available).

<sup>260</sup> Ibid.

<sup>261</sup> Ibid.

<sup>262</sup> New Zealand Commerce Commission (NZCC), *Decision No.316*, Clause 7, February 11<sup>th</sup>, 1998.

<sup>263</sup> Brian Gaynor, “PPCS squirreling of Richmond shares could be costly,” *New Zealand Herald*, November 29<sup>th</sup>, 2002. PPCS refused to sign a shareholder agreement – John Loughlin in discussions with author, April 6<sup>th</sup>, 2017.

<sup>264</sup> Ibid. PPCS’s foremost interests were lamb and venison not beef. John Loughlin in discussion with author, April 6<sup>th</sup>, 2017.

<sup>265</sup> NZCC, *Decision 316*. A Booz Allen report in 1993 suggested Lowe Walker plants were amongst the most efficient in the world (Source: Calder & Tyson, *Meat Acts*, 289). Also see – “Richmond Meats.”

<sup>266</sup> Ibid.

<sup>267</sup> NZCC, *Decision 316*.

<sup>268</sup> “Richmond Meats.”

to the Richmond portfolio.<sup>269</sup> Richmond CEO John Loughlin lauded these transactions.<sup>270</sup> Sheep capacity was rationalised whilst Richmond's beef processing and value added capabilities were lifted substantially. Following the Lowe Walker acquisition, Richmond became New Zealand's biggest meat company and by far the dominant player in Hawke's Bay.<sup>271</sup> Loughlin suggested that it was not a specific intention become so large but falling sheep numbers provided the urgency required to make the move.<sup>272</sup> Furthermore, Loughlin and Richmond Chairman, Hamilton Logan, were acutely aware of the interest shown by PPCS and saw financial success and increased market share as the best ways to defend Richmond's independence.<sup>273</sup> In light of Richmond's greatly strengthened competitive position, it was not completely unexpected when PPCS reignited its interest in Richmond in 1999 with a 'bid' for 66% of HKM.<sup>274</sup> A group of farmer shareholders subsequently challenged the transaction on the basis the bid breached 'notice and pause' provisions in Richmond's constitution and PPCS was compelled by court order to sell its stake.<sup>275</sup> The ensuing standoff was ended when a 'White Knight' investor in the shape of Active Equities, managed by former Brierley Executives Paul Collins, Bruce Hancox and Patsy Reddy, bought the PPCS stake in Richmond.<sup>276</sup> Richmond's independence was seemingly guaranteed.

Richmond is taken over by PPCS.

Sheep numbers in Hawke's Bay continued to decline in the early 2000s, falling from 4.50m in 1999 to 3.79m in 2002.<sup>277</sup> Despite the fall, Richmond Meats continued to trade successfully. Backed by a proactive merger and acquisition (M&A) strategy that sought capacity reductions and synergy benefits, the firm added \$600m in turnover between 1998

---

<sup>269</sup> Ibid.

<sup>270</sup> Ibid.

<sup>271</sup> Philippa Stevenson, "Meat company Richmond takes plunge in market," *New Zealand Herald*, February 11<sup>th</sup>, 2001. Also see – Calder & Tyson, *Meat Acts*, 394.

<sup>272</sup> "Richmond Meats."

<sup>273</sup> Ibid & John Loughlin in discussion with author, April 6<sup>th</sup>, 2017.

<sup>274</sup> Gaynor, "PPCS squirreling of Richmond shares could be costly." Also see – "PPCS Bid For Richmond on the Rocks," *New Zealand Herald*, January 9<sup>th</sup>, 2003. John Loughlin believes HKM was paid \$1m by PPCS for their services.

<sup>275</sup> Ibid, Gaynor. Also see – NZPA "PPCS Comes Out Fighting with Richmond Bid," *Sharechat*, January 7<sup>th</sup>, 2003, accessed March 11<sup>th</sup>, 2017. <http://www.sharechat.co.nz/article/fd83443b/ppcs-comes-out-fighting-with-richmond-bid.html>

<sup>276</sup> Gaynor, "PPCS squirreling of Richmond shares could be costly." Stevenson, "Meat company Richmond takes plunge in market." Reddy was appointed Governor-General of New Zealand in September 2016.

<sup>277</sup> NZOYB, 2004, Chapter 18.2, table 18.05. NZOYB, 2002, Chapter 18.2, table 18.8.

and 2001.<sup>278</sup> In the same period, the firms focus on value added products was extended by the establishment of a \$14m 'FoodTech' plant on the Takapau site and the purchase of food service brand Gourmet Direct.<sup>279</sup> By 2001, Richmond was trading well enough to list on the New Zealand stock exchange, and a subsequent issuance of \$50m in capital notes bolstered the company's balance sheet and facilitated a number of capital investment projects.<sup>280</sup> Richmond was the first Hawke's Bay meat processor to list on the equity market, an action that boosted liquidity opportunities for the company's 1,900 shareholders<sup>281</sup> and closed the secondary market discount of 25%-30%.<sup>282</sup>

Unfortunately, the stock exchange listing would hasten the end of Richmond. In late 2001, PPCS purchased 16.7% of Richmond, 6.7% on market and 10% from Auckland's Spencer family.<sup>283</sup> Meanwhile, PPCS approached Active Equities whose subsequent decision to sell suggested their interest in Richmond was little more than a ruse.<sup>284</sup> PPCS then moved to take a 49% interest in Hawke's Bay Meat Holdings, a joint venture created with Active Equities that held 33% of Richmond as its sole asset.<sup>285</sup> The move effectively gave PPCS 52.6% of Richmond.<sup>286</sup> Court proceedings were once again issued by Richmond alleging breaches of disclosure by HKM (in 1997), a complaint that was subsequently upheld.<sup>287</sup> The court ruling stipulated that PPCS must make a full bid for Richmond or forfeit its shareholding and in February 2003, PPCS duly launched a successful takeover.<sup>288</sup> The era of farmer controlled processors in the province, one that had started with the creation of HBFMC in 1912, was over.

The detailed mechanics of Richmond's demise as an independent, farmer-led processor emphasised three significant historical themes in the meat processing industry. First, PPCS acted like a corporate raider. Consequently, their behaviour cast doubt on the

---

<sup>278</sup> "Richmond Meats." Loughlin's strategy was entitled "Pursuing a Food Company Vision through M&A."

<sup>279</sup> Stevenson, "Meat company Richmond takes plunge in market."

<sup>280</sup> "Richmond Meats."

<sup>281</sup> Ibid.

<sup>282</sup> Ibid.

<sup>283</sup> Ibid.

<sup>284</sup> Gaynor, "PPCS squirreling of Richmond shares could be costly." PPCS provided the finance for Active Equities to buy the HKM stake in Richmond.

<sup>285</sup> Ibid.

<sup>286</sup> Ibid.

<sup>287</sup> Ibid.

<sup>288</sup> Ibid.

founding principles of all farmer owned co-operatives. Second, in sharp contrast to previous decades, control of the processing side of the Hawke's Bay meat industry was now completely in the hands of privately-owned companies and/or 'co-operatives' domiciled in other regions. Third, after nearly twenty years of constant restructuring, the commitment of Hawke's Bay farmers to the co-operative model had become very weak. Farmer control of HBFMC, although always nominal, did not ensure its survival whilst a mere 19% of Richmond, a so called 'farmers co-op,' was in farmer control in 2003.<sup>289</sup>

**Table 4.1. Richmond Meats major event timeline, 1930-2003.**

1930	Firm established as a farmer-controlled meat exporter by William Richmond.
1932	Richmond survives debt crisis with help from HBFMC which becomes the largest shareholder.
1953	HBFMC sells its stake to other shareholders. W. Richmond becomes fully owned by farmers.
1956	Founder dies.
1959	W. Richmond becomes a public, unlisted company.
1971	Pacific Beef established as 50:50 joint venture with Dawn Meats.
1977	Brierley Investments launches unsuccessful takeover for Richmond.
1986	Richmond participates in the closure of Whakatu and acquires the Takapau plant.
1997	HKM Nominees takes 33.4% shareholding beating a rival bid by PPCS.
1999	PPCS launches bid for HKM but is again rebuffed. Active Equities buys the HKM stake.
2001	Richmond Meats lists on New Zealand Stock Exchange,
2003	Active Equities sells its shareholding to PPCS which takes full control of Richmond.

Sources: Sulzberger, Gaynor, Loughlin.

The 2003 downfall of Hawke's Bay's last meat processing co-operative highlighted the continued success of other ownership and business models, most importantly those of Progressive Meats. Although many processing firms struggled between 2004 and 2010, Progressive lifted its share of New Zealand lamb volumes from 1% to 6%, and with turnover of over NZ\$600m the firm became New Zealand's fifth largest processor.<sup>290</sup> The contrast with Hawke's Bay dominant meat processors of the 1950s and 1960s could not be starker. Unlike Whakatu, Progressive was not a co-operative. And unlike both Whakatu and Tomoana, none of Progressive's products were frozen. Moreover, Progressive completely rejected the carcass trade. All products were described as "value added," produced at small, flexible plants capable of processing a broad range of stock.<sup>291</sup> The same trends were

<sup>289</sup> John Loughlin in discussion with author, April 6<sup>th</sup>, 2017.

<sup>290</sup> Coriolis et al, "The Investors Guide To The New Zealand Meat Industry," *Food & Beverage Information Project* (2017): 71 & 73.

<sup>291</sup> Craig Hickson in discussion with author, March 2<sup>nd</sup>, 2017.

apparent across New Zealand. In 1983, frozen lamb/mutton carcasses represented 81.2% of total sheep meat exports.<sup>292</sup> By 2009/10 the equivalent figure was 3%-5%.<sup>293</sup>

Although the production of higher margin, chilled and cut meats was an essential strategy after 2000 falling stock numbers remained hugely problematic for all Hawke's Bay meat processors, a difficulty that led to yet more merger and acquisition activity. In June 2006, Integrated Foods, a vertically integrated meat processing business, acquired Napier based Fresh Meats.<sup>294</sup> In the same year, Progressive Meats acquired a majority interest (64%) in the Bernard Matthews Ltd plant (now known as Ovation) in Waipukurau,<sup>295</sup> and in 2010 ownership of the Wairoa freezing 'works' switched to Talley as part their takeover of AFFCO.<sup>296</sup> Similarly, few new meat processing companies were established. Although secondary beef processor First Light Foods was formed in 2004, low margins and supply difficulties kept new entrants to a minimum.<sup>297</sup>

#### Summary 1995-2010.

The demise of Richmond Meats marked the end of an era for Hawke's Bay farmer owned processing companies. As sheep numbers continued to collapse, M&A became essential to survival and, like Richmond itself, PPCS saw additional size as the only way out of what had become a nationwide calamity. Richmond's own strategy and its subsequent takeover highlighted two important themes. First, as sheep numbers fell, the onus of adjustment continued to fall most acutely on established primary processors. Second, industry trends continued to favour small nimble plants with a value-added focus and less pronounced seasonality courtesy of a wider range of products. Following the acquisition of Lowe Walker, which added these attributes, Richmond became a very attractive target

---

<sup>292</sup> "Meat industry Review 1982/83," Reserve Bank of New Zealand (April 1984): 136, accessed March 21<sup>st</sup>, 2017, <http://www.rbnz.govt.nz/-/media/ReserveBank/Files/Publications/Bulletins/1984/1984april47-31982-83meatindustryreview.pdf>. Chilled cuts were 1.0% of total meat exports in 1983 with chilled lamb a mere 0.25% of total sheep meats exports.

<sup>293</sup> Coriolis et al, "Lamb Exports by Type," *Food & Beverage Information Project – Sector Stream: Meat* (2011): 58 & 62.

<sup>294</sup> "Overview," I.F.L Group, accessed April 7<sup>th</sup>, 2017, <https://www.integratedfoods.co.nz/our-story>

<sup>295</sup> Craig Hickson in discussion with author, March 2<sup>nd</sup>, 2017. Progressive commenced 'in house' processing in Hastings following the closure of Whakatu. Hickson suggests that the Employment Contracts Act (1991) was a pivotal aspect of subsequent success as it gave the company the greatly enhanced operational flexibility.

<sup>296</sup> "Talley's Takes Charge," *New Zealand Herald*, October 7<sup>th</sup>, 2010.

<sup>297</sup> Coriolis et al, "The Investors Guide To The New Zealand Meat Industry," *Food & Beverage Information Project* (2017): 83.

indeed.<sup>298</sup> By 2010, ownership and business models in the Hawke's Bay meat industry were much changed. The most successful meat processing plants operating in the province, notably those owned by Progressive, were privately owned, small, flexible operations with a focus on value added products, strengths that were not seen in Whakatu and Tomoana.<sup>299</sup>

## Conclusion.

The Hawke's Bay meat processing industry experienced three distinct eras between 1945 and 2010. The first era (1945-75) was one of 'Continuity and Change.' Continuity references the ongoing dominance of mega-plants Whakatu and Tomoana, continually rising sheep numbers and protection of incumbent processors by government regulation. 'Change' references modifications in consumer and market dynamics as well as cost inflation and labour unrest that threatened the established structure of the industry. Inertia in the face of these changes meant processors were resistant to innovation and slow to acknowledge emerging threats. Furthermore, the Hawke's Bay meat processing industry was systemically over capitalised, a problem disguised by ever rising sheep numbers.

The second era, from 1975 to 1995, was one of 'Disruption and Adjustment'. 'Disruption' refers to UK membership of the EEC, industry deregulation and disorder in marketing channels as well as the implementation, and subsequent abolition, of SMPs. Although the closure of Whakatu and Tomoana cannot be attributed to a single variable, Hawke's Bay's two mega-plants were totally unprepared for the collapse in sheep numbers that occurred after 1985 and it is notable that Whakatu lasted but twelve months after the cessation of agricultural subsidies. The subsequent collapse of Tomoana, which removed the last connection between Hawke's Bay's meat processing sector and offshore investors, reflected the same theme. In contrast, the success of smaller, locally owned processors showed that adjustment was indeed possible.

A third era, 'Recovery and Stabilisation,' began in the mid-1990s and highlights the emergence of a new type of capitalism in the Hawke's Bay meat processing sector. The period was typified by aggressive ownership battles as well as the corporatisation and

---

<sup>298</sup> John Loughlin in discussion with author, April 6<sup>th</sup>, 2017. Loughlin suggests PPCS bought Richmond for its lamb and venison assets only.

<sup>299</sup> Ibid.



eventual demise of Richmond, Hawke's Bay's last farmer-led co-operative. By 2010, the industry had stabilised but in a much-changed form. Although the number of primary processing plants in 2010 (seven) was higher than 1945 (three) the ownership and focus was substantially different. Crucially, Hawke's Bay's historically most visible processors were either gone or no longer independent, a theme that heralded a major historical juncture in the meat processing industry. Like the sheep farms that supplied them, plants such as Whakatu and Tomoana typified New Zealand's history of productivism, an approach exemplified by a focus on quantity rather than quality. The demise of Richmond points to another theme of historic importance: Hawke's Bay pastoral farmers no longer felt it worthwhile to hold a stake in a local processing facility, something that was a prime motivation for the creation of HBFMC in 1912 and Richmond in 1930.

# Chapter Five: Hawke's Bay Wool Distribution, Processing & Manufacturing 1945-2010.

---

## Introduction.

This chapter will examine the wool distribution, processing and manufacturing sector in Hawke's Bay between 1945 and 2010. Discussions will focus on the profitability and business strategies of stock and station agents (SSAs), wool scours and woollen goods manufacturers. In addition, a critical industry institution will be examined - the public wool auction system. The chapter will employ the same chronological parameters used previously but a number of events specific to the wool industry lend additional credibility to their use. In real terms coarse wool prices spiked in 1950/51, 1963/64 and 1972/73 before entering a long slump. The mid 1970s are, therefore, an important threshold. The twenty-year period that followed is similarly significant, facilitating comparison between the late 1970s peak in agricultural subsidies and their removal in the mid-1980s. 1995 marks the start of another pivotal period. Fifty years of continuous intervention by statutory authority, the New Zealand Wool Board, ended in December of that year.

Chapter Five argues that changing consumer trends, government policies and productivist thinking shaped the wool sector after 1945. Ever growing volumes, high prices and protection meant prosperity was widespread but so was complacency, and as synthetic fibres gained market share, wool prices slipped. Subsidies were introduced as an offset but inevitably the industry was forced to restructure. As dominant firms searched for improved scale, duopolies emerged in most sectors and the era of farmer-led co-operatives ended as did the dominance of public auctions.

Primary sources used in this chapter include New Zealand Official Yearbooks, the archives of Statistics New Zealand and the Hawke's Bay branch of Federated Farmers, annual reports of industry participants and local newspapers. Important secondary sources

comprise the industry histories of Ville and Anderson as well as briefings from relevant government departments including the Reserve Bank of New Zealand.<sup>1</sup>

New Zealand wool distribution and processing industry structure.

Discussion of the wool industry must recognise that the sector's structure has remained largely unchanged since 1900 and that the relationship between participant groups is strongly interdependent. Growers employ wool brokers to market bales of raw wool at auctions - both private and public - where manufacturers, or their appointed agents (wool merchants), acquire the desired quantity/quality at a clearing price.<sup>2</sup> Merchants then either engage New Zealand based commission scours to wash and clean the wool, a necessity prior to use, or deliver wool to overseas scours in condensed packages created through a process known as 'dumping.' Once the wool is cleaned by the offshore scour, it is delivered to the buyer. After domestic scours have cleaned the wool, the semi-processed product is then 'dumped' and shipped to end users – both domestic and offshore. Some participants service more than one segment of the chain, most notably integrated merchants and scours (see Figure 5.1).<sup>3</sup>

Since 1945, the profitability of the New Zealand wool industry has reflected the price of coarse wool, the most commonly produced grade. Furthermore, as selling and scouring fees are typically commission based, price has always been as important to wool brokers and scours as farmers. Another historical commonality persists - coarse wool has few end uses. Accordingly, carpet manufacturers have for many decades been the foremost buyers of New Zealand coarse wool. Consequently, demand for woollen carpets tends to determine New Zealand wool prices. Since the 1930s, the rise of synthetic textiles has been a major disruptor for the coarse wool industry. Synthetics are oil-based fabrics, and in the mid-1970s a strong co-relation emerged between the prices of oil, synthetics and coarse wool.<sup>4</sup>

---

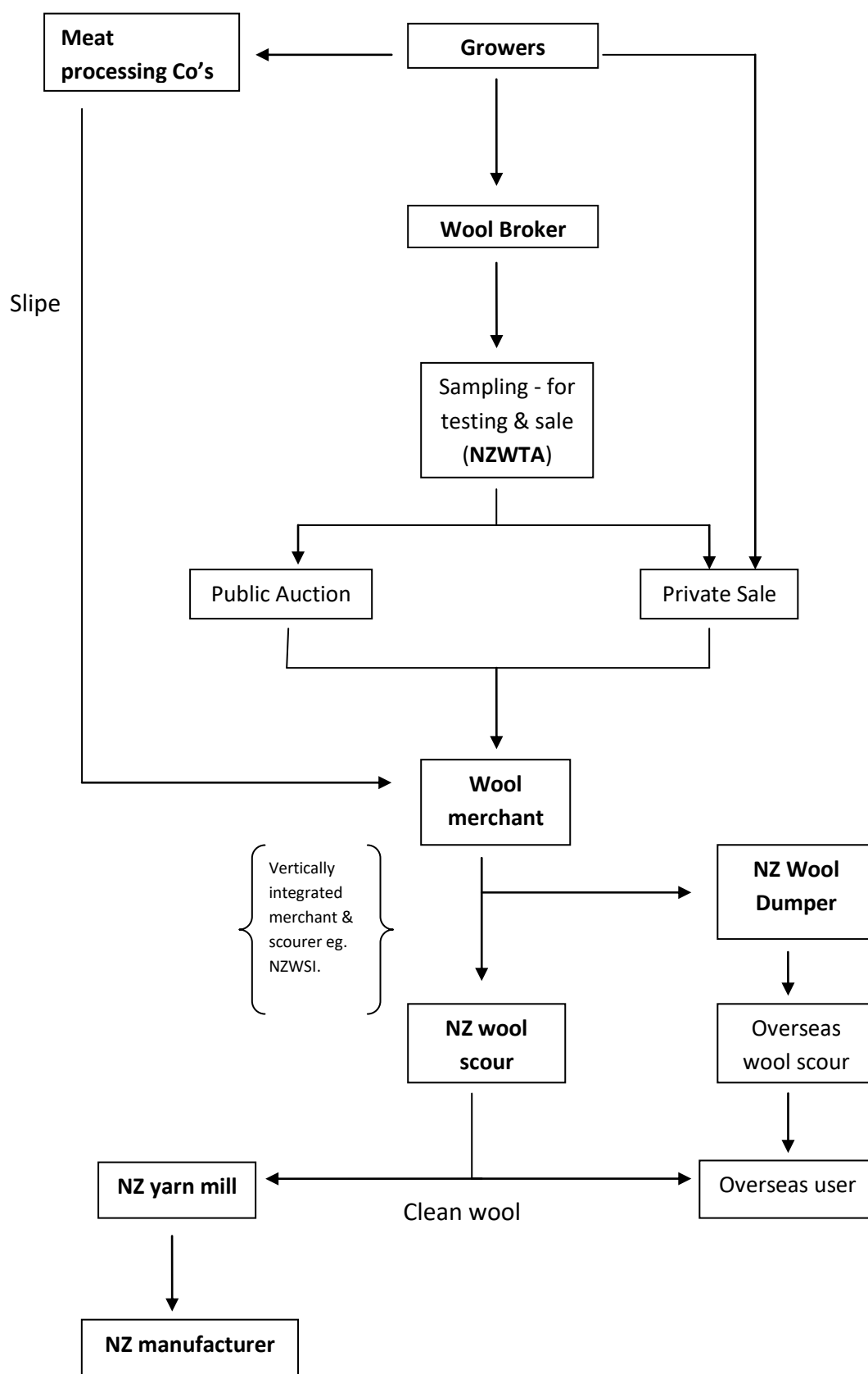
<sup>1</sup> Simon Ville, *The Rural Entrepreneurs*; Len Anderson, *Throughout the East Coast: The Story of Williams and Kettle* (Hastings, Pictorial Publications, 1974).

<sup>2</sup> Prior to auction, a sample from each wool bale is placed in a cardboard presentation box. Grades are established by independent wool testing laboratories such as the New Zealand Wool Testing Authority.

<sup>3</sup> New Zealand Wool Services International (NZWSI) is one such example.

<sup>4</sup> Index Mundi, Price relationship between crude oil and coarse wool. Accessed September 29<sup>th</sup>, 2017  
<http://www.indexmundi.com/commodities/?commodity=coarse-wool&months=360&commodity=crude-oil-west-texas-intermediate&indicator=price-ratio>

Figure 5.1. Structure of New Zealand wool industry (all levels operate in Hawke's Bay).<sup>5</sup>



<sup>5</sup> NZWSI: New Zealand Wool Services International. NZWTA: New Zealand Wool Testing Authority.

## 1945-1975: Continuity and Change.

At the conclusion of WW2, the wool distribution sector in Hawke's Bay was dominated by a small number of firms, most particularly co-operatively owned stock and station agents (SSAs/agents). In the decades that followed, Napier's importance as a wool sales centre grew substantially and, as overseers of the public auction system, SSAs thrived as did related activities such as wool scouring and woollen yarn manufacturing. The prosperity of the period was heightened by wool booms, particularly those of 1950/51 and 1963/64; however, by the late 1960s fundamental change, most obviously the rise of synthetic yarns, became an existential threat to the survival of all.

Co-operatively owned wool brokers dominate.

The early development of stock & station agents in New Zealand was highly regionalised and most New Zealand provinces had a local 'champion' or 'champions.' Farmers were invariably anxious to ensure that profits were retained within their province and farming communities. Accordingly, many SSAs were established as farmer owned co-operatives. Hawke's Bay was no different and the earliest SSAs in the province, Williams & Kettle (established in 1885) and the Hawke's Bay Farmers Co-operative (HBFC, 1891), were founded on co-operative principles.<sup>6</sup> Although the former was formed on a more selective basis, described as a "limited company with co-operative principles,"<sup>7</sup> co-operative status was a key marketing tool for both firms and 'shareholder' rebates were used to reward Hawke's Bay farmers for their business in a wide range of commercial activities including general merchandise, insurance and wool broking. Consequently, from inception Hawke's Bay SSAs were highly leveraged to farm incomes and, by extension, commodity prices.

As London's importance as a wool selling centre progressively declined after 1890, domestic auctions run by local SSAs became the dominant sales channel for New Zealand wool and Napier became one of the leading sales centres.<sup>8</sup> By 1945, domestic auctions accounted for 80% of all New Zealand wool sales.<sup>9</sup> Although private sales channels were

---

<sup>6</sup> Anderson, *Throughout the East Coast*, 44. Williams & Kettle was established in response to the creation of the Hawke's Bay Farmers Co-operative.

<sup>7</sup> Ville, *The Rural Entrepreneurs*, 41.

<sup>8</sup> *Ibid*, 126.

<sup>9</sup> *Ibid*, 126 & 146.

active competitors Napier's public auction system attained a similar degree of dominance.<sup>10</sup> Hawke's Bay wool brokers had worked with the London wool consignment trade since the 1880s and 'on-shoring' was greatly advantageous to them given the physical distance between wool growers and buyers in Europe (UK woollen goods manufacturers and textile mills in France and Germany). Consequently, Hawke's Bay brokers became essential participants at Napier wool sales.<sup>11</sup> The public auction system was suspended during WW2 but Napier's share of total New Zealand wool sales in 1945 was approximately 16%.<sup>12</sup> Only Wellington and Canterbury were larger in the decade following the war.<sup>13</sup>

**Table 5.1. Wool auction market shares: Napier wool sale, 14<sup>th</sup> November 1955.**

	Market share	<i>Established</i>	<i>Defunct</i>
<b>Hawke's Bay Farmers Co-op</b>	24.9%	1891	1982
<b>Williams &amp; Kettle</b>	23.9%	1885	2005
<b>Murray Roberts</b>	13.5%	1867	1961
de Pelichet McLeod	13.0%	1911	1986
NZ Loan & Mercantile	11.1%	1865	1962
Dalgety	11.1%	1846	1983
Wright Stephenson	2.5%	1861	1972

Source: "Big Offering of Hawke's Bay wool for Napier sale," *Hawke's Bay Herald Tribune*, November 14<sup>th</sup>, 1955. Murray Roberts HB averaged circa 24,000 bales p.a in the 1950s and 1960s, a market share of approximately 12%. Note: Co-operatives in bold.

At the conclusion of WW2 the business of wool broking in Hawke's Bay was dominated by local co-operatives and sales commissions represented a vital part of their revenues.<sup>14</sup> A foundation service for firms such as Williams & Kettle and HBFC, wool broking accounted for 30% of total income in a most years and as much as 80% when wool prices were high.<sup>15</sup> Commission income was similarly vital to other 'local' brokers such as family owned firm Murray Roberts. Established in Dunedin in the 1860s, Murray Roberts was commonly considered an extension of Williams & Kettle due to close commercial and family connections.<sup>16</sup> Consequently, as market share data from a typical sale in the mid-1950s shows (see Table 5.1), agents owned and/or partially controlled by local farmers dominated Napier wool auctions. Together the co-operative 'group' accounted for over 60% of trade.

<sup>10</sup> Anderson, *Throughout the East Coast*, 102 & 103.

<sup>11</sup> Trust extended to the accuracy of wool testing and sampling as well as the legitimacy of wool auctions.

<sup>12</sup> Australian Department of Agriculture & Water (DAWR), Source: Ville, *The Rural Entrepreneurs*, Table 6.5.

<sup>13</sup> Ibid.

<sup>14</sup> Anderson, *Throughout the East Coast*, 108.

<sup>15</sup> Refer Table 5.3.

<sup>16</sup> Ville, *The Rural Entrepreneurs*, 124. Farmers were generally mistrustful of such connections.

The post war dominance of farmer co-operatives coincided with a significant rise in wool prices, and notwithstanding the substantial build-up of stocks that occurred during WW2, the 1950s were extremely positive for Hawke's Bay SSAs.<sup>17</sup> As owners of the most important firms it was logical that farmers were strongly supportive of Napier as a sales centre. Accordingly, farmer-controlled agents such as Williams & Kettle flourished. The Korean wool boom of 1950/51 provided a particular boost and between 1949 and the peak of the boom in 1951, Williams & Kettle's turnover doubled. High prices in turn stimulated wool production and as auction volumes soared (refer Table 5.2), the firm posted another record result in 1955.<sup>18</sup> These were halcyon days for Williams & Kettle and between 1945 and 1955 the company's financial reserves increased by a factor of 4.2. As costs were largely fixed, volume growth generated quite extraordinary increases in profitability. Between 1947 and 1957 the number of bales handled by Williams & Kettle rose by a respectable 28% but net profits grew by an astonishing 288% (see Table 5.3). The firm was not alone in earning windfall profits. During the 1950s, the profitability of Murray Roberts' single Hawke's Bay branch exceeded the combined profits of the firms five other New Zealand offices.<sup>19</sup>

**Table 5.2 Napier wool auction volume growth in bales tendered, 1941-1980 (%).**

Period	Bales tendered (p.a. avg)	Volume growth (%)
1941-50	135,748	+43%
1951-60	165,815	+22%
1961-70	224,986	+36%
1971-80	251,305	+12%

Sources: DAWR, New Zealand Wool Brokers Association. Ville (127 & 129). Bales tendered reflects annual average over decade.

<sup>17</sup> Baker, *War Economy*, 209 & 213. Baker describes how wool was a near by-product compared to meat, the production of which was a government priority. Also see - Hawke's Bay sheep farmer incomes, Chapter 3, page 2.

<sup>18</sup> Comparable figures are not available for the Hawke's Bay Farmers Co-operative.

<sup>19</sup> A.A Roberts, *A Family Affair, A History of Murray Roberts & Co Ltd* (Hastings: Pictorial Publications, 1982), 1-6.

**Table 5.3. Post war wool boom generates massive growth. Williams & Kettle financials, 1934-1966.**

	1939	1949	1951	1955	1966
Revenues	£1,500,000	£4,000,000	£8,000,000 estd	£9,000,000	£14,000,000
Wool as a % (estd)	25%	30%	80%	70%	40%
	1934	1939	1947	1957	
Net profit	£19,263	£12,535	£109,200	£314,600	
	1947-48	1954-55	1962-63	1972-73	
Bales handled	39,304	47,190	59,614	76,464	

Sources: Williams & Kettle Annual Reports, Anderson (110), Ville (126 & 129). Notes: financial reserves increased from £80,000 in 1945 to £332,000 in 1955. 1949 percentage assumes £32/bale.

Growth in the Napier wool trade continued into the 1960s, a reflection of market share gains and production growth. Between 1963 and 1968, wool exports through the Port of Napier rose 40% to 70,000 tons p.a.<sup>20</sup> Growth came from three sources. London continued to decline as a sales centre and Napier gained at the expense of New Zealand rivals. Ville estimates that Napier transacted an average 20% of the national clip by the early 1970s, against 16% in the 1950s partly due to the closure of the neighbouring East Coast wool auction centre.<sup>21</sup> Increased production was, nevertheless, the primary driver of growth and between 1955 and 1965 coarse wool production in Hawke's Bay rose by nearly a quarter (see Table 3.2). The fortuitous combination of surging volumes and rising market share gave wool traders an enormous boost in confidence and in 1966, to symbolise their collective success, the Hawke's Bay Wool Brokers Association built an exquisitely designed wool exchange building on Marine Parade, Napier.<sup>22</sup>

Although confidence in Napier's public auction system remained high in the mid-1960s rival channels remained active and farmers occasionally expressed concern about auction fees. Ville estimates that public auctions accounted for over 90% of all wool sold in New Zealand in the 1952/53 season and in the mid-1960s market share was only slightly lower at approximately 84%, a level that remained relatively stable until 1970.<sup>23</sup> Despite the overwhelming dominance of the public auction system following WW2 both private and direct sales channels remained active and the former gained between 5% and 10% market

<sup>20</sup> *Hawke's Bay Regional Resource Survey*, 178.

<sup>21</sup> Ville, *The Rural Entrepreneurs*, 129.

<sup>22</sup> "Hawke's Bay Timeline," Hawke's Bay Knowledge Bank, accessed October 12<sup>th</sup>, 2017, <https://knowledgebank.org.nz/912/998/35618>

<sup>23</sup> Ville, *The Rural Entrepreneurs*, 140.



share between the early 1950s and mid-1960s.<sup>24</sup> Although competition was robust in the immediate post war decades the majority of Hawke's Bay sheep farmers nevertheless remained loyal to the public auction system, dominated as it was by farmer owned co-operatives.<sup>25</sup> Discontent did, however, arise occasionally. Typical brokerage costs of 2%-3%<sup>26</sup> were regarded as excessive by many and in 1952 Hawke's Bay Federated Farmers sought an inquiry into auction fees.<sup>27</sup> The remarkable rise in profits posted by Williams & Kettle during the 1950s and 1960s suggests the complaints were justified, albeit growth in farm income was equally pronounced at the time.<sup>28</sup>

In the early/mid 1960s the profitability of New Zealand SSAs prompted a wave of mergers and acquisitions (M&A) but Hawke's Bay's largest agency businesses did not participate. Surging profits in the sector provided the means for larger, national firms to expand by way of M&A and lacking external sources of equity, smaller family owned SSAs were the most vulnerable. Although highly profitable, Williams & Kettle and HBFC did not participate in the rationalisation of regional agency businesses that took hold after 1960 and despite its strong connections with Williams & Kettle; Murray Roberts was acquired by the National Mortgage and Agency Company of New Zealand (NMA) in 1961.<sup>29</sup> Regionally focused firms were equally susceptible. In 1962, Dalgety acquired NZ Loan & Mercantile<sup>30</sup> and in 1972 Wright Stephenson merged with NMA to create Wrightson NMA before changing its name to Challenge Corporation in 1973.<sup>31</sup> Of the remaining brokers listed on Table 5.1, three of the top four were still operating in 1975, albeit de Pelichet McLeod was no longer fully independent.<sup>32</sup>

Rationalisation remained a muted theme in Hawke's Bay during the 1960s and early 1970s but the province's SSAs could not escape change on another front – the structural decline of wool prices. Between 1949 and 1974 nominal wool prices nearly doubled but in

<sup>24</sup> Anderson, *Throughout the East Coast*, 102 & 103, Ville, *The Rural Entrepreneurs*, 119, 120 & 140.

<sup>25</sup> "Wool growers want to retain auction system," *Hawke's Bay Herald Tribune*, September 15<sup>th</sup>, 1950.

<sup>26</sup> Ville, *The Rural Entrepreneurs*, 143.

<sup>27</sup> "Farmers seek wool selling system inquiry," *Hawke's Bay Herald Tribune*, July 12<sup>th</sup>, 1952.

<sup>28</sup> Refer Chapter 3 (1945-1975).

<sup>29</sup> Roberts, *A Family Affair, a history of Murray Roberts & Co Limited*.

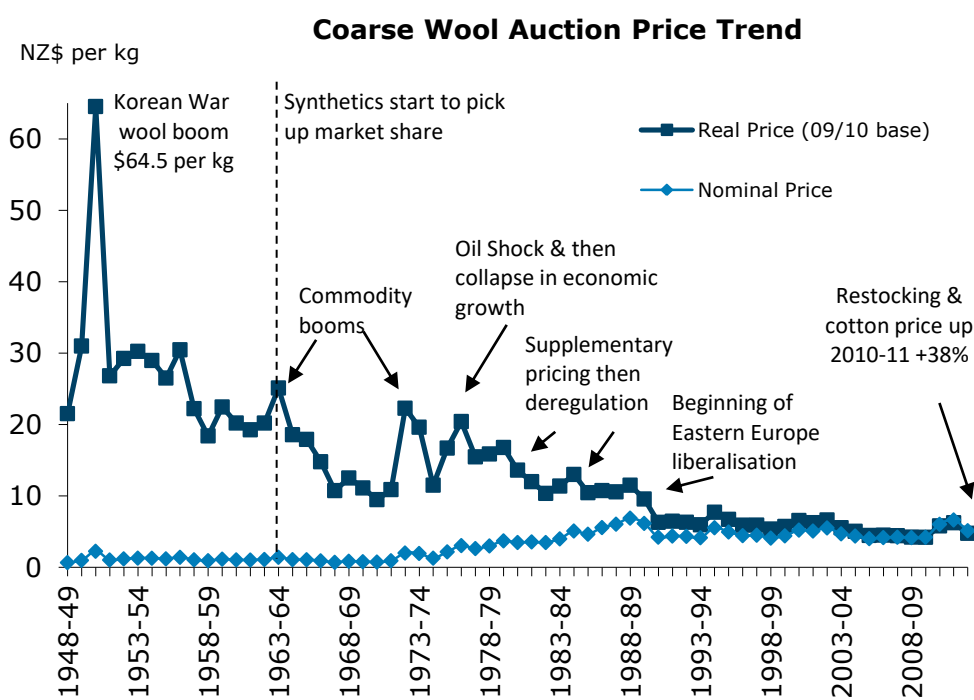
<sup>30</sup> "The rise and fall of the historic Stock agent," Brian James, Landmarks Trust History Forum, accessed April 12<sup>th</sup>, 2017, <http://hdclandmarkshistorygroup.blogspot.co.nz/2012/08/the-rise-and-fall-of-historic-stock.html>

<sup>31</sup> "NMA Wright Stephenson Holdings Limited," *The Times*, May 1<sup>st</sup>, 1972 (page 20). Also see - & Fletcher Challenge archives – refer, [www.fclarchives.co.nz](http://www.fclarchives.co.nz), accessed July 5<sup>th</sup>, 2018

<sup>32</sup> Boyd, *City of the Plains*, 345. Became part of Crown Consolidated in 1973.

real terms the price of coarse wool reached a post war low in the mid-1970s, some 37% lower than in 1949 (see Figure 5.2). The decline led to slowing volume growth. Between 1965 and 1975, Hawke's Bay wool production grew by just under 8% against a rise of 20%+ in each of the two preceding decades (see Table 3.2). Similarly, the buoyant tone of Williams & Kettle annual reports in the 1950s had been replaced by more sober commentary. In 1973, shareholders were warned of "serious inflationary trends" amid highly unstable wool prices.<sup>33</sup> In the same year, nominal prices spiked to their highest level since 1950/51. But the rally was brief. By 1974/75 the price of wool in real terms/Kg was at a post war low, a reflection of underlying structural problems most particularly the rise of synthetic fibres.<sup>34</sup> By the mid-1970s the supreme confidence of the 1950s and 1960s, typified by the claim that "Wool will always be king," was in serious doubt.<sup>35</sup>

Figure 5.2. Short boom(s) followed by a long decline: Real term wool prices, 1948-2010.



Sources: ANZ Bank Agrifocus & Statistics NZ, see wool\_price\_time\_series\_(long).xls

<sup>33</sup> Anderson, *Throughout the East Coast*, 152-55, 159 & 160.

<sup>34</sup> Statistics NZ, see wool\_price\_time\_series\_(long).xls

<sup>35</sup> Anderson, *Throughout the East Coast*, 99. Quotes Williams & Kettle Chairman.

Processors and manufacturers: strong post-war growth but synthetics pose a fundamental threat.

In 1945, domestic use of New Zealand wool was miniscule. Focused on the small local market, New Zealand manufacturers purchased a mere 2.5% of total wool production. Accordingly, the vast majority of wool was either exported in raw, unprocessed form, or clean/scoured (see Table 5.4). Although domestic manufacturing's consumption of wool doubled to 15m lbs between 1939 and 1945, usage returned to pre-war levels of approximately 8m-10m lbs p.a by 1946.<sup>36</sup> Nor was the sector a large employer. At the end of WW2, New Zealand's 21 woollen mills employed little more than 2% of the total manufacturing workforce.<sup>37</sup> The wool scouring sector was even smaller, accounting for less than 0.5% of total manufacturing employment.<sup>38</sup> Moreover, wool scours were small in size. 33 wool scours and fellmongeries operated in New Zealand in 1945, employing an average of sixteen persons apiece.<sup>39</sup> Manufacturing remained similarly sub-scale into the 1950s and 1960s, and at no time between 1945 and 1975 did domestic consumption of wool exceed 4% of New Zealand's total wool clip.

**Table 5.4. Limited domestic demand: wool exports as a % of total production, 1946-1975 (% & lbs - millions).**

	1946	1955	1965	1970	1975
Exports	97.3%	96.4%	96.4%	96.9%	96.1%
NZ use (lbs)	10.1m	12.2m	22.3m	38.4m	33.7m <sup>40</sup>

Sources: *NZOYB*, 1946-1975, ANZ Agrifocus April 2017, RBNZ Wool Reviews June 1981 & July 1982. 1975 numbers adjusted to lbs to permit comparison with earlier periods.

The story of wool scouring is, however, more positive than woollen goods manufacturing. Although scouring was "in the doldrums in the immediate pre-war period" wartime demand provided the industry with a platform for longer term growth.<sup>41</sup> A minor percentage of New Zealand's wool output was scoured domestically during WW2 but off a

<sup>36</sup> *NZOYB*, 1947-49, Chapter 18c.

<sup>37</sup> *Ibid*, Chapter 22.

<sup>38</sup> *Ibid*.

<sup>39</sup> *Ibid*.

<sup>40</sup> 1974 figure.

<sup>41</sup> Baker, *War Economy*, 215.

very small base, employment at local scours increased 50% between 1939 and 1945.<sup>42</sup> Progress after 1945 was much slower. Between 1945 and 1966 no more than 16% of New Zealand's wool production was scoured at local plants.<sup>43</sup> But in the early 1970s, New Zealand-developed scouring technologies prompted a sharp surge in growth<sup>44</sup> and by 1975 domestic scours processed 40% of the New Zealand wool clip.<sup>45</sup> The trend was replicated in Hawke's Bay and in 1975, an unprecedented five scours operated in the province<sup>46</sup> of which Tucker's was the oldest.<sup>47</sup> The profitability of scouring was such that cross shareholdings with other wool sector participants became common, and in the mid-1970s Williams & Kettle acquired a 33% interest in the Whakatu wool scour.<sup>48</sup>

The greatly increased availability of clean wool that accompanied the growth in wool scouring encouraged related industries. Although domestic woollen goods manufacturers continued to account for a very small part of New Zealand's total wool production, domestic consumption of coarse wools rose three-fold between 1945 and 1975.<sup>49</sup> Growth between 1965 and 1970 (+172%) was particularly pronounced (see Table 5.4). Again, the same theme was evident in Hawke's Bay. In the early 1960s, Napier Woollen Mills established a woollen yarn manufacturing plant at Awatoto to supply New Zealand's newly developed carpet manufacturing sector. With 75% of its feedstock sourced from local wool scours, the mill employed 230 staff making it one of the larger businesses in the province at the time.<sup>50</sup> In 1966, the plant was sold to Auckland based carpet manufacturer United Empire Box (UEB) Industries, and despite the change in ownership woollen yarns continued to be sold to UEB's

---

<sup>42</sup> Ibid.

<sup>43</sup> "Wool Industry Review (June 1981)," Reserve Bank of New Zealand, 229, accessed May 2<sup>nd</sup>, 2017, <http://www.rbnz.govt.nz/-/media/ReserveBank/Files/Publications/Bulletins/1981/1981june44-5woolindustryreview.pdf>

<sup>44</sup> "Cleaning the Wool Clip," Tech History NZ, accessed October 12<sup>th</sup>, 2017, <http://www.techhistory.co.nz/OntheLand/Woolscouring3.htm>

<sup>45</sup> "Wool Industry Review (June 1981)," 229.

<sup>46</sup> Beverley Dunlop & Kay Mooney, *Hawke's Bay - Profile of a Province* (Auckland: Hodder and Stoughton, 1986), 104.

<sup>47</sup> Matthew Wright, "Tucker, Richard," *Te Ara - The Encyclopedia of New Zealand*, accessed May 31<sup>st</sup>, 2017, <http://www.TeAra.govt.nz/en/biographies/2t50/tucker-richard>

<sup>48</sup> Anderson, *Throughout the East Coast*, 126.

<sup>49</sup> "Demand And Supply For Wool (July 1982)," Reserve Bank of New Zealand, 255, accessed July 18<sup>th</sup>, 2018, <https://www.rbnz.govt.nz/-/media/ReserveBank/Files/Publications/Bulletins/1982/1982july45-6demandandsupplyforwool.pdf>.

<sup>50</sup> *Hawke's Bay Regional Resource Survey*, 157 & 159. Napier Woollen Mills also operated a scour/mill in Napier.

North Island competitors including stock exchange listed Cavalier Carpets.<sup>51</sup> No large scale carpet manufacturing was undertaken in the province itself.

Notwithstanding the presence of several larger scale processing plants in the mid-1960s, Hawke's Bay's woollen manufacturing sector remained very small. In 1966/67, nine textile manufacturers operated in the province. Dominated by UEB's woollen yarn factory these businesses employed 276 workers and produced a broad range of products that included woollen clothing and floor coverings. But, UEB aside, these were extremely small-scale enterprises. Each manufacturer employed an average of six employees apiece and the sector accounted for little more than 3% of Hawke's Bay's manufacturing output in the late 1960s.<sup>52</sup> Similarly, the province was a small part of New Zealand's emergent textile industry, accounting for no more than 2.4% of total sector employment.<sup>53</sup> Unfortunately small scale equated with poor returns. In value-added terms, wool processing was the second worst performer of Hawke's Bay's thirteen industrial sectors between 1954/55 and 1965/66.<sup>54</sup> Although returns in Hawke's Bay's sub-scale wool processing and manufacturing sector were disappointing, manufacturers elsewhere were thriving. Most particularly, New Zealand's protected carpet manufacturing sector continued to grow strongly during the late 1960s and early 1970s. In the mid-1960s, carpet manufacturing was unknown in statistical records. But by the early 1970s New Zealand was producing in excess of 8m square metres of woollen carpet per annum.<sup>55</sup>

In the early/mid 1970s growth in woollen carpet manufacturing began to slow, the result of global recession and competition from synthetic alternatives but Hawke's Bay manufacturers were slow to react. In 1975 the New Zealand carpet industry's consumption of coarse wool plunged by nearly 50% following a collapse in the global economy.<sup>56</sup> At the same time synthetic fibre alternatives were now a significant competitor. As the effects of recession eased, demand for woollen carpet rebounded. But in a continuation of a trend

---

<sup>51</sup> Ibid. Carpet manufacturing was still an infant industry in the mid-1960s. The first statistical record of production (1969) can be found in the *NZOYB* 1975, Chapter 18.

<sup>52</sup> *Hawke's Bay Regional Resource Survey*, 152, 157 & 159.

<sup>53</sup> Donna Louise Ferretti, "Restructuring in the NZ Textile Industry", 41 (M.A thesis, Massey University, 1981). Quotes source as New Zealand Department of Labour.

<sup>54</sup> *Hawke's Bay Regional Resource Survey*, 152.

<sup>55</sup> *NZOYB*, 1975, Chapter 18, section 18.

<sup>56</sup> "Demand And Supply For Wool (July 1982)," 255.

that first emerged in the 1960s, wool was now commonly displaced by cheaper nylon and other oil-based fibres. Ominously for the New Zealand wool industry, global output of synthetics had grown an average 9.9% p.a. from 1960 to 1973 and an explosive average of 21.5% p.a. during the 1960s.<sup>57</sup> Unfortunately Hawke's Bay woollen goods manufacturers did little to offset the 'synthetic threat.' In 1975, the structure and output of the province's textile sector remained exactly as it had been in 1945 and most importantly not a single synthetic fibre was produced.

It would be easy to accuse the Hawke's Bay wool industry of complacency but two factors unique to New Zealand need to be considered. First, wool remained totally dominant in the New Zealand fabric/yarn market. In the early 1970s, domestic consumption of wool was approximately tenfold greater than that of man-made fibres.<sup>58</sup> Furthermore, synthetic carpets were virtually unknown to local consumers. Likewise, New Zealanders were among the highest per capita users of wool in the world.<sup>59</sup> Quite simply, New Zealanders both trusted and preferred natural fibre. Consequently, the 'synthetic threat' had substantially less visibility in the domestic market than overseas. Second, although growth in woollen carpet demand was well below that of synthetics, consumption was nonetheless 12.5% higher in 1975 than the late 1960s.<sup>60</sup> Market share losses were therefore disguised by absolute growth in the use of coarse wools. Other global trends were, however, less supportive. By 1975, wool's share of fibre consumption in eleven key textile manufacturing countries had fallen to approximately 35% against 48% in 1968, a fact of great importance given declining wool prices and the disproportionate importance of exports to the New Zealand wool industry.<sup>61</sup>

#### Summary 1945-75.

From 1945 to 1975, Hawke's Bay dominant SSAs were co-operatives, a structure that enabled farmers to access margins across the distribution chain. Dissatisfaction with the public auction system emerged periodically but Napier's continued dominance was

---

<sup>57</sup> Ibid, 253.

<sup>58</sup> NZOYB, 1975. Chapter 18, section 18.

<sup>59</sup> NZOYB, 1996, Chapter 18. In 1994, NZ consumption was estimated at 4.0 Kg per capita compared with the 1993 figures of 1.99 Kg in Australia, 2.21 Kg in Germany, 1.61 Kg in the UK and 0.53 Kg in the United States.

<sup>60</sup> "Demand And Supply For Wool (July 1982)," 251.

<sup>61</sup> Ibid, 254.

underpinned by the simple fact farmers owned key agency businesses. Consequently, SSAs such as Williams & Kettle and Hawke's Bay Farmers were ideally placed to benefit from the fortuitous combination of surging wool volumes and rising nominal wool prices that took hold after 1945. Napier's success as an auction centre supported the growth of wool scouring and yarn manufacturing but wool booms in 1950/51 and 1963/64 disguised the decline of wool relative to man-made fibres. Unfortunately, stock & station agents, processors and manufacturers alike did little to prepare for the competitive threat posed by synthetics. Inaction in the face of rising synthetic yarn use and falling real wool prices suggests widespread complacency. Nevertheless, inertia can be explained by factors unique to New Zealand, most particularly the strong emotional link that existed between domestic consumers and woollen fabric.

### 1975 – 1995: Disruption and Adjustment.

After 1975, change became disruption as the real price of coarse wool continued to fall and synthetics gained ground. But political belief in productivism remained intact and as pastoral profitability fell, volume based agricultural subsidies intensified. Sheep numbers subsequently soared but intervention did not alter the structural decline of pastoralism, and in 1985, faced with deteriorating economic fundamentals, SMPs were abolished by a reformist government. Meanwhile, tariff protection for woollen goods manufacturers was progressively dismantled. Together these policy reforms led to extensive restructuring in wool distribution, processing and manufacturing in Hawke's Bay.

Wool broking and Napier's auction system: deteriorating fundamentals drive consolidation and rationalisation.

Public auctions remained the primary sales channel for New Zealand wool in the 1970s, and with a market share of 75% dominance was comparable to that of 1945.<sup>62</sup> Napier's position as a wool sales centre was similarly robust. In 1975, with volumes at an all-time high of approximately 280,000 bales p.a., Napier was by some margin the North Island's foremost wool selling location and second only to Canterbury nationally.<sup>63</sup> The city's

---

<sup>62</sup> "Wool Industry Review (June 1981)," 228.

<sup>63</sup> Ville, *The Rural Entrepreneurs*, 129.

importance as a wool auction centre was growing but by the late 1970s volume growth had peaked. Between 1970 and 1980 Napier auction volumes increased 12%, significantly below that of preceding decades (see Table 5.1). Although momentum was slowing, Napier performed considerably better than other selling centres - national auction volumes fell 4.5% during the same period.<sup>64</sup> Similarly, the regions dominant SSA, Williams & Kettle, performed relatively well. The company handled 115,022 bales in 1981, a figure that compared favourably with peak season volumes of the mid 1950s (76,000 bales) and gave the company a dominant market share of 30%.<sup>65</sup>

**Table 5.5. Napier wool auction volumes and public auction share of total, 1955-1999 (bales & % of market).**

1955	206,000 bales	80%
1975	280,000 bales	75%
1999	163,000 bales	45%

Source: New Zealand Grasslands Association (Scott & Dowling).

Less positively, Napier and Williams & Kettle were not typical of the New Zealand wool industry, and in the early 1980s sluggish production growth and weak prices led to unprecedented rationalisation. Although Napier's importance to the New Zealand wool sector was sufficient to attract an important new entrant in 1981, Australian wool broker Elders, the overwhelming themes after 1980 were rationalisation and corporatisation.<sup>66</sup> But unlike the mergers and acquisitions of the 1960s and 1970s, Hawke's Bay SSAs were inextricably involved. In 1982, the wool broking, retail and agency activities of the Hawke's Bay Farmers Co-operative were integrated into national firm Dalgety & Co, the New Zealand division of Dalgety Plc.<sup>67</sup> In the same year, a completely new type of industry participant emerged when Brierley Investments, a corporate raider, took a 30% stake in Williams & Kettle.<sup>68</sup> Although Brierley initially hoped to profit by selling the interest to acquisitive SSAs, the stake was retained. Consequently, Williams & Kettle was not involved in the 1983 merger of national chains Crown and Dalgety.<sup>69</sup> In 1984, the focus of consolidation shifted to New Zealand's public auction system and Napier became one of just two selling centres.<sup>70</sup>

<sup>64</sup> Ibid.

<sup>65</sup> Williams & Kettle, *Annual Report 1982*, 6 & 7.

<sup>66</sup> "The rise and fall of the historic Stock agent."

<sup>67</sup> Boyd, *City of the Plains*, 345. Merged firm was known as HBF-Dalgety.

<sup>68</sup> Williams & Kettle, *Annual Report 1982*. HBFMC was the seller. Brierley was not a long-term holder and began selling in 1993. The purchaser was Brierley associate, Selwyn Cushing.

<sup>69</sup> "The rise and fall of the historic Stock agent."

<sup>70</sup> Ville, *Entrepreneurs*, 148. The other was located in Christchurch.



Napier's survival reflected two significant facts. First, unlike many other regions sheep farming remained the dominant pastoral activity on the eastern side of the North Island. Second, centralisation had become essential given the ongoing decline in wool prices and falling pastoral profitability. Following the cessation of SMPs in 1985 yet another round of M&A took hold, most notably the purchase of Dalgety Crown by Wrightson NMA in 1986.<sup>71</sup>

By the mid-1980s, Williams & Kettle was the only Hawke's Bay co-operative of the 1950s still active, but with Brierley Investments now the company's core shareholder, the company was in truth no longer farmer owned. One established feature of the company endured, however: the company remained highly leveraged to New Zealand agriculture and hence suffered badly during the economic slump that began in the mid-1980s. Between 1985 and 1990, Williams & Kettle's net assets fell 22% as the company downsized its activities to match collapsing trading volumes.<sup>72</sup> 1986 was a particularly challenging year and the company was "severely affected" as "a dramatic downturn" took hold.<sup>73</sup> Williams & Kettle was not alone. In 1993, concerned at the collapsing economics of the wool industry and general disruption in New Zealand agriculture, Fletcher Challenge sold its Wrightson division by way of public listing.<sup>74</sup>

**Table 5.6. Tough trading between 1985 and 1990: Williams & Kettle financials, 1980-1995.**

	1980	1985	1990	1995
Trading Revenues	\$11.4m	\$19.4m	\$9.0m	\$20.9m
Net profit	\$1.20m	\$2.35	\$1.26m	\$1.94m
Total assets	\$30.7m	\$51.3m	\$39.9m	\$50.6m

Sources: New Zealand Companies Office annual returns, Williams & Kettle Annual Reports.

Wool producers were similarly concerned with low returns, and in a frantic search for improved profitability farmers turned to alternative sales channels as a way to minimise selling costs. The change led to substantial alteration in marketing structures. As Ville notes, private sales had been a substantial competitor since the 1930s.<sup>75</sup> But in the 1990s, as volumes plummeted, competition intensified. The consequent decline of the public auction system led to significant change in storage and display arrangements at Ahuriri, Napier's

<sup>71</sup> "The rise and fall of the historic Stock agent."

<sup>72</sup> New Zealand companies Office, *Williams & Kettle prospectus*, 1990.

<sup>73</sup> Williams & Kettle, *Annual Report 1986*, 9.

<sup>74</sup> Brian Gaynor, "Farm firms fail to grow on share market," *New Zealand Herald*, September 25<sup>th</sup>, 2010.

<sup>75</sup> Ville, *The Rural Entrepreneurs*, 140.

traditional wool auction hub, and in a highly symbolic change, Williams & Kettle vacated the historic 'Woolstore No.2' in 1995.<sup>76</sup> Other businesses were similarly doubtful about the future of Ahuriri, and in the same year Napier Wool Dumpers Limited shifted to the Napier suburb of Clive.<sup>77</sup> By the mid-1990s, Wrightson's wool store on Pandora Road was the only large facility of its type left, a fact that questioned the very viability of Napier as a wool selling centre.

Processors and manufactures: rapid growth followed by a struggle for survival.

By 1975, over 40% of New Zealand wool production was scoured domestically, a rise of nearly 30% in ten years. But as a service industry, scouring remained leveraged to the health of the wool industry and was thus exposed to the rise of synthetic fibres. The success of New Zealand scours following WW2 reflected two key developments. First, the use of new locally developed technology gave the industry an advantage over foreign competitors.<sup>78</sup> Second, market diversification meant New Zealand was selling wool to countries without scouring plants of their own.<sup>79</sup> These favourable trends continued into the mid-1980s when, for the first time, the majority of New Zealand's total wool production was scoured domestically (see Table 5.7). As a percentage of the total clip, New Zealand wool scours were doing well but rising market share disguised underlying vulnerabilities. Throughput peaked in 1985 and fell thereafter in line with declining sheep numbers. Of further concern, the majority of scouring was commission based. Hence profitability was hostage to falling wool prices. In addition, the industry was reliant on offshore customers.<sup>80</sup> Domestic demand in the mid-1990s was higher than 1985 but still accounted for less than 10% of industry volumes (see Table 5.8). As a result, the industry was highly exposed to the rise of synthetic textiles that had taken hold offshore.

---

<sup>76</sup> "The rise and fall of the historic Stock agent."

<sup>77</sup> New Zealand Company Directory, "Napier Wool Dumpers (2007) Ltd," accessed May 7<sup>th</sup>, 2017 <https://nzcompany.org/co.php?id=873272>.

<sup>78</sup> "Cleaning the Wool Clip." Technical improvements enabled higher throughput and quality at a lower cost.

<sup>79</sup> "Wool Industry Review (June 1981)," 229.

<sup>80</sup> Ibid. In 1985, approximately 95% of all wool scoured was for offshore customers.

**Table 5.7. Strong growth: New Zealand wool scouring volumes, 1965-1995.**

	1965	1970	1975	1980	1985 <sup>81</sup>	1995
% scoured in NZ	12.0%	31.3%	40.8%	50.4%	63.3%	72.0%
Tonnes (000s)	52.8	75.1	90.0	136.7	173.2	153.3
Growth rate	n/a	+93%	+19%	+55%	+26.7%	-11.5%

Sources: New Zealand Wool Board, Wool Research Organisation NZ, RBNZ Wool Reviews 1981 & 1983, *NZOYB* (1965-1995). Note: information prior to 1975 included to show long term trends.

The paucity of domestic demand for scoured wool reflected the small size of the New Zealand woollen goods manufacturing sector relative to total wool output. From a small base, domestic use of scoured wool grew strongly between 1975 and 1985 but volumes remained miniscule compared to offshore demand. Similarly, value added manufacturing was an extremely small part of the Hawke's Bay wool sector. In 1985, UEB Industries' plant at Awatoto (formerly Napier Woollen Mills) remained the only woollen manufacturing facility of consequence in the province.<sup>82</sup> After 1985, domestic demand for scoured wool began to fall significantly following the removal of tariff protection for local carpet manufacturers, the key domestic buyers of New Zealand wool. Likewise, import licensing of carpet was progressively phased out between 1985 and 1990, exposing New Zealand carpet manufacturers to the full force of international competition for the first time.<sup>83</sup>

The impact of reduced protection was virtually immediate in Hawke's Bay. In 1988, publicly listed UEB sold its yarn and carpet manufacturing assets to its main rival, Cavalier Carpets.<sup>84</sup> The purchase was an important strategic move for Cavalier as it both removed a competitor and added a well-known brand.<sup>85</sup> Following the acquisition, production at Awatoto was reconfigured to meet the needs of newly created carpet brand, 'Cavalier Bremworth.' Furthermore, as a vertically integrated manufacturer, the addition of the Awatoto yarn factory was a close fit with Cavalier's existing scouring activities, a

<sup>81</sup> 1983/84 figure.

<sup>82</sup> Paul Pankhurst, "Hands that built an empire," *New Zealand Herald*, August 22<sup>nd</sup>, 2003.

<sup>83</sup> *NZOYB*, 2000, Chapter 21, "Manufacturing Groups." Tariff protection of 32% remained in place until 1992.

<sup>84</sup> "Cavalier Corporation," New Zealand Stock Exchange, accessed April 12<sup>th</sup>, 2017, <https://www.nzx.com/markets/NZSX/securities/CAV/analysis>. UEB Industries went into receivership in 1990 and was subsequently delisted. "UEB Industries", Delisted New Zealand, accessed June 7<sup>th</sup>, 2017 <http://www.delisted.co.nz/company/ueb-industries-limited>

<sup>85</sup> UEB Industries was established in 1947 as a box manufacturer. The company expanded into woollen carpet manufacturing in 1967 (Bremworth). The company's operations included, scouring and yarn manufacturing. "Doig, Sir James Nimmo Crawford," New Zealand Business Hall of Fame, accessed September 17<sup>th</sup>, 2017, <http://www.businesshalloffame.co.nz/past-laureates/doig-james-nimmo-crawford/>

combination that underwrote the company's position as the foremost wool processor and manufacturer in Hawke's Bay.<sup>86</sup>

**Table 5.8. Little local manufacturing: exports of wool as a % of total NZ production, 1980-2005.**

	1980	1985	1995	2005
Exports (%)	96.1%	93.9%	90.0%	90.0%
NZ use (lbs)	36.6m	82.7mt	67.0m	50.9m

Source: NZOYBs (1980-2005).

After 1990, the familiar problems of declining wool volumes, low prices and tough international competition intensified placing wool processing businesses under even greater pressure. Established companies such as Tucker's wool scour, which had operated on the same site in Clive since 1913, continued to trade under the control of the founding family.<sup>87</sup> But other owners were more vulnerable. In 1994, continued low margins resulted in a round of rationalisation that saw one Hawke's Bay scour close and a 50:50 joint-venture between Dalewood and the New Zealand Wool Board, (via subsidiary Wool Services International - NZWSI) purchase the Whakatu wool scour.<sup>88</sup> Notwithstanding these changes capacity reductions were limited in scope and four of Hawke's Bay's five original scours continued to operate, a fact that that placed all participants at risk.

The operating environment facing woollen carpet manufacturers was similarly challenging. The dominance of woollen carpets had long been a domestic peculiarity, something readily apparent from the disproportionate percentage of global woollen carpet production located in New Zealand. Although New Zealand remained a leading centre for woollen carpet manufacturing, its pre-eminent position had been slipping steadily since the 1970s (see Table 5.9). Manufacturing data are important in a further sense. Despite the handicap of oil shocks during the 1970s, global synthetic fibre output grew from 19,986 million lbs in 1971 to 30,020 million lbs in 1981.<sup>89</sup> That synthetic yarn output did not slip despite soaring oil prices during the 1970s was a highly threatening sign for the woollen goods industry and by the mid-1990s global output of nylon and other petroleum based

<sup>86</sup> Pankhurst, "Hands that built an empire."

<sup>87</sup> "Tucker, Richard."

<sup>88</sup> "Key Milestones In Our History," NZWSI, accessed May 9<sup>th</sup>, 2017, <https://www.woolsev.co.nz/history/>

<sup>89</sup> "Demand And Supply For Wool (July 1982)," 253.

fibres was more than twice that of 1978.<sup>90</sup> Meanwhile, coarse wool had become increasingly reliant on a single product - carpet, a trend that put the industry on a collision course with nylon (see Table 5.9).

**Table 5.9. New Zealand carpet manufacturers lose market share: wool & synthetic fibre output, 1971-1981.**

Year	NZ as a % of global wool carpet production	Change in synthetic fibre production (global)	Change in carpet wool production	Carpet wool as a % of total wool output
1971-72	36.5%	+9.6%	-0.7%	21.5%
1972-73	33.8%	+13.7%	-0.2%	23.1%
1973-74	30.1%	-2.5%	+2.9%	24.1%
1974-75	28.2%	-6.4%	+11.4%	25.1%
1975-76	29.7%	+14.5%	+2.4%	25.5%
1976-77	26.3%	+5.2%	+7.9%	28.3%
1977-78	26.3%	+7.4%	+5.4%	29.3%
1978-79	26.4%	+4.7%	+3.0%	29.5%
1979-80	28.3%	-1.8%	+3.9%	29.5%
1980-81	29.7%	-0.2%	+3.4%	30.2%

Note: No data available for 1982-1995. Source: Reserve Bank of New Zealand, "Demand And Supply For Wool (July 1982)," 251-257.

#### Summary 1975-1995.

Although Napier remained one of New Zealand's most important wool auction centres in 1995, very few of the wool brokers operating in the mid-1950s remained active. Rationalisation of weaker businesses was particularly intense after 1985 due to a deep agricultural recession. Crucially, co-operative ownership, a structure that dominated the SSA sector in the post war decades, was replaced by corporate business models. At the same time, Napier's port suburb of Ahuriri lost its dominance as a location for wool stores. As the economics of wool production collapsed and co-operatives disappeared, farmers increasingly abandoned the public auction system in favour of private sales channels. Disruption in the industry extended to processors and manufacturers. After growing rapidly between 1975 and 1985, wool processing and manufacturing came under considerable pressure in the decade that followed. But capacity adjustments in wool scouring did not match lower volumes - a problem left for future business leaders to solve. At the same time, yarn manufacturers remained reliant on woollen carpets, a product facing the existential threats of synthetic fibres and the loss of import protection.

<sup>90</sup> "The Man Made Fibers Market," Fiber Economics Bureau, accessed June 16<sup>th</sup>, 2017. <http://www.technica.net/NF/NF1/efibrechimiche.htm>.

## 1995 – 2010: Recovery and Stabilisation.

The combined impacts of lower prices and falling volumes fell heavily on all parts of the Hawke's Bay wool sector. But agency businesses such as SSAs were hit especially hard. Consequently, the business of wool broking in Hawke's Bay was completely unrecognisable in 1995 compared with that of 1975. Between 1995 and 2010 the structural decline of wool continued, a deterioration that forced the beleaguered Hawke's Bay wool industry to adopt further adjustment strategies. Levels of success varied widely however. As a consequence, the familiar themes of rationalisation and corporatisation continued leading to the emergence of duopolies in most sectors of the industry. Nevertheless, these remedies were a pre-requisite for future recovery and stabilisation.

Wool Brokers: co-operatives disappear as a broken business model leads to further consolidation.

After 1995, China emerged as the most important buyer of New Zealand wool, but Chinese demand did not herald better times for wool industry participants. Prior to 1985, China had been an opportunistic buyer, but as wool prices fell, China became a regular participant at Napier auctions. Chinese involvement in the New Zealand wool market further intensified during the 1990s, and by 1995 China (35%) was fast becoming an export market comparable to that of the UK in 1946 (47%).<sup>91</sup> China's importance continued to grow during the late 1990s, and by 2000 Chinese wool buyers had become indispensable at Napier wool auctions.<sup>92</sup> In 2010, China accounted for 52% of New Zealand wool exports (see Table 5.10): reliance on the UK and European markets during the 1940s and 1950s had now been replaced by dependence on China.<sup>93</sup> The entry of an important new buyer of New Zealand coarse wool did not, however, lead to recovery, and by 1995 the future of wool broking in Hawke's Bay remained in question. In a nationwide trend, dissatisfaction with established marketing structures was such that alternatives to the public auction system, most obviously private sales, continued to gain ground.<sup>94</sup> In 1998/99 Napier auction volumes were approximately 42% lower than that of 1974/75, a fall from 280,000 bales to

---

<sup>91</sup> NZOYB, 1946, Chapter 51, 9b.

<sup>92</sup> "China fills hole for wool sales," *New Zealand Herald*, June 30<sup>th</sup>, 2000.

<sup>93</sup> NZOYB, 1946, Chapter 51, 9b.

<sup>94</sup> "Wool float plans attacked" *The Christchurch Press*, February 7<sup>th</sup>, 1998 (page 21).

163,000 bales.<sup>95</sup> Given their reliance on the fading public auction system, SSAs were poorly positioned. Hawke's Bay wool brokers were active at both public and private sales but they were small players in the latter. In 1996, 82% of wool handled by Williams & Kettle was sold through the public auction system.<sup>96</sup> Describing the 1996/97 season in its annual report as "very difficult for wool," the company even questioned the future of cross-bred wools.<sup>97</sup>

**Table 5.10. China replaces the UK & Europe: % of total wool exports, 1975-2010.**

	1975	1995	2010
Other Europe *	43%	12%	18%
UK	19%	9%	9%
USSR	10%	0%	0%
Japan	8%	6%	0%
USA	3%	4%	0%
China (incl HK)	0%	35%	52%

Sources: *NZOYBs* 1975 Chapter 22b, 1986/87 Chapter 15.4, 1997 Chapter 18. \* Other Europe comprises EEC countries other than the UK, mainly West Germany and France.

Deteriorating fundamentals forced Williams & Kettle, still Hawke's Bay's dominant SSA, to diversify its revenue base.<sup>98</sup> In 1996, the company took majority control of New Zealand Rural Properties Ltd, a fund manager and owner of forty two farming properties.<sup>99</sup> In 1999, the company acquired Fruitfed, a supplier of horticultural products.<sup>100</sup> Moreover, Williams & Kettle continued to push into provinces other than Hawke's Bay, particularly regions with dairy.<sup>101</sup> The move into new activities and locations proved well advised. In 1999, Williams & Kettle noted that "all areas of the wool industry, from farming to first stage processing, continue to cause major concern."<sup>102</sup> But the decision to dilute its exposure to the troubled pastoral sector enabled Williams & Kettle to limit the impact. In 2000, the company's return on total assets employed rebounded to 4.8% against 2.8% in 1996.<sup>103</sup> The recovery enabled the company to avoid the fate of less well performed SSAs. In 1998, a mere five stock & station firms remained in New Zealand, a fact that prompted

<sup>95</sup> Dowling, "Farming in Hawke's Bay," 238.

<sup>96</sup> Williams & Kettle, *Annual Report 1997*, 9.

<sup>97</sup> *Ibid*, 8.

<sup>98</sup> Listed on the New Zealand Stock Exchange the firm remained in Napier. Brierley retained 33%.

<sup>99</sup> Williams & Kettle, First Schedule Takeover Notice, November 14<sup>th</sup>, 1996, 3-7. 17% was acquired in 1993. Cost \$14.4m.

<sup>100</sup> Williams & Kettle, *Annual Report 1999*, 4.

<sup>101</sup> *Ibid*, 2.

<sup>102</sup> *Ibid*, 7.

<sup>103</sup> Williams & Kettle, *Annual Report 2000*, 9 & 10. Also see – *Annual Report, 1996*.

Wrightson and Fletcher Challenge Chairman, Ron Trotter, to reflect that 45 had been active when he began his career in the late 1950s.<sup>104</sup>

By the late 1990s wool's structural problems were such that the industry was ready to embrace fundamental change. In 2000, McKinsey & Company Consulting was commissioned by New Zealand Wool Growers Inc to identify alternative administrative and marketing structures in the hope that reform would generate improved returns. In 2002, following the report's release, the New Zealand Wool Board was abolished.<sup>105</sup> Radical moves were easy to justify. Parliamentary transcripts relating to the passage of the Wool Restructuring Bill (2003) indicate the depth of the slump in the coarse wool sector and the extent of desperation in provinces such as Hawke's Bay.<sup>106</sup> McKinsey's other findings questioned public auctions and the businesses that supported them. Most importantly, critics suggested public auctions fostered a 'commodity mindset' by creating a commercial barrier between end users/manufacturers and suppliers/growers.<sup>107</sup> Sensing the need for further restructuring, 'Wrightsons' adopted an "integrated fibre management" system in an attempt to establish new "relationships with overseas carpet makers, many of whom did not use New Zealand wool."<sup>108</sup> Similarly, Cavalier restructured its procurement operation (Elco Direct) to provide a more direct link between growers and manufacturers.<sup>109</sup> As these changes suggested, Napier's future as a wool selling centre remained in serious jeopardy, a threat that was confirmed anecdotally. In 2002, the symbol of Napier's 1960s success as a wool trading centre, the auction centre on Marine Parade, was demolished and replaced with a hotel.<sup>110</sup> In another anecdote of structural decay, the New Zealand Wool Testing

---

<sup>104</sup> Ron Trotter quoted in "The rise & fall of the historic Stock agent." Wrightson, Pyne Gould Guinness, Williams & Kettle, Allied Farmers and Elders New Zealand.

<sup>105</sup> McKinsey & Company, *Report to New Zealand Woolgrowers on Improving Profitability: Summary of Recommendations* (Wellington: McKinsey: June 2000), 1-4.

<sup>106</sup> Wool Industry Restructuring Bill, First Reading March 19<sup>th</sup>, 2003, accessed May 14<sup>th</sup>, 2017, [https://www.parliament.nz/en/pb/hansard-debates/rhr/document/47HansD\\_20030319\\_00001428/wool-industry-restructuring-bill-first-reading](https://www.parliament.nz/en/pb/hansard-debates/rhr/document/47HansD_20030319_00001428/wool-industry-restructuring-bill-first-reading)

<sup>107</sup> Ibid.

<sup>108</sup> Phillipa Stevenson, A time to milk it down on the farm," *New Zealand Herald*, January 7<sup>th</sup>, 2001, accessed May 6<sup>th</sup>, 2017, [http://www.nzherald.co.nz/business/news/article.cfm?c\\_id=3&objectid=167590](http://www.nzherald.co.nz/business/news/article.cfm?c_id=3&objectid=167590)

<sup>109</sup> "About Us," Elco Direct Wool Buyers, accessed May 23<sup>rd</sup>, 2017, <http://www.elcodirect.co.nz/about-us.aspx>. A structure subsequently employed by others such as apparel brand Icebreaker.

<sup>110</sup> "Napier Wool Exchange Building – 1962," Tara Cooney Art & Design, accessed June 7<sup>th</sup>, 2017 <https://taracooney.wordpress.com/2013/10/29/napier-a-good-yarn-wool-exchange-building-1962/>. See also – "Robert Brown Developments," *Hawke's Bay Today*, November 29<sup>th</sup>, 2006, accessed June 3<sup>rd</sup>, 2017 [http://www.nzherald.co.nz/hawkes-bay-today/news/article.cfm?c\\_id=1503462&objectid=10948373](http://www.nzherald.co.nz/hawkes-bay-today/news/article.cfm?c_id=1503462&objectid=10948373).



Authority (an essential aspect of the public auction system) was sold to its Australian counterpart in 2004.<sup>111</sup>

By the mid-2000s even seemingly well positioned SSAs such Williams & Kettle were under threat. The company's diversification strategy in the mid-1990s had placed the company in an enviable position relative to competitors, and in 2004 the firm reported a 7.6% return on total assets, an all-time high.<sup>112</sup> Even the long problematic wool division "performed well."<sup>113</sup> But success attracted predators and in 2005 Williams & Kettle's main competitor, Wrightson, launched a successful bid.<sup>114</sup> In an ignominious end for a company established 120 years earlier, Hawke's Bay's wool industry champion was rolled into the acquirers business and its brand name extinguished forever.<sup>115</sup> The demise of Williams & Kettle and consequent creation of PGG Wrightson underlined the extent of rationalisation and change. PGG Wrightson brought together into a single firm New Zealand's six largest stock & station agencies of the 1960s and 1970s and in doing so ended the era of farmer-led wool broking firms.

The decline of wool broking was matched with a decline in the public auction system. In 2009, approximately 40% of wool was sold at public auction and 44% through private selling channels.<sup>116</sup> The failing public auction system placed the traditional wool broking model under even greater financial pressure and in 2009 PGG Wrightson sought to sell its 50% interest in the company's wool division (Wool Partners International – WPI) by way of a joint venture with a grower owned co-operative.<sup>117</sup> Moreover, wool auctioneers continued to fall in number and by 2010 the vast majority of public wool auctions in New Zealand were conducted by just two companies: Elders Primary Wool (EPW) with an

---

<sup>111</sup> "Aussies get a grip on NZ Wool Testing Authority," *New Zealand Herald*, April 7<sup>th</sup>, 2004.

<sup>112</sup> Williams & Kettle, *Annual Report 2004*, 3, 9 & 10.

<sup>113</sup> *Ibid*, 4.

<sup>114</sup> "The Rise & Fall of the historic Stock agent." Selwyn Cushing sold his 34.5% interest to Wrightson, a company led by Craig Norgate. Brian Gaynor, "Trust Needs Strong Dose of Activism," *New Zealand Herald*, October 25<sup>th</sup>, 2003, accessed October 17<sup>th</sup>, 2018, [https://www.nzherald.co.nz/business/news/article.cfm?c\\_id=3&objectid=3530720](https://www.nzherald.co.nz/business/news/article.cfm?c_id=3&objectid=3530720)

<sup>115</sup> Pyne Gould Guinness (PGG) and Wrightson launched rival bids for Williams & Kettle. Wrightson won after PGG failed to build a blocking stake. Williams & Kettle was deregistered in 2009 and the brand was merged within PGG Wrightson.

<sup>116</sup> Daniel Conforte, Samuel Dunlop and Elena Garnevska, "New Zealand Wool Inside: A Discussion Case Study," *International Food and Agribusiness Management Review* (IFAMA), Vol.14 Issue 3 (2011): 150.

<sup>117</sup> *Ibid*, 156. Also see – "Strong wool's time has come," *Otago Daily Times*, August 14<sup>th</sup>, 2009.

estimated 42% share, and WPI, with 32%.<sup>118</sup> Meanwhile, traditional wool brokers continued to struggle in the private selling market, dominated as it was by just two independent, privately owned wool merchants Kells Wool and Carrfields.<sup>119</sup> Similarly, by 2010/11 a mere six firms accounted for over 80% of all wool exports with around half of the trade controlled by just two participants - NZWSI (30-35% market share) and Hawke's Bay based Masarel Direct Ltd (15%-20%).<sup>120</sup>

Consolidation in distribution channels did not, however, address a long-standing farmer complaint. In 2010, WPI's commission rates were typically around 4%, a level significantly above that of the 1950s when rates of 2%-3% were more usual.<sup>121</sup> With the addition of indirect costs, net proceeds struggled to exceed 90% of gross revenues.<sup>122</sup> Reasons for the increase in selling costs since the 1950s were two-fold. First, fixed costs were now spread over a much lower number of bales tendered. Second, structural change had greatly reduced the number of competitive participants in the public auction system. As Table 5.2 shows the Hawke's Bay wool broking sector of 2010 was completely unrecognisable versus that of 1955. By 2010, the auction system was caught in a downward spiral partly of its own making.

Processors and manufacturers battle falling volumes, rising competition and synthetic carpets.

In contrast to wool broking, restructuring in the wool processing sector, most specifically scouring, had been minor prior to 1995. In 1995, four scours operated in the province; in the 1950s there were five. Nevertheless, plunging sheep numbers and falling wool prices suggested that restructuring was inevitable. The first indication of impending change came in 1998 when, in a highly symbolic move, the oldest name in Hawke's Bay scouring passed from its founding family.<sup>123</sup> The sale of Tucker's scour at Clive to Australian

---

<sup>118</sup> Conforte et al, "New Zealand Wool Inside," 150.

<sup>119</sup> Ibid.

<sup>120</sup> ANZ Bank, "A Yarn of Wool," ANZ Agri-Focus (April 2013): 3. Also see – "Industry Contacts," New Zealand Wool Testing Authority, accessed May 12<sup>th</sup>, 2017, <https://www.nzwta.co.nz/contacts/industry-contacts/>

<sup>121</sup> Conforte et al "New Zealand Wool Inside," 169. Also see Ville, *The Rural Entrepreneurs*, 143.

<sup>122</sup> Ibid (Conforte et al).

<sup>123</sup> "Our Heritage," Lewis Tucker & Co, accessed May 4<sup>th</sup>, 2017, <http://www.lewistucker.co.nz/our-heritage/>. This followed a partial sale in 1996 involving Tomoana Pelt Processors and Taranaki Farmers Co-op Wool, "Tucker Ruling Challenged," *Hawke's Bay Herald Tribune*, October 14<sup>th</sup>, 1998, accessed June 6<sup>th</sup>, 2017,

carpet manufacturer Godfrey Hirst brought to a conclusion the Tucker family's 125-year association with the scouring industry, an indication that even the most established processors were not immune to the wool industry downturn. Figures obtained from NZWSI show the depth of the malaise. Despite relatively stable export volumes, wool scouring remained barely profitable between 1997 and 2005.<sup>124</sup> The problem led to ongoing restructuring and in 1999 NZWSI sold a 50% share in its Whakatu scour to Auckland based wool exporter RDWM Ltd.<sup>125</sup> In the same year Cavalier acquired a controlling interest in the Ferrier family's wool scour at Awatoto, adjacent to the company's woollen yarn plant, and closed its Auckland scour.<sup>126</sup>

The much-needed removal of scouring capacity initially generated healthier returns, but the improvement did not last. In 2003, as the number of competitors fell, profitability and volumes at NZWSI's Whakatu wool scour reached record levels.<sup>127</sup> The rebound was such that \$12m was invested in new machinery to meet expectations of higher volumes and returns.<sup>128</sup> But NZWSI's optimism was misplaced and in the 2005/06 season wool prices once again slumped.<sup>129</sup> The fall hit commission wool scours hard and in 2007 RDWM Ltd was forced to sell its operating and trading assets back to NZWSI.<sup>130</sup> Other firms were similarly distressed. In 2009, Godfrey Hirst sold its Clive scour to Cavalier's scouring joint venture (now known as Hawke's Bay Wool Scouring - HBWS).<sup>131</sup> Unfortunately, weaker wool prices were but one part of the problem. Although substantial ownership change occurred after 1995, capacity adjustments had been cosmetic. In 2010, the Hawke's Bay sheep flock was little more than 40% of its peak size, a fall from 7.853m to 3.270m head.<sup>132</sup> Yet in the same year, the number of scouring lines in the province was unchanged at four spread between

---

<http://www.meatunion.org.nz/test/wp-content/uploads/2015/08/Tuckers-harsh-and-oppressive-conditions.pdf>.

<sup>124</sup> "NZWSI AGM 2011, 1997-2005: Processing," New Zealand Stock Exchange, last modified December 6<sup>th</sup>, 2011, <https://www.nzx.com/files/attachments/150473.pdf>.

<sup>125</sup> "Key Milestones In Our History." RDWM Ltd is also known as Dalewool.

<sup>126</sup> Phil Bouyen, "Cavalier Closes Auckland Wool Scour," *Sharechat*, October 24<sup>th</sup>, 2000. Also see Amy Milne, "Wool scour staff upset by closure," *The Southland Times*, March 10<sup>th</sup>, 2009 and New Zealand Commerce Commission, Decision No. 587, August 31<sup>st</sup>, 2006, 6.

<sup>127</sup> "Managing Directors Review," NZWSI Annual Report 2003, 6, accessed May 4<sup>th</sup>, 2017, [https://nzx.com/files/documents/companies/WSI/13\\_Annual\\_Report\\_2003.pdf](https://nzx.com/files/documents/companies/WSI/13_Annual_Report_2003.pdf)

<sup>128</sup> *Ibid* & ANZ & Statistics NZ, *Wool\_Price\_Time\_Series* (Long).xls

<sup>129</sup> *Ibid*.

<sup>130</sup> "Key Milestones In Our History."

<sup>131</sup> Cavalier Corporation, *Annual Report 2009/2010*, 6.

<sup>132</sup> *NZOYB*, 1984, Chapter 15c & table 2.2.

three sites. Two (Clive and Awatoto) were owned by the Cavalier joint venture (HBWS) and one was owned by NZWSI at Whakatu.<sup>133</sup>

The inadequate response of the Hawke's Bay wool scouring sector to declining economics seems anomalous given the obviousness of the decline in wool production and prices. But regulatory pressures restricted capacity reductions. Competition authority unease first emerged in 2006 when the New Zealand Commerce Commission (NZCC) considered the acquisition of Feltex by Godfrey Hirst.<sup>134</sup> It was of concern to the NZCC that 70% of North Island scouring was conducted at a single plant, New Zealand's biggest scour at Awatoto owned by HBWS.<sup>135</sup> In 2009, the NZCC again expressed alarm regarding concentration risks in the industry and made specific reference to the need for "constraint" by dominant scours.<sup>136</sup> Accordingly, by 2010, rationalisation appeared to have reached its regulatory limit. The NZCC's position was poorly received by the besieged industry. New Zealand scours faced mounting competition from Chinese competitors, a factor said to explain the decimation of the Australian wool scouring industry after 2000.<sup>137</sup> With over 50% of New Zealand wool now sold to China, Chinese scours were well placed to take business from domestic scours, and in 2010 a third of New Zealand wool was scoured overseas.<sup>138</sup> The decline was a structural change that threatened to take the industry back to the 1880s, a time when the vast majority of New Zealand wool was scoured offshore.<sup>139</sup>

Woollen carpet manufacturing consolidates as tariff protection continues to decline.

Faced with the unrelenting rise of synthetic carpets and the loss of import protection, the New Zealand woollen carpet industry was similarly distressed. Most notably, Feltex, the second largest woollen carpet manufacturer in New Zealand, collapsed in 2006, a

---

<sup>133</sup> "Cavalier Wool Scouring," *Rural Delivery* – June 5<sup>th</sup>, 2010 (pages 1-5). Owners comprised Cavalier (50%), Ferrier Group (25%) and ACC (25%).

<sup>134</sup> New Zealand Commerce Commission, Decision No.587, August 31<sup>st</sup>, 2006.

<sup>135</sup> "Cavalier Wool Scouring," *Rural Delivery*.

<sup>136</sup> New Zealand Commerce Commission, Decision No.666, March 6<sup>th</sup>, 2009.

<sup>137</sup> "Cavalier Wool Scouring," *Rural Delivery* (page 2). Also see – Cavalier Wool Holdings, Submission on Draft NZCC Determination, April 21<sup>st</sup>, 2015, point 2.6.

<sup>138</sup> "Commerce Commission Draft Determination Authorising Merger," Direct Capital, last modified October 1<sup>st</sup>, 2015, <https://www.directcapital.co.nz/news/2017/8/25/commerce-commission-draft-determination-authorising-merger>

<sup>139</sup> The industry's success since 1945 was founded on a technological advantage. Refer footnote 44.

mere twenty one months after listing on the New Zealand Stock Exchange.<sup>140</sup> Although Cavalier's woollen yarn plant at Awatoto continued to supply New Zealand carpet manufactures, Cavalier management sensed the need for radical change,<sup>141</sup> and in a stunning reversal in strategy, the company introduced its first range of synthetic fibre carpets in the mid-2000s.<sup>142</sup> Government tariff policies presented a further challenge. Between 1992 and 1999, tariffs on imported carpet declined from 32% to 17%,<sup>143</sup> and in 2009 carpet tariffs stood at just 9%.<sup>144</sup>

The loss of protection and the rise of synthetic alternatives forced New Zealand manufactures to restructure and by 2010 the benefits of consolidation were beginning to show. In 2010, just two wool scouring and two carpet manufacturers remained in New Zealand.<sup>145</sup> Cavalier, which remained focused on Hawke's Bay by way of its scouring and yarn factories, was the only participant in both sectors. As such, the company's accounts provide insight as to the state of wool processing and manufacturing in the province. Perhaps surprisingly, Cavalier's 2010/11 annual report shows a company in strong financial health. The company's return on equity (RoE) was 22.5% in 2007 and 18.6% in 2010, an excellent outcome given that 9.5%-10.0% was then common for stocks listed on the New Zealand stock exchange.<sup>146</sup> Earnings per share even firmed slightly after 2007, suggesting it was still possible for integrated wool processing and manufacturing companies to make respectable returns despite the enduring problems of structural over capacity in scouring and the loss of tariff protection.<sup>147</sup>

---

<sup>140</sup> Duncan Bridgeman, "Feltex case reveals Ernst & Young secret files," *National Business Review*, April 15<sup>th</sup>, 2010

<sup>141</sup> "Sixty-eight jobs to go at Cavalier Spinners," *Wanganui Chronicle*, May 2<sup>nd</sup>, 2016.

<sup>142</sup> "Cavalier Bremworth," Cavalier Corporation, accessed June 3<sup>rd</sup>, 2017, <https://www.cavbrem.co.nz/>

<sup>143</sup> NZOYB, 2000, Chapter 21, "Manufacturing Groups."

<sup>144</sup> NZIER, "Tariffs for New Zealand," *NZIER Viewpoints*, Working Paper 2010/1: 6, accessed June 30<sup>th</sup> 2018. [https://nzier.org.nz/static/media/filer\\_public/53/67/536738d3-47d5-4aee-b322-897fad0bc443/wp\\_2010-1\\_tariffs\\_in\\_new\\_zealand.pdf](https://nzier.org.nz/static/media/filer_public/53/67/536738d3-47d5-4aee-b322-897fad0bc443/wp_2010-1_tariffs_in_new_zealand.pdf).

<sup>145</sup> Cavalier and NZWSI in scouring. Cavalier and Godfrey Hirst Ltd in woollen carpet manufacturing. Feltex collapsed in 2006 and was subsequently bought out of receivership by Godfrey Hirst.

<sup>146</sup> Forsyth Barr, "New Zealand Markets Outlook," July 2017, 177.

<sup>147</sup> "Managing Directors Review," Cavalier Corporation Annual Report 2010/11, 3-8, accessed May 14<sup>th</sup>, 2017, <http://www.cavcorp.co.nz/files/7862112aa0309fcf7c880d06ec2aadcbn/49/cavcorp2011annualreportfinal.pdf>

## Summary 1995-2010.

Faced with industry collapse, SSAs and the wool auction system engaged in a desperate battle for survival between 1995 and 2010. Napier auctions lost market share at an alarmingly rate after 1995, a problem that threatened its future as a wool sales centre. Likewise, the decline undermined the profitability of local SSAs for whom wool broking remained an important activity. Agency businesses responded, as they had previously, by rationalising, diversifying and corporatising and by 2010 wool broking was dominated by a mere two participants, neither of which was a co-operative. Similarly, wool exporting consolidated around two major companies. The pattern was repeated elsewhere, albeit to varying degrees of success. Scouring capacity was cut but adjustment failed to match the decline in wool production. The New Zealand Commerce Commission prevented some rationalisation, but the industry was nonetheless very slow to adjust to falling wool volumes and Chinese competition. Woollen carpet manufacturers showed a similar degree of denial. Synthetics had been a rising force since the 1950s, yet it was not until 2005 that Cavalier, one of only two carpet makers left in New Zealand, manufactured its first nylon carpets. Reduced tariffs on imported synthetic carpets provided a double negative for the industry. Nevertheless, Cavalier showed that nimble manufacturers could do well despite the structural decline of coarse wool.

## Conclusion.

The history of the Hawke's Bay wool distribution, processing and manufacturing sector between 1945 and 2010 highlights how consumer trends and government policy can lead to industry disruption. In the two decades following WW2, nominal wool prices and wool volumes were highly supportive, positives that generated record profits for SSAs. Similarly, the public auction system thrived as did Napier's status as a wool auction centre, dominated as it was by a small group of co-operative SSAs controlled by Hawke's Bay farmers. Similarly, wool scours grew strongly and woollen carpet manufacturing, an industry founded on substantial tariff protection, prospered. But in the late 1960s, these foundations of success began to erode. Importantly, post war growth in wool output, based as it was on productivist thinking by farmers and the New Zealand government, was at odds with changing consumer preferences. Since 1945, synthetic yarns had been gaining market

share at the expense of coarse wool, a theme that contributed to a sustained decline in the price of wool in real terms after 1951. The change led to rising vulnerability at all levels of the wool industry in Hawke's Bay. But inertia in the face of structural decline was widespread. Most particularly, complacency was reinforced by the twin wool booms of 1950/51 and 1963/64. These price spikes, which gave synthetics a price advantage and the chance to get established, overstated the consumer appeal of coarse wool relative to nylon. Furthermore, the dominance of woollen carpet in the New Zealand market, a peculiarity unique to this country, disguised the rise of synthetics. Consequently, wool brokers, processors and manufacturers shared a false sense of security.

Ongoing weakness in coarse wool prices after 1975, coupled with plunging wool volumes following the abolition of agricultural subsidies in 1985, eventually forced the agency sector to restructure aggressively. At the same time, tariff protection for woollen goods manufacturers was progressively dismantled. Adjustment strategies included consolidation, rationalisation and diversification but with outside corporate capitalism on the rise, co-operatives were absorbed into company structures. As a result, industry participants plunged in number. Even when familiar brand names were retained, the reality of their new ownership structures were much removed from their co-operative foundations. Furthermore, in a desperate effort to maintain margins, farmers increasingly abandoned the public auction mechanism, putting further pressure on wool broking businesses. In the battle to survive, duopolies emerged in most wool industry activities. The story of scouring is, nevertheless, slightly different. Despite sharply lower commission income and rising offshore competition, the latter of which reflected New Zealand's increasing reliance on Chinese wool demand, regulatory intervention meant the industry was unable to find a new equilibrium. In contrast, flexible participants such as Cavalier were more successful.

The adjustment strategies employed by the sector in the face of overwhelming change are worthy of further comment. A more immediate and agile response to the decline of coarse wool may have softened the blow. But government subsidies and an embedded belief in wool lessened the visibility of wool's structural decline. Consequently, when restructuring inevitably came, the impact on the Hawke's Bay wool industry was severe, no more so than in wool broking and the wool auction system. Although exceptions such as Cavalier Corporation exist the verdict on processors and manufacturers is only

slightly less damning. Consequently, by 2010, a new form of capitalism was foremost in the Hawke's Bay wool industry. With the co-operative model broken and processing/manufacturing in retreat, corporatisation and duopolistic market structures dominated.





# Chapter Six: Hawke's Bay Horticulture 1945-1975.

## Introduction.

This chapter examines the history and development of Hawke's Bay horticulture between 1945 and 1975, a period that was pivotal to its emergence as a core primary sector. Defined as fruit and vegetables, both fresh and processed, horticulture has two essential participants – growers and processors. Another important characteristic of the sector in Hawke's Bay is the enduring dominance of both apples and process vegetables such as peas. Strong interconnections are a further feature of the industry. Growing and processing differ sharply in form but they interact closely. Consideration of one in isolation from the other would underplay important commercial interdependencies. Consequently, the chapter begins with a discussion of fruit growing, predominantly apples, and then moves onto vegetable growing before concluding with an examination of the development of J.Wattie Canneries – the province's dominant processor.

Chapter Six argues that collective institutions and collegiality were essential to the success of Hawke's Bay horticulture between 1945 and 1975. Grower organisations and institutions, most particularly pip-fruit, facilitated close social connections and provided vital marketing, distribution and storage infrastructure. Similarly, interdependency characterises the relationship between growers and Watties. Nevertheless, such was the company's dominance that a semi-feudal structure existed, most particularly in vegetable growing. But by 1975 significant change was evident, a reflection of rising corporatisation, declining cohesion and erosion in the social support that had enabled Watties to dominate New Zealand food manufacturing.

Important primary sources used in this chapter include New Zealand Official Yearbooks, interviews with industry participants, annual reports from industry bodies and companies, industry journals, the archives of Statistics New Zealand and those of the Hawke's Bay branch of Federated Farmers as well as the Ministry of Works resource survey

of 1970. Secondary sources include Mannering's history of fruit growing and the histories of Wattie Industries by Conly and Irving & Inkson.<sup>1</sup>

### 1945-1975: Continuity and Change.

The Hawke's Bay horticultural sector was experiencing mixed fortunes in 1945. World War Two had been problematic for most fruit growers as transport disruptions curtailed almost all apple exports and government 'compensation' resulted in extremely poor prices. In contrast, vegetable growers and Hawke's Bay's most important processor, J.Wattie Canneries, emerged from the conflict in great health due to strong wartime demand for their products. Although fruit growers were less fortunate, apple exports resumed shortly after the end of WW2 and, under the umbrellas of regulation and processor protection, the province's full suite of horticultural activities entered a long period of growth and stability.<sup>2</sup> The 1950s and 1960s were prosperous but success disguised structural vulnerabilities. Apple growers were overly dependent on the European/UK market and tariff protection gave food processors an artificial advantage over offshore competitors. But by 1975, the business and social norms upon which growth and profitability had been founded were changing rapidly.

#### Fruit growers: Rapid growth as markets normalise after World War Two.

At the end of WW2, Hawke's Bay was one of New Zealand's key fruit growing regions and apples the dominant crop. Less positively, the sector was not in good health. On a national basis, the area in orchard had been declining since the 1930s and continued to do so until the late 1940s. Accounting for 20% of all orchard plantings in 1945, Nelson and North Auckland were New Zealand's foremost fruit growing provinces with Hawke's Bay in third position (17%) just ahead of Otago (16%). Total acreage following the war was, however, sharply lower than in 1939. As fruit was considered a low transport priority during WW2, export markets were effectively shut. Consequently, growers switched to more profitable alternatives such as vegetables, and in 1947/48 the area in orchard was some

---

<sup>1</sup> Mannering, *100 Harvests*; Conly, *Wattie's*; Irving & Inkson, *It Must Be Wattie's*.

<sup>2</sup> Growers were not protected from imports, only processors. The benefit that flowed to primary producers was indirect.

14% lower than pre-war levels.<sup>3</sup> The decline was in keeping with a longer-term trend as New Zealand's orchard acreage peaked in 1930/31 and thereafter declined for fifteen consecutive years before stabilising.<sup>4</sup> The fall had a severe impact on production. In 1947, apple production was a third lower than 1930, a decline of close to 1 million bushels.<sup>5</sup> Despite the drop, apples remained New Zealand's principal pip-fruit crop with output some five times greater than the next largest category, stone-fruit.<sup>6</sup> Similarly, apples were dominant in every one of New Zealand's fruit growing provinces and by some margin the leading fruit export.<sup>7</sup>

The long-term decline in fruit growing that began in the early 1930s was viewed with great concern by both growers and the New Zealand government and in an effort to stabilise the industry, regulatory intervention intensified after 1939. Prior to WW2, industry regulations comprised the 1924 Fruit Control Act, through which the Fruit Export Board administered a system of export price guarantees, and the 1927 Orchard Tax Act which was introduced to combat fire blight and fund fruit inspection costs.<sup>8</sup> But following the loss of export markets at the start of WW2, and fearing the loss of a whole industry, existing intervention mechanisms were reinforced. The intent of government policy was clear – exert full control over marketing and distribution – and in 1939 the Fruit Export Control Board was suspended in favour of a Marketing Department with a mandate to control all fruit sales – both domestic as well as export.<sup>9</sup> Unfortunately the initiative was largely ineffective. Most importantly, payments, which were based on the principle of “No control, no subsidies,” were parsimonious and grower returns were notoriously low.<sup>10</sup> Moreover, the absence of export markets led to damaging gluts on the domestic market.<sup>11</sup>

In 1948, in a further effort to rebuild the industry, the discredited Marketing Department was replaced by another statutory monopoly, the Apple & Pear Marketing

---

<sup>3</sup> *NZOYB*, 1947-49, Chapter 18b.

<sup>4</sup> *Ibid*; *NZOYB*, 1939, Chapter 18b.

<sup>5</sup> *Ibid*. A bushel of apples is approximately 40lbs (18Kg).

<sup>6</sup> *Ibid*. Includes peaches and plums.

<sup>7</sup> *NZOYB*, 1947-49, Chapters 9b & 18b.

<sup>8</sup> Orchard-tax Act, 1927 (18 GEO V 1927, No 25). Also see - *NZOYB* 1939, Chapter 18b & *NZOYB* 1951-52, Chapter 18b.

<sup>9</sup> *Ibid*. NB, fruit was not its only responsibility.

<sup>10</sup> Mannerling, *100 Harvests*, 75 & 76. Quote attributed to Sir Walter Nash.

<sup>11</sup> *Ibid*.

Board (APMB).<sup>12</sup> The APMB was conceived in the hope a focused marketing entity would restore profitability and lift investment and like its previous incarnations, the APMB exerted near full control over pip-fruit sales. Only small amounts of fruit could be legally sold outside the board's distribution system, most of which occurred at the farm gate. Even though the industry continued to operate on a 'single desk' basis, the APMB had strong democratic appeal for many orchardists. Crucially, it was run by fruit growers for fruit growers who were able to elect a board of directors to represent their interests.<sup>13</sup>

Although regulatory intervention increased both during and after the war and sought to establish institutions that were aligned with growers interests, centralised control of the New Zealand fruit industry was controversial. Most notably, government-imposed marketing structures highlighted a significant split within the industry. Smaller Hawke's Bay orchardists generally regarded control as necessary, a reflection of the problematic 1930s. Yet dissenting voices were common and frustration at market regulation was widespread, particularly among larger growers. Unable to sell their produce freely, black market operations were commonly undertaken by Hawke's Bay growers in the 1940s and early 1950s.<sup>14</sup> Moreover, articles in industry publications referenced ideological divisions between growers. In May 1939, industry journal *The Orchardist* acknowledged that "many orchardists will regret the passing of control of their product" but saw regulation as essential given that "the industry has failed to make an adequate return."<sup>15</sup> Paradoxically, many growers blamed government intervention for both.

The New Zealand fruit industry's pre-war struggles persisted for several years after WW2 but as global markets progressively reopened, most importantly the UK, a more positive era began. In 1948, the first sizeable post-war export of Hawke's Bay apples occurred when the *S.S Contessa* carried 165,000 cases to the UK.<sup>16</sup> The consumer response was overwhelming, a reflection of post war shortages that had led to riots at London fruit shops.<sup>17</sup> Continental European, US and Canadian markets, all of which reopened in the late

---

<sup>12</sup> Mannering, *100 Harvests*, 78.

<sup>13</sup> The activities of the APMB were financed by an annual levy based on production.

<sup>14</sup> Author in discussion with David Sykes, Director - Orchard Investments Ltd, December 17<sup>th</sup>, 2017.

<sup>15</sup> *The Orchardist*, May 1939.

<sup>16</sup> Mannering, *100 Harvests*, 69. Volume was four times larger than any previous shipment.

<sup>17</sup> *Ibid*, 77.

1940s and early 1950s, provided further growth.<sup>18</sup> The normalisation of trade that occurred in the 1950s was accompanied by efforts to diversify markets but progress was very slow, particularly in non-traditional markets such as those in Asia. Consequently, the pre-war dominance of traditional markets in Europe continued. Most notably, the UK market remained of disproportionate importance accounting for 80% of New Zealand apple exports in 1949 and 60% in 1959.<sup>19</sup> Together the UK and Europe consumed 90% of all apple exports in 1939 and 70% in 1975 (see Table 6.1).

**Table 6.1. New Zealand apple exports: destinations & volumes, 1939-1975.**

	1939	1949	1959	1969	1975
United Kingdom	65.3%	79.6%	66.1%	53.3%	45.4%
Europe (excl UK)*	25.6%	7.8%	26.8%	26.2%	25.9%
USA/Canada	6.2%	10.8%	4.1%	8.9%	12.9%
Asia	0.6%	neg	neg	5.8%	10.5%
Exports (m lbs)	38.0m	21.4m	70.5m	91.8m	175m
Export growth (%)	n/a	-56%	+329%	+130%	190%

Sources: *NZOYB*, 1939, C50b, 1947-49 C9b, 1961 C22b, 1971 C22b, 1977 C21. \* Mainly West Germany, Sweden & Belgium.

The re-establishment of pip-fruit exports that occurred after WW2 had a significant impact on the structure and growth of Hawke's Bay fruit growing. At the conclusion of the conflict, several hundred returned servicemen were drawn to the province's fruit industry attracted by offers of cheap land following the introduction of the 1943 Servicemen's Settlement and Land Sales Act.<sup>20</sup> Their arrival stimulated broader demand for horticultural land on the Heretaunga Plains, including areas formerly regarded as too wet for pip-fruit.<sup>21</sup> From 1945 to 1950, the area of the province in orchard rose 23.5%, from 1,178ha (see Table 2.1), to 1,455ha.<sup>22</sup> Moreover, Hawke's Bay gained ground on other New Zealand provinces. By the early 1950s, the province accounted for 19% of the national orchard acreage, still behind North Auckland with 21% and Nelson on 20% but now well ahead of Otago (15%).<sup>23</sup>

<sup>18</sup> *NZOYB*, 1950, *NZOYB*, 1951-52, Chapter 9b. Belgian, Canadian and American markets reopened in 1949. Germany followed in 1950-51.

<sup>19</sup> *NZOYB*, 1977, Chapter 21b.

<sup>20</sup> Servicemen's Settlement and Land Sales Act, 1943. Also see – *NZOYB*, 1944, Chapter 16.

<sup>21</sup> Mannering, *100 Harvests*, 79, 80 & 84.

<sup>22</sup> *NZOYB*, 1951-52, Chapter 18b.

<sup>23</sup> *Ibid.*

In a feature shared with its southern counterpart, Nelson, Hawke's Bay remained a pip-fruit province after WW2, and growth in the immediate post war years was heavily oriented towards a narrow range of traditional varieties of apple. In 1946, Sturmer accounted for 24% of output followed by Delicious (16%), Ballarat (11%) and Cox's Orange (10%). Granny Smith, a new entrant variety in the 1940s, accounted for a further 9% of the apple crop.<sup>24</sup> The remaining balance was split evenly between eight other varieties.<sup>25</sup> Hawke's Bay's varietal mix after 1945 was similar to that of New Zealand as a whole. In 1950, Sturmer accounted for 40% and Cox's Orange approximately 18% of all apple plantings. Change was, however, underway, and by the late 1960s both varieties had declined as a percentage of the national orchard, largely due to the increased plantings of Granny Smith.<sup>26</sup> Nevertheless, a notable continuity remained in place. New Zealand's focus on tart apple varieties endured, an emphasis that reflected consumer preferences in Europe.

The dominance of tart flavoured apples in Hawke's Bay enabled the province to meet surging demand for pip-fruit in European markets during the 1950s and 1960s, a boom that led to a sharp lift in grower profitability and orchard investment. Between 1949 and 1959, exports of New Zealand apples increased by 330% and by a further 130% between 1959 and 1969 (see Table 6.1). Much of the increase came from Hawke's Bay orchards. From 1958 to 1968, Hawke's Bay pip-fruit production increased 66%.<sup>27</sup> Profit growth was similarly robust. In the years between 1963 and 1968 the farm gate value of Hawke's Bay orchard produce rose by 35% to \$4.6m.<sup>28</sup> Rising profits funded labour saving technologies<sup>29</sup> and a second burst of drainage investment.<sup>30</sup> Drainage in areas with heavy soils created the conditions for further growth, and the area in orchard increased by an annual average of 5% from 1962 to 1968.<sup>31</sup> Moreover, land use intensity soared, a reflection of improved management techniques and investment in new rootstocks. Between 1940 and 1960,

---

<sup>24</sup> *The Orchardist*, 5<sup>th</sup> July 1946. In 1975, Granny Smith accounted for 46% total output. See *NZOYB*, 1977, Chapter 13b.

<sup>25</sup> *Ibid.*

<sup>26</sup> ANZ Bank, Agrifocus, December 2015.

<sup>27</sup> *Hawke's Bay Regional Resource Survey*, 95.

<sup>28</sup> *Ibid.*, 94. In constant terms. Note however the modest size of the sector relative to the pastoral sector, for the latter see Figure 3.2.

<sup>29</sup> Mannering, *100 Harvests*, Chapters 6 & 7.

<sup>30</sup> *Ibid.*, 90.

<sup>31</sup> *Hawke's Bay Regional Resource Survey*, 94 & 95.

average planted density increased from 250 trees per ha to 550 trees per ha.<sup>32</sup> Growth was such that orchards were now displacing sheep in traditional pastoral areas and by 1970 the area of the Heretaunga Plains devoted to grazing had fallen to 50% against 84% in 1937.<sup>33</sup>

Although pip-fruit (particularly apples) remained of disproportionate importance in Hawke's Bay, stone-fruit production also increased significantly after 1945. Encouraged by food processors, most notably James Wattie, 14,000 Golden Queen peach trees were planted on the Heretaunga plains from 1937 to 1942.<sup>34</sup> By 1945, these trees had reached production maturity and in 1946 Hawke's Bay produced 250,000 cases of peaches along with smaller amounts of plums (52,000) and nectarines (20,000).<sup>35</sup> Growth continued after 1945, and between 1950 and 1960 stone-fruit production doubled.<sup>36</sup> Although diversification gained traction in the 1950s and 1960s, Hawke's Bay remained a pip-fruit province. In 1968/69, stone-fruit accounted for no more than a third of total fruit production against 28% in 1945 (see Table 6.2), a mix that remained largely unaltered into the 1970s. The dominance of pip-fruit was based on a productivity advantage. Accounting for 58% of the total planted area in 1968/69, pip-fruit produced 65% of total fruit volume against the equivalent figures of 35% and 42% for stone-fruit (see Table 6.2).

**Table 6.2. Apples Dominate: Production & acreage (pip-fruit & stone-fruit), Hawke's Bay 1945/46 and 1968/69.**

	1945/46		1968/69	
	% of total output		% of total output	% of total area
Apples	65.7%		49.1%	44.9%
Pears	6.3%		16.2%	12.6%
Quince	neg		0.1%	0.2%
<b>Pip-fruit</b>	<b>72.0%</b>		<b>65.4%</b>	<b>57.7%</b>
Peaches	21.5%		30.5%	32.9%
Plums	4.5%		2.8%	5.6%
Nectarines	1.7%		0.8%	1.6%
Apricots	0.2%		0.4%	1.6%
Cherries	0.1%		0.1%	0.6%
<b>Stone-fruit</b>	<b>28.0%</b>		<b>34.6%</b>	<b>42.3%</b>

Sources: *Hawke's Bay Regional Resource Survey*, 96 & Mannering, 76. Area figures unavailable for 1944/45.

<sup>32</sup> Ibid, 94.

<sup>33</sup> E.W Manning, "The Changing Land Use of a Diversified Agricultural Region: The Heretaunga Plains of New Zealand" (PhD diss., Victoria University of Wellington, 1972), 146.

<sup>34</sup> Mannering, *100 Harvests*, 77.

<sup>35</sup> *The Orchardist*, July 5<sup>th</sup>, 1946.

<sup>36</sup> Tom Conway, Senior Horticultural Inspector, *The Orchardist*, July, 1965.



Two essential platforms for success but collegiality fades.

Effective industry institutions, most importantly the Apple & Pear Marketing Board (APMB), were a critical enabler of growth in the Hawke's Bay fruit industry after WW2. Mandated to acquire, market and export New Zealand apples, the board enabled growers to access scale advantages unobtainable on a single-orchard basis. Cool stores provide a crucial example. The board doubled the size of its cool stores in Hastings in 1958, and during the 1960s storage was constantly upgraded to meet rising volumes.<sup>37</sup> As output rose distribution needs became ever more complex, and the board developed sophisticated shipping arrangements through the Port of Napier. Specifically, by combining the volumes of hundreds of small pip-fruit growers, the board could obtain the scale needed to contract specialist refrigerated vessels known as 'reefers.' Underpinned by these initiatives, returns during the 1950s and 1960s were such that orchards as small as ten acres in size were financially viable.<sup>38</sup> The board itself was similarly profitable, delivering a string of record results in the late 1960s.<sup>39</sup>

Industry cohesion and strong social ties provided further platforms for success. Orchardists gained from the advocacy of collective institutions such as the APMB and the Hawke's Bay Fruit Growers Association (HBFGA). Furthermore, close geographical proximity bolstered industry unity.<sup>40</sup> But most importantly, fruit growing in the province was dominated by family owned orchards and growers of the period describe the industry as a "close knit family."<sup>41</sup> Social occasions, orchestrated by the HBFGA, were common and the atmosphere in the industry was likened to "a club."<sup>42</sup> The predominance of small-scale orchards was a further contributor to collegial industry relationships. In 1950, a third of all New Zealand orchards were between one and five acres.<sup>43</sup> Small scale growing persisted into the mid-1960s, and in 1967 half of Hawke's Bay orchards were between one and ten

---

<sup>37</sup> Mannering, *100 Harvests*, 99.

<sup>38</sup> *Ibid*, 98.

<sup>39</sup> *Ibid*.

<sup>40</sup> *Hawke's Bay Regional Resource Survey*, 97. In 1967, 90% of orchards were within a ten-mile radius of Hastings.

<sup>41</sup> Graeme Wake, fruit grower – Havelock North, quoted in Mannering, *100 Harvests*, 87.

<sup>42</sup> *Ibid*.

<sup>43</sup> *NZOYB*, 1951-52, Chapter 18b. A mere 11 of 3,147 orchards were larger than fifty acres (21 H.A).

acres in size.<sup>44</sup> Small scale equated with family ownership: in 1968 two thirds of all orchards were managed by family growers.<sup>45</sup>

In the early 1970s, cohesion amongst Hawke's Bay fruit growers began to fracture. Interest in HBFGA social functions was "waning" and the "family feel" of the 1950s had disappeared.<sup>46</sup> Three developments caused the change. First, as the fruit growing sector became larger, it became more difficult to establish a sense of common purpose and collegiality. Importantly, new entrants were more numerous, and of the 477 registered orchards in 1967 approximately 20% had joined the industry in the previous five years.<sup>47</sup> Second, by the late 1960s the industry was less physically confined. Drainage investment had enabled orchards to spread away from the established horticultural areas of Havelock North, Twyford and Pakowhai to include formerly uneconomic areas uplifted by the Napier earthquake.<sup>48</sup> Third, in the mid-1970s corporate investors entered the industry. The entry of outsiders, attracted by tax incentives, unsettled long standing relationships and disrupted established commercial structures.<sup>49</sup> Furthermore, in a symbolic break with the traditional ownership model of the past, several larger family growers formed partnerships with these so called 'Queen Street farmers,' creating a third tier of industry participant.<sup>50</sup>

The entrance of corporate investors became a touchstone of industry division and exposed the ideological divisions that had been dormant since the 1940s. In 1972, a charged debate took place in Hawke's Bay regarding the proposed introduction of a two-tier industry levy. In a move regarded as anti-competitive by corporate investors, new entrants were to be levied at a higher rate than established growers. A small number of dominant families were similarly opposed, forming a rival clique that split the industry into two equally vociferous camps.<sup>51</sup> Leading to further division, the HBFGA voted in favour of the levy differential leading to allegations of self-interested behaviour on the part of the small family

---

<sup>44</sup> Mannering, *100 Harvests*, 95. Quote attributed to Noel Congdon, Horticultural Superintendent for Hawke's Bay, 1967.

<sup>45</sup> *Hawke's Bay Regional Resource Survey*, 95. Small growers are defined as fifteen acres (6.25 H.A) or less.

<sup>46</sup> Mannering, *100 Harvests*, 87 & 89. Quote attributed to orchardist, Graeme Wake.

<sup>47</sup> *Hawke's Bay Regional Resource Survey*, 94.

<sup>48</sup> *Ibid.*

<sup>49</sup> Mannering, *100 Harvests*, 119, 120. Introduced by PM Muldoon to encourage agricultural diversification.

<sup>50</sup> *Ibid.*, 120 & 126.

<sup>51</sup> *Ibid.*, 89. The differential was approved by a majority of New Zealand growers.

growers that dominated its membership.<sup>52</sup> In contrast, larger family growers (defined as those with fifty acres or more) were already adjusting to the new era and in 1973, *Yummy*, the first fresh fruit brand to be established outside of the APMB's statutory monopoly, was launched by John Paynter.<sup>53</sup> Collectively these changes led to a significant destabilisation of the consensus that had guided fruit industry relations since 1945, and by the mid-1970s a new less cohesive era had begun.

Vegetable growers: strong post war growth but relative returns disappoint.

Unlike fruit growers, New Zealand vegetable growers benefitted substantially from World War Two demand overseas, a one-off stimulus that laid the basis for subsequent growth. Wartime supply was focused on the provision of processed vegetables which were delivered to canneries contracted to US forces in the Pacific.<sup>54</sup> The war thus provided a significant boost to vegetable growing. Between 1939 and 1945, the area of New Zealand devoted to process vegetables increased from immaterial levels to nearly 2,000 acres, 42% of which was located in Hawke's Bay.<sup>55</sup> Momentum continued after 1945 and by the 1947/48 season New Zealand's market garden area was 74% larger than that of 1938/39.<sup>56</sup> Hawke's Bay's vegetable growing sector saw similar trends, again a reflection of demand from food processors. In 1949/50, the area in vegetables for processing was nearly triple that of 1945 and with a share of 79%, Hawke's Bay was by some margin New Zealand's dominant province in the processing category.<sup>57</sup> Although the province's share of process vegetables fell to 50.3% by 1960, vegetables grown for processing now totalled 5,500 acres, more than three times greater than in 1949/50.<sup>58</sup> Moreover, as demand from processors surged, the value of output rose sharply.<sup>59</sup> The rise exceeded other horticultural activities. Between 1960 and 1968, Hawke's Bay vegetable growers lifted revenues by 41% against a rise of 35% for the province's horticultural sector.<sup>60</sup>

---

<sup>52</sup> Ibid, 110.

<sup>53</sup> "Yummy Apples." New Zealand Companies Office, company number: 164,059.

<sup>54</sup> NZOYB, 1947-49, Chapter 18b.

<sup>55</sup> NZOYB, 1940, Chapter 18, NZOYB 1946, Chapter 17b. Process vegetables are sold to food manufacturers.

<sup>56</sup> Ibid. Definition of vegetables is aligned with the Commercial Gardens Registration Act, 1943, which came into force on May 1<sup>st</sup>, 1943.

<sup>57</sup> NZOYB, 1951-52, Chapter 18b. Up from 52% in 1943/44.

<sup>58</sup> NZOYB, 1961, Chapter 14b.

<sup>59</sup> Robert Young (ed), *Hawke's Bay 1967* (Auckland: Breckell & Nicholas Ltd, 1967), 37.

<sup>60</sup> *Hawke's Bay Regional Resource Survey*, 94.

Growth was spectacular in absolute terms but after 1945 the profitability of vegetable growing underperformed alternative land uses by a significant margin. Most importantly, the value of vegetable production on a per hectare basis was noticeably lower than the most visible horticultural alternative, pip-fruit. In 1968, the gross value of all vegetables produced in Hawke's Bay represented 45% (\$4.14m) of the combined value of fruit and vegetable output (\$9.2m).<sup>61</sup> Although time periods do not align precisely, the land use figures outlined in Table 2.1 suggest that the gross value of vegetable output in the mid/late 1960s was approximately \$790/ha. Figures obtained from Hawke's Bay vegetable processors broadly support the estimate. In 1974, asparagus growing generated a gross profit of \$1,000/ha<sup>62</sup> whilst tomato growing generated \$625/ha.<sup>63</sup> In contrast, the equivalent figure for fruit growing, dominated as it was by sales of fresh produce, was much higher at \$2,900/ha. The relative performance of vegetables remains unflattering despite the higher capital needs of an orchard, which are commonly 50% greater than the value of bare cropping land.<sup>64</sup> Introducing such an adjustment to the figures above suggests that capital returns from vegetable growing were commonly less than 40% of those available from fruit growing.

The comparative underperformance of vegetable growing reflected the dominance of vegetables grown for processing rather than fresh consumption. The lack of export markets for fruit during WW2 encouraged less committed fruit growers to switch to vegetables, a trend encouraged by processors who took the chance to shape the industry to their needs. Without a domestic market of any great size and lacking the means by which to develop export markets for fresh produce, processors remained the dominant buyers of vegetables in the province after 1945. By the early 1970s, around 60% of all process vegetables grown in New Zealand were grown in the province and Hawke's Bay grew more process vegetables than the entire South Island.<sup>65</sup> The specialisation crowded out the option

---

<sup>61</sup> Ibid.

<sup>62</sup> Conly, *The First Fifty Years*, 50.

<sup>63</sup> R.B Le Heron and E.C.R Warr, "Corporate Organisation, Corporate Strategy and Agribusiness Development in New Zealand," *New Zealand Geographer*, Vol.32 Issue 1 (April 1976): 10.

<sup>64</sup> "Evidence to EPA," Andrew Borland, CEO Mr Apple, accessed July 24<sup>th</sup>, 2017, [http://www.epa.govt.nz/resource-management/NSP000028/NSP000028\\_10%20Andrew%20Borland%20concise%20summary%20of%20evidence.pdf](http://www.epa.govt.nz/resource-management/NSP000028/NSP000028_10%20Andrew%20Borland%20concise%20summary%20of%20evidence.pdf)

<sup>65</sup> NZOYB, 1975, Chapter 14b.

of fresh vegetables. In 1968, the area of Hawke's Bay devoted to processed vegetables was just under ten times larger than that of fresh vegetables grown for domestic consumers, a dominance that continued to reflect the needs of local processors such as Watties. Unlike vegetable growers, fruit growers were able to access a global market for fresh apples and, to a lesser extent, fresh pears. In 1965, 55% of the province's apple crop was exported fresh, and it is notable that Hawke's Bay had "little apple processing" at the time.<sup>66</sup> In contrast, a mere 10% of Hawke's Bay vegetables were sold fresh in the late 1960s.<sup>67</sup> Consequently, the relative outperformance of fruit growing is closely matched with a higher percentage of fresh sales, a market access advantage facilitated by the willingness of the APMB to develop advanced shipping arrangements and build cool storage capabilities.<sup>68</sup> As canneries were the dominant buyers of Hawke's Bay vegetables, cool storage for vegetables was totally absent.

Although the relative returns and end markets of fruit and vegetable growers were markedly different both sectors shared two important commonalities: the dominance of family growers on small parcels of land and a single buyer. The Commercial Gardens Act of May of 1943 required vegetable growers to register production land of half an acre or more.<sup>69</sup> Registration data from 1952 shows a national average of just less than six acres, an area comparable to that of commercial orchards at the time (five acres).<sup>70</sup> Even the limited number of large scale, corporate vegetable growers that operated in the province tended to have a family connection, the best example being Asparagus Limited established in 1937<sup>71</sup> by family orchardist Ralph Paynter.<sup>72</sup> Furthermore, both sectors were dominated by a single buyer, APMB in the case of pip-fruit and as we will see, Watties in the case of vegetables (and to a lesser extent stone-fruit).

The commonality, nevertheless, disguised a crucial difference. The APMB was, for the most part, controlled by growers. Consequently, the dominant buyer of fresh fruit was

---

<sup>66</sup> *Hawke's Bay Regional Resource Survey*, 96.

<sup>67</sup> *NZOYB*, 1968, Chapter 14b.

<sup>68</sup> Mannering, *100 Harvests*, 90, 96 & 99.

<sup>69</sup> Commercial Gardens Registration Act, 1943 (7 GEO VI 1943, No.1).

<sup>70</sup> *NZOYB*, 1953, Chapter 20a.

<sup>71</sup> New Zealand Companies Office, company number: 159,000.

<sup>72</sup> Mannering, *100 Harvests*, 119. By the early 1940s the company accounted for half of the province's asparagus output.

compelled to act in their best interests. Although similarly symbiotic, the relationship between growers and processors was less equal. With one large buyer and numerous small growers, the bargaining power of individual vegetable growers was relatively weak. The resulting power imbalance aligns with the lower returns achieved by vegetable growers relative to those of fruit growing. Despite the problem it was, nonetheless, possible to make an adequate return but only in cases where growers could build scale advantages. For example, corporate farmer Asparagus Limited, thirty times larger than the average vegetable grower, returned annual dividends of 15% p.a on initial capital outlay from 1937 to the early 1970s.<sup>73</sup>

The conspicuous success of Asparagus Limited highlights two important historical themes. First, large scale farms were the only way to offset the low margins earned for growing process vegetables. Second, in common with fruit growing, a new type of industry participant had emerged. Both trends underpinned a rapid increase in scale during the 1950s. By 1964, the average vegetable plot of sixteen acres was nearly three-fold greater than a decade earlier, and from the mid-1950s to the mid-1960s the area under vegetable cultivation in New Zealand increased from 16,000 acres to over 45,000 acres. In contrast, the number of growers in the country was largely unchanged, and with 42% of the total area in vegetables dedicated to processors, vegetable growing was operating on a quasi-corporate basis by 1965.<sup>74</sup> In the early 1970s, corporate ownership of the sector gained further momentum. In 1972, Hastings stockbroker Selwyn Cushing orchestrated the takeover of Asparagus Limited by corporate raider Ron Brierley.<sup>75</sup> Brierley subsequently renamed the company Luminous Investments, and in an effort to build yet more scale the company pursued an aggressive land acquisition strategy.<sup>76</sup> The Luminous partnership symbolised further structural change. The increase in scale that occurred in the vegetable growing sector between 1945 and 1975 corresponded with both the entry of the first listed corporation and the first corporatisation of a family owned grower.

---

<sup>73</sup> Ibid.

<sup>74</sup> NZOYB, 1965, Chapter 14b.

<sup>75</sup> Mannering, *100 Harvests*, 120. Cushing became closely associated with Brierley over subsequent decades.

<sup>76</sup> Ibid.

Horticultural processors: An era of rapid growth dominated by Watties.

J. Wattie Canneries was essential to the success of horticulture in Hawke's Bay after WW2. Consequently, the company provides the best illustration of a successful processor in the province and an excellent example of primary sector entrepreneurship. The most commonly held vision of its founder, James Wattie, is that of a self-made man who, from a humble Hastings shed during the Great Depression, forged the beginnings of what would become an iconic New Zealand company. The same folklore holds that Wattie's generosity of spirit contributed to his business success. Whether such imagery is accurate cannot detract from the fact he was one of New Zealand's greatest industrialists. Quite simply, the development of the fruit and vegetable industries in Hawke's Bay could not have occurred without him, a fact recognised by growers.<sup>77</sup> Wattie was, however, far from perfect. He was extremely competitive, sometimes to the detriment of fair play. Furthermore, Wattie sought to create a family dynasty by promoting his sons, unchallenged, into influential management positions. Moreover, favourable externalities, most particularly tariff protection, contributed greatly to his business success. As a consequence, the history of James Wattie and his company illustrates important aspects of the development of horticulture and food manufacturing in both Hawke's Bay and New Zealand, as well as the interplay between industrial policy and Wattie's personal ambition.

In common with vegetable growers, Watties gained greatly from wartime contracts, a platform that created the basis for growth in subsequent decades. Conceived in 1934, J. Wattie Canneries Limited grew quickly during the 1930s selling a mix of canned fruit (such as Golden Queen peaches) and vegetables but the company remained very small.<sup>78</sup> Annual turnover never exceeded \$200,000, and in common with many new enterprises, profitability remained virtually immaterial.<sup>79</sup> Business was, however, brisk during WW2 and revenues reached approximately \$1 million in 1945 (all figures in 1975 dollar terms).<sup>80</sup> Between 1939 and 1945, demand for canned foods, particularly vegetables, from US forces underpinned a fourteen fold increase in output. But when wartime contracts were terminated in 1946, profit growth stalled. Although New Zealand remained the company's core market, Wattie

---

<sup>77</sup> Conly, *The First Fifty Years*, 149.

<sup>78</sup> Cans of Golden Queens and William Bon Chretien pears were important early products.

<sup>79</sup> Conly, *The First Fifty Years*, 214.

<sup>80</sup> *Ibid.*

began to seek diversification opportunities. In 1947, in an effort to replace lost revenues, a lively export trade in canned foods commenced with the UK.<sup>81</sup> Wattie took the opportunity of offshore success to reinvest in his company, and between 1945 and 1950 shareholder funds doubled.<sup>82</sup> By 1951, profitability again matched that of 1945 and the company was firmly established as one of New Zealand's foremost food manufacturers.<sup>83</sup>

The five years that followed were more problematic, a reflection of domestic competitors and surplus food stocks. Wattie continued to look for new opportunities but market dislocations and rising costs proved painful. In the early 1950s, as food security improved and trade patterns normalised, large amounts of government held wartime food stocks were off loaded onto key markets. The impact of these disposals reversed much of the profit growth achieved by Watties in the immediate post war period. Between 1945 and 1956 revenues increased three-fold (237% in real terms) but profitability was unchanged, a decline of 63% in real terms<sup>84</sup> Although profitless growth was a significant problem, Wattie remained totally committed to his expansion focused strategy. In the early 1950s, large investments were made in Hastings and another vegetable processing plant was added in Gisborne.<sup>85</sup> By the mid-1950s, Wattie's faith was seemingly rewarded. Now a publicly listed stock, Wattie dividends were lifted in 1954 from 4% to 8%, a level significantly superior to the Hawke's Bay meat processing industry at the time.<sup>86</sup> Unfortunately the respite was brief. In the 1954/55 financial year profitability slumped to a ten year low<sup>87</sup> due to competition from a government-sponsored factory, The New Zealand Packing Corporation in Auckland (Pukekohe), and a consequent glut in key product lines.<sup>88</sup> With twenty years of work at risk and his company in mortal danger Wattie was reportedly "disgusted" at what he described

---

<sup>81</sup> Boyd, *City of the Plains*, 336.

<sup>82</sup> Conly, *The First Fifty Years*, 214. Retained earnings provided the required capital.

<sup>83</sup> Ibid.

<sup>84</sup> Ibid, 44.

<sup>85</sup> Boyd, *City of the Plains*, 336. Hastings remained Wattie's primary location.

<sup>86</sup> Ibid. HBFMC dividends never exceeded 6% p.a in the 1950s. Watties listed on the New Zealand Stock Exchange in 1953.

<sup>87</sup> Conly, *The First fifty Years*, 214.

<sup>88</sup> Boyd, *City of the Plains*, 336. Ibid, 82. The NZ Packing Corporation was subsequently purchased by rival J. R. Butland.



“an injustice” and “an astonishing act,” a reaction that does much to explain the unique blend of business strategies that subsequently emerged.<sup>89</sup>

The shock of a state-backed competitor highlighted to Wattie the critical importance of working in partnership with government and society. An early believer in the concept of “social licence”, Wattie regarded himself as a servant of the people, something emphasised by business histories. Consequently, after 1955 he sought to position his company as a “national institution” that provided both secure employment and good food at reasonable prices.<sup>90</sup> Although the company was not founded on socialist or co-operative principles, it is clear that after 1955 Wattie saw the usefulness of portraying his business as a part of New Zealand society.<sup>91</sup> Profitability was important but in keeping with the strategy, Wattie was anxious to ensure New Zealanders saw that money was not his prime motivation. At all times Wattie remained a very small shareholder (1%) as well as a salaried employee.<sup>92</sup> Furthermore, he strived to develop a “special Kiwi climate” within the company where “loyalty was considered a key virtue.” To newcomers the Wattie business culture was certainly regarded as unique. David Irving, who became CEO of Watties in the 1990s, describes Wattie’s leadership style as a mix of “altruism, patriotism, production orientation and Kiwi common sense.”<sup>93</sup> The ethos explains why the company became a common source of development capital for growers.<sup>94</sup> Watties supplied fruit trees and seeds, generating goodwill by providing growers with working capital, albeit the strategy tied growers into the Wattie ‘system.’<sup>95</sup>

In practical terms the company’s business philosophy was more self serving and unemotional, most particularly when it came to dealing with competition.<sup>96</sup> Wattie’s core tactic, an “intra-regional” merger and acquisition (M&A) strategy, started in the dark days of 1954 with the takeover of privately owned Auckland based manufacturer Thompson, Hills

---

<sup>89</sup> Conly, *The First Fifty Years*, 82.

<sup>90</sup> Irving & Inkson, *It Must Be Wattie’s*, 23. Watties was the third largest employer in Hastings at this time after the Whakatu and Tomoana freezing works.

<sup>91</sup> *Ibid.*

<sup>92</sup> *Ibid*, 24.

<sup>93</sup> *Ibid*, 39 & 41.

<sup>94</sup> Conly, *The First Fifty Years*, 169.

<sup>95</sup> Mannering, *100 Harvests*, 91 & Conly, *The First Fifty Years*, 178. Watties also offered crop insurance in 1979. See Conly, 169. Heinz Wattie continues to provide seeds to growers.

<sup>96</sup> Jim Wattie actively lobbied against deregulation of canning in 1948, Mannering, *100 Harvests*, 91.

and Kirkpatrick, a deal which added four manufacturing plants across New Zealand.<sup>97</sup> A broader capital base aided Wattie's strategy. By the late 1950s, J. Wattie Canneries was among the most frequently traded stocks on the New Zealand exchange (NZX), enabling the firm to access additional capital.<sup>98</sup> In 1968, armed with a greatly strengthened balance sheet, Watties 'merged' with financially stressed General Foods, and in 1969 food manufacturer Cropper-NRM was acquired.<sup>99</sup> More acquisitions followed. In 1970/71, Butland's (Unilever) Crest brand was added to the Wattie 'stable' along with Haigh's Ltd and in 1975 Wattie's largest Hawke's Bay rival, Wyona, was purchased from its Australian owners.<sup>100</sup> The aggressive M&A strategy worked and by the mid-1970s Watties was the largest food manufacturer in New Zealand.

Ruthless business practices were a further contradiction to Wattie's carefully cultivated public image. Coercive tactics were commonly used to dissuade growers from supplying rival canneries and to pressure both competitors and suppliers. 'Observers' were often placed outside the rival Wyona cannery in Hastings to record the names of growers for inclusion on a Wattie blacklist.<sup>101</sup> Furthermore, the company used sub-cost strategies to drive out competitors. In 1957, offering a similar product range as Watties, Unilever established a factory in Hawke's Bay with 400 staff and products manufactured under the Birdseye brand.<sup>102</sup> The motivation for the investment was to build a presence in New Zealand's protected market. But Unilever stumbled badly when Wattie slashed prices aggressively and in 1972 the unprofitable Birdseye factory was closed.<sup>103</sup> The success of the strategy emboldened Wattie, and by the mid-1970s Unilever products had been squeezed out of the New Zealand market altogether leaving his firm in an almost unassailable position.<sup>104</sup> The resulting dominance meant other rivals were either rendered sub-scale<sup>105</sup> or

---

<sup>97</sup> Le Heron & Warr, "Corporate Organisation," 7 & 8. Operating under the Oak brand. Plants were located in Auckland and Nelson.

<sup>98</sup> David Malcolm Grant, *Bulls, Bears & Elephants* (Wellington: Victoria University Press, 1997), 194.

<sup>99</sup> Boyd, *City of the Plains*, 340. General Foods Corporation (NZ) Ltd, based in Hastings, became a Wattie subsidiary but subsequently acquired Food Processors Ltd. See General Foods Archive, accessed October 14<sup>th</sup>, 2018, <https://longwhitekid.wordpress.com/category/general-foods-corporation-nz-ltd/>

<sup>100</sup> Le Heron & Warr, "Corporate Organisation," 7 & 8, Mannering, *100 Harvests*, 91 & 92. Wyona, established in 1949 by the Lay family, was subsequently sold to Henry Berry Ltd of Australia. Wyona made a record profit in 1971 something that attracted Wattie's attention.

<sup>101</sup> John Loughlin in various discussions with author, March 2017.

<sup>102</sup> Young (ed), *Hawke's Bay 1967*, 24.

<sup>103</sup> Le Heron & Warr, "Corporate Organisation," 7 & 8.

<sup>104</sup> Mannering, *100 Harvests*, 92.

eventually acquired.<sup>106</sup> The lasting impact was sharply reduced competition. Of the six rival fruit and vegetable processing plants operating in Hawke's Bay in 1959, five were gone by 1974.<sup>107</sup> The New Zealand market was insignificant to large companies such as Unilever, but lesser New Zealand companies and family growers were more exposed to the emergent Wattie monopoly. Veteran suppliers maintain that Wattie would commonly threaten to close his Hastings factory if growers lifted prices.<sup>108</sup>

Although M&A and aggressive pricing tactics proved critical to Wattie's success, organic growth was, nonetheless, an active part of the company's strategy.<sup>109</sup> From inception, Wattie's production was heavily oriented towards four main crops – peas, beans, sweet-corn and tomatoes - with peaches and berries as the main fruit crops (see Table 6.3).<sup>110</sup> Wattie's broad supply base gave it the ability to develop critical mass in a surprisingly wide range of consumer food groups despite the unsophisticated nature of the company's marketing strategy.<sup>111</sup> Although the dominant views of its founder sometimes meant the company was not always a market-led organisation, Watties launched numerous new product lines, including baked beans, soups and frozen goods, and added new techniques such as freeze drying.<sup>112</sup> In 1960, the first blast freezers were installed in the Hastings plant, an investment that anticipated the home whiteware boom and enabled Wattie to further develop offshore markets and new product lines to match the growth of convenience foods.<sup>113</sup> During the 1960s, as Watties began to outgrow the New Zealand market, the company successfully developed new export markets in Japan, Asia and Australia using the same range of products sold domestically.<sup>114</sup>

---

<sup>105</sup> "Costs out of control," *Hawke's Bay Herald Tribune*, June 1<sup>st</sup>, 1957 & "Another Cannery to be built in Hastings," *Hawke's Bay Herald Tribune*, May 14<sup>th</sup>, 1958

<sup>106</sup> "Orchardists show anxiety about cannery merger," *Hawke's Bay Herald Tribune*, June 10<sup>th</sup>, 1960.

<sup>107</sup> Conly, *The First Fifty Years*, 89.

<sup>108</sup> Keith Newman, "Watties: How Close To Closing?" *Baybuzz*, November 30<sup>th</sup>, 2015.

<sup>109</sup> Organic growth is the process of business expansion by increased output, customer base expansion or product development as opposed to merger and acquisition (regarded as inorganic growth).

<sup>110</sup> Conly, *The First Fifty Years*, 178 & 179.

<sup>111</sup> Irving & Inkson, *It Must Be Wattie's*, 37.

<sup>112</sup> Conly, *The First Fifty Years*, 64-67. Also included pet foods, ready meals and dehydrated foods.

<sup>113</sup> J. Wattie Canneries, "Quarterly Bulletin," *Harvest*, Vol.1, No.10 (April 1960): 1 & 3. Refer HB Knowledge Bank.

<sup>114</sup> Conly, *The First Fifty Years*, 90-97.

**Table 6.3. J.Wattie Canneries: Growth in processed volumes, 1955-1974 (tonnes).**

	Tonnes - 1955	%	Tonnes - 1965	%	Tonnes - 1974	%
Tomatoes	2,571	31%	5,778	26%	18,000	36%
Peaches	2,085	25%	4,412	20%	9,500	19%
Peas	1,945	24%	6,068	27%	7,500	15%
Pears	920	11%	1,910	8%	5,000	10%
Beans (green/butter)	333	4%	1,668	7%	4,125	8%
Asparagus	288	4%	1,273	6%	1,000	2%
Carrots	83	1%	968	4%	2,300	5%
Apples	-		438	2%	2,000	4%
Sweet corn	-		-		400	1%

Sources: J. Wattie Canneries, Annual Reports (1955-1974) & Conly.

The company's successful offshore strategy would not have been possible without the benefit of domestic dominance, a strength that relied on the company's deliberate positioning as a 'Kiwi' champion. Crucially, Watties was a major beneficiary of government policies that provided the company with a sheltered domestic base from which to grow.<sup>115</sup> Introduced as a temporary measure in December 1938, import protection remained in force throughout the post war decades.<sup>116</sup> Consequently, multinational food manufacturers such as Unilever needed to invest in domestic manufacturing if they wanted to operate profitably in New Zealand. But new entrants faced a further difficulty. As most raw materials were already committed to the Wattie system, obtaining economic quantities of fruit and vegetables was easier said than done.

The multifaceted strategy that emerged after the shock of 1955 was highly successful (see Table 6.4) and in 1968, to encapsulate a much larger and more diversified entity, J. Wattie Canneries Limited was renamed Wattie Industries Limited. Turnover was now seven-fold larger than the problematic mid-1950s, and with the era of profitless growth firmly over Wattie felt sufficiently emboldened to install his two sons - Gordon and Ray -

<sup>115</sup> Irving & Inkson, *It Must Be Wattie's*, 34. Conly, *The First Fifty Years*, 93-95.

<sup>116</sup> "Import Control Regulations (1938), 1938/161," New Zealand Government, accessed July 17<sup>th</sup>, 2017 [http://www.nzlii.org/nz/legis/num\\_reg/icr1938305/](http://www.nzlii.org/nz/legis/num_reg/icr1938305/)

unchallenged into senior roles within the company.<sup>117</sup> The promotions were uncontroversial and regarded as an inevitable extension of Wattie family influence. Although shareholders remained confident in the judgement of the company's founder it is, nonetheless, difficult to imagine such a subdued reaction in less buoyant times. Importantly, by 1968 profits were sixteen times greater (nominal) than 1955 and the company was not only bigger it was better. Returns on shareholders equity did not repeat the highs of the war. But, as can be seen in Table 6.4, the company recovered very strongly after the 1955 slump. Furthermore, by the mid-1970s, Wattie's aggressive response to competition coupled with tariff protection had given the company almost total dominance in New Zealand. In 1973/74, Watties processed 104,000 tonnes of vegetables and fruit, 4.5 times more than the company's closest rival.<sup>118</sup>

**Table 6.4. J. Wattie Canneries: select financial data, 1945-1968.**

Year	Turnover	Net profit	Shareholder equity	Return on equity	Net operating margin
1940	\$75,000	negligible	negligible	negligible	negligible
1945	\$1,000,000	\$60,000	\$100,000	60.0%	6.0%
1950	\$1,000,000	\$45,000	\$500,000	9.0%	4.5%
1955	\$2,500,000	\$76,000	\$1,000,000	7.6%	3.0%
1960	\$5,000,000	\$280,000	\$3,000,000	9.3%	5.6%
1965	\$14,000,000	\$800,000	\$8,000,000	10.0%	5.7%
1968	\$20,700,000	\$1,250,000	\$11,900,000	10.5%	6.0%

Sources: J. Wattie Canneries, New Zealand Companies Office, Conly.

**Table 6.5. Wattie Industries Limited: select financial data, 1970-1975.**

Year	Turnover	Net profit	Shareholder equity	Return on equity	Net operating margin
1970	\$100,000,000	\$4,150,000	\$38,000,000	10.9%	4.2%
1975	\$200,000,000	\$6,000,000	\$70,000,000	8.6%	3.0%

Sources: J. Wattie Canneries, New Zealand Companies Office, Conly.

The late 1960s were, nonetheless, something of a high-water mark for Watties, both financially and strategically. In the early 1970s, with inflation rampant, Wattie products were subject to price control by the New Zealand Price Tribunal, a government entity set up to control soaring consumer prices. Unable to recoup rapidly rising input costs, the company

<sup>117</sup> Both sons joined the Board of Directors.

<sup>118</sup> Le Heron & Warr, "Corporate Organisation," 12.

experienced a significant profit decline in 1974 and 1975.<sup>119</sup> Although margins fell from 5% in 1974 to 3% in 1975,<sup>120</sup> the company continued to face allegations of profiteering.<sup>121</sup> Amid accusations of price gouging, the company found itself cast in the unfamiliar role of corporate villain and, along with several other high profile New Zealand firms, Watties became a target of consumer rights movement, CARP (Campaign Against Rising Prices).<sup>122</sup> Jim Wattie was personally aggrieved at suggestions his company exploited ordinary New Zealanders, an accusation that cut to heart of his business strategy. With the company's carefully crafted image at risk, the company took out newspaper advertisements stressing Wattie's commitment to good food at fair prices.<sup>123</sup> After the halcyon days of the 1960s, government criticism and the CARP campaign came as a huge shock to Wattie and his 20,000 fellow shareholders.<sup>124</sup> But as a high profile stock exchange listed company, deliberately positioned at the centre of everyday life in New Zealand, Watties had become an understandable target for consumer activists.

Sir James Wattie's death on the 8<sup>th</sup> of June 1974, several months after the start of the CARP campaign, marked the end of a unique era in which a paradoxical mix of paternalism and aggressive business practices underpinned a quintessential New Zealand success story. Wattie's style inevitably owed much to his struggles in the 1930s but more importantly the mid-1950s, a period that highlighted the need to confront competitors with maximum aggression as a way to achieve market dominance. Furthermore, Wattie saw the utility of positioning his company as a part of the national fabric, socially as well as in business, with tariff protection perhaps the ultimate reward for doing so. It was well remembered by Wattie that the most troublesome competitor in the mid-1950s was a government sponsored company. Although Wattie's corporate strategy often contradicted his professed commitment to New Zealand and New Zealanders, there seems little doubt the man himself believed his company was indeed a national asset. Nevertheless, towards the end of his life, business, as well as social, norms were changing rapidly. Future growth was less assured as was the Wattie monopoly.

---

<sup>119</sup> Ibid, *The First Fifty Years*, 215.

<sup>120</sup> Ibid, 147.

<sup>121</sup> Hansard, Vol.391, 2<sup>nd</sup> Session, 37<sup>th</sup> Parliament (June 11<sup>th</sup>–July 5<sup>th</sup>, 1974), page 2,462, June 28<sup>th</sup>, 1974.

<sup>122</sup> Irving & Inkson, *It Must Be Wattie's*, 24.

<sup>123</sup> Ibid, 145-149.

<sup>124</sup> Ibid, 173.

## Conclusion.

From 1945 to 1975 the Hawke's Bay horticulture sector experienced rapid growth and strong profitability. For growers, post war success reflected the continuities of pre-war years. These included the re-establishment of existing export markets (most importantly the UK), strong industry cohesion and collegiality based around family growers, centralised control and government regulation. Other continuities included the pre-eminence of apples, most of which were tart varieties preferred by European consumers, and the dominance of process rather than fresh vegetables. The latter theme was of particular importance to the success of James Wattie. In the absence of a viable market for fresh vegetables, Wattie was able to shape the industry to meet his company's needs. Less positively, the result was a quasi-feudal relationship with growers. In addition, the company's success was based on an incongruous mix of organic growth, paternalism, aggressive M&A and coercive tactics. Importantly, ruthless competitive strategies contradicted the firms' positioning as a form of 'capitalist/co-operative' that sought to place consumers, shareholders, suppliers and employees on equal terms – the so-called 'Wattie way.' Moreover, Wattie was faintly despotic and nepotistic. The strategy was heavily influenced by events in 1955 and the near disaster of that year taught Jim Wattie two critical lessons. First, the company had to position itself as a partner with government and society. Second, total dominance of the competitive environment was essential. The combination proved highly successful.

The role of institutions emerged as a theme of great importance after 1945. The New Zealand Apple & Pear Marketing Board, Hawke's Bay Fruit Growers Association and Watties were crucial to the success of Hawke's Bay horticulture. Each institution provided a distinct service. The APMB provided the infrastructure and marketing needed to access the higher margins available from fresh fruit exports whilst the growers association added social cohesion. Crucially, these two entities were run and managed by growers. In contrast, the interests of Watties and growers were less aligned. Growers were able to tap into a rapid growth company with unrivalled market control that provided a means to deal with seasonal gluts. But in serving the needs of the firm, growers, most notably vegetable, failed to develop markets for fresh produce and reinforced a monopoly that discouraged the entry of other processors. The resulting power imbalance between growers and Watties enabled

the company to dictate commercial terms. Consequently, returns from vegetable growing were generally lower than that of fruit growers.

Towards 1975, the pillars of post-war prosperity began to subside as societal and business conditions changed. Crucially, by the early 1970s, the co-operative spirit based around small growers was fracturing amid rising corporatisation and a need for increased scale. As the discussion of regulation indicates, an ideological divide had long existed within the pip-fruit sector. Rising corporatisation introduced a further point of disagreement, most importantly between large and small growers. But as the sector was performing strongly, friction between the two groups remained manageable. The vegetable growing sector was similarly based around small growers, and Wattie's extremely strong market position gave the company a significant advantage over them. Nevertheless, in the mid-1970s changing business and societal norms began to undermine Wattie's pre-eminent position. Much of the company's success after 1945 relied on a quasi-monopoly in domestic markets and tariff protection, benefits that came with the implicit requirement that the company act as a national champion. Moreover, Wattie's success depended on the absence of international competition and the willingness of growers to accept the relatively low returns inherent to process fruit/vegetables. Wattie's privileged position was, however, only tenable if governments, citizens and, oddly, even competitors, felt that the company served society's greater good (the company's "social licence").<sup>125</sup> By 1975, the company's status as a 'Kiwi Champion' was being challenged. Jim Wattie had long regarded his firm as part of an extended community. That the company was now considered a legitimate political target for government and citizens groups illustrated that the social and business certainties of the post war era that underpinned Wattie's social licence were coming to an end.

---

<sup>125</sup> It is difficult to imagine a repeat of the help extended by competitors following the Wattie's factory fire in 1962. Conly, *The First Fifty Years*, 98-102





# Chapter Seven: Hawke's Bay Horticulture 1975-2010.

---

## Introduction.

This chapter discusses the history of Hawke's Bay horticulture between 1975 and 2010. Four events dominated the period. First, from the early 1980s import protection for processors was progressively reduced. Second, in 1992 Watties was acquired by Heinz. Shortly thereafter the first steps towards full deregulation of the pip-fruit sector were taken, and in 1996 growers gained the first real alternative to Heinz Wattie. All but one of these events occurred in the early/mid 1990s. Consequently, Chapter Seven has been divided into two parts centred around 1995. In common with earlier chapters, the profitability and growth of key participants will be examined. Fruit growing (most particularly pip-fruit), vegetable growing and processing will again be discussed with these considerations in mind. Other focuses include changing export markets, land uses and varieties.

Key arguments in the chapter include the extent to which government policies shaped the structure of Hawke's Bay horticulture between 1975 and 2010. Most particularly, government policy switched from intervention and regulation to free market and free trade, a change that forced the sector to embrace new ways of doing business. Nevertheless, several themes from earlier decades remained in place after 1975. Most importantly, corporatisation, diversification and scale continued to increase. Meanwhile, multinationals displaced local firms and processing became more internationalised. Although the Wattie monopoly was eventually broken, one form of hegemony was replaced with another.

Important primary sources used in the chapter include New Zealand Official Yearbooks, interviews with industry participants, annual reports from industry bodies and companies as well as the archives of the Hawke's Bay Regional Museum and Statistics New Zealand. Secondary sources again include Mannering's history of fruit growing and the histories of Wattie Industries by Conly and Irving & Inkson. In addition, the chapter draws

upon reports from relevant government departments, financial institutions and research consultancies.

## 1975 – 1995: Disruption and Adjustment.

The 1970s did not begin well for Hawke's Bay horticulture. Most particularly, excess supply in European apple markets hit pip-fruit growers hard. Furthermore, the introduction of the CER free trade agreement forced change on both vegetable growers and processors. Moreover, following the election of a reformist government in 1984, single desk controls were progressively abolished and import protection ended. But structural change was not over. Wattie's became increasingly vulnerable and in the mid-1990s, the profitability of pip-fruit collapsed, a malaise that led to dramatically different business models and further entrenched the themes of corporatisation, diversification and increased scale.<sup>126</sup>

Fruit growers: collapsing cohesion accelerates the pace of disruption.

The 1970s provided challenges to the New Zealand pip-fruit industry due to an oversupply of fruit in key export markets.<sup>127</sup> The problem reflected the combination of exceptionally heavy crops in Western Europe and the unrestricted import of apples into the UK from Commonwealth countries.<sup>128</sup> Consequently, planting incentives introduced by the New Zealand government in the 1970s were at odds with market conditions.<sup>129</sup> Although the glut was widely recognised, tax breaks fuelled a sharp increase in the area devoted to key varieties of apple. Between 1971 and 1979, the area in Granny Smith and Red Delicious rose by 134% and 348% respectively, and in 1979 Hawke's Bay became New Zealand's largest apple producing province.<sup>130</sup> As plantings soared, Hawke's Bay growers became increasingly concerned that surging production would worsen the European fruit glut, and in the same year the Hawke's Bay Fruit Growers Association promoted a remit giving the APMB the right to veto new plantings.<sup>131</sup> Importantly, the proposal did not proceed and the

<sup>126</sup> As the largest horticultural crop, the focus will again be on pip-fruit, most particularly apples.

<sup>127</sup> Mannering, *100 Harvests*, Introduction & 107. Also see "Four Tough Years," *Hawke's Bay Herald Tribune*, December 23<sup>rd</sup>, 1976.

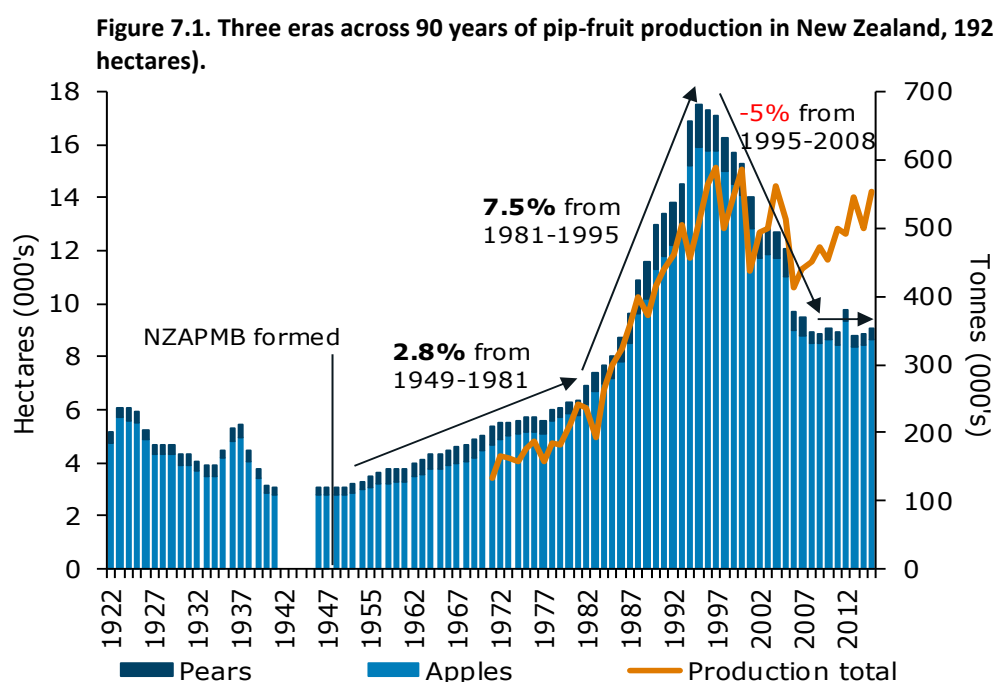
<sup>128</sup> British Parliament Debates, Hansard, HC Deb 03 December 1969, Vol.792 cc1661-72, accessed May 21<sup>st</sup>, 2019, <https://api.parliament.uk/historic-hansard/commons/1969/dec/03/apples-import-quotas>

<sup>129</sup> Refer Chapter Six: 'Two essential platforms for success but collegiality fades.'

<sup>130</sup> *The Orchardist*, February 1979. New Zealand APMB, *Annual Report*, 1978.

<sup>131</sup> Mannering, *100 Harvests*, 107.

APMB continued to have no influence over production levels. Nevertheless, concern about uncontrolled planting and declining industry cohesion remained widespread, and in an extensively debated report Dr Alan Rae of Massey University highlighted the importance of improved co-ordination if the industry was to maximise returns.<sup>132</sup> The lack of market diversification demonstrated a further weakness, most importantly New Zealand's continued reliance on the European apple market.<sup>133</sup>



NB: Data after 2010 have been included to illustrate the stabilisation of planting rates.

Source: ANZ Bank. Data sourced from Pip-fruit NZ, Hort Research, Coriolis Research & Statistics NZ.

In the late 1970s, European apple markets returned to balance leading to a rebound in industry profitability and a surge in planting that further accelerated in response to renewed government incentives. In 1977, the APMB posted a record profit,<sup>134</sup> and in the early 1980s tax breaks were reintroduced, a policy that attracted city based investors to the pip-fruit industry.<sup>135</sup> Strong profits and tax incentives proved an intoxicating mix, and boosted by rising volumes the APMB posted a string of record results in the early/mid

<sup>132</sup> Alan Rae, "An Evaluation of A New Zealand Marketing Boards Supply Diversion Strategies," *The Australian Journal of Agricultural Economics*, Vol.22, No.1 (April 1978),17, accessed August, 16<sup>th</sup> 2017, <http://onlinelibrary.wiley.com/doi/10.1111/j.1467-8489.1978.tb00341.x/pdf>

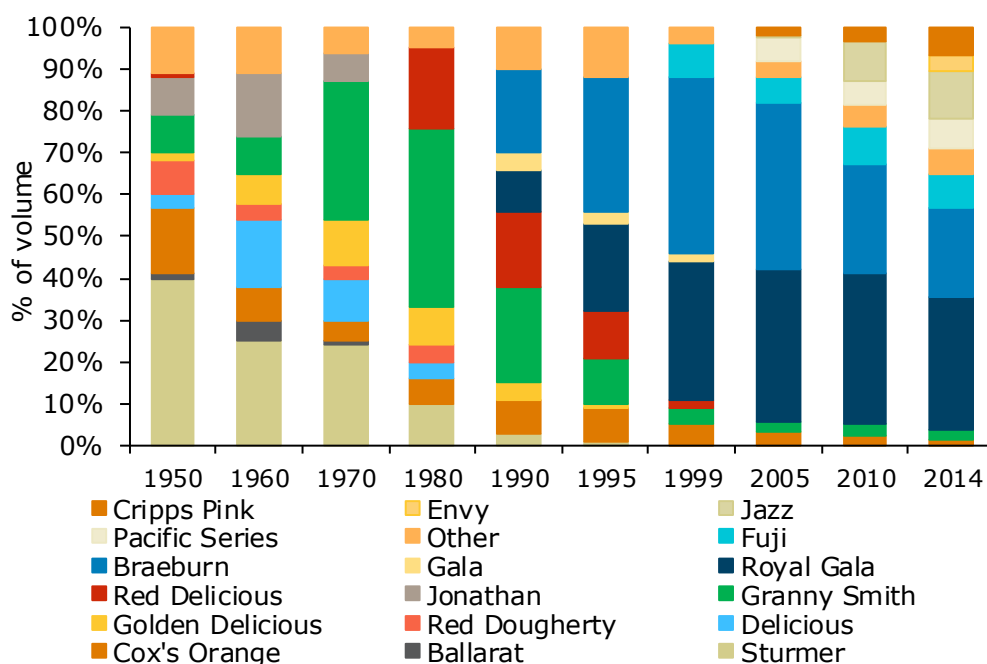
<sup>133</sup> Mannering, *100 Harvests*, 109.

<sup>134</sup> *Ibid*, 110.

<sup>135</sup> Paul Goldsmith, "Taxes - Gradual complication of the tax system – 1960 to 1984," *Te Ara - The Encyclopedia of New Zealand*, last modified September 2<sup>nd</sup>, 2016, <http://www.TeAra.govt.nz/en/taxes/page-6>.

1980s.<sup>136</sup> But the rapidity of the recovery and the acceleration in planting that began in 1981 (see Figure 7.1) led to renewed nervousness.<sup>137</sup> In 1985, the APMB sent a letter to growers entitled “Crisis of Change,” advising that apple volumes had again reached problem levels and that Hawke’s Bay’s dominant varieties, Granny Smith and Red Delicious, were not selling well in Europe.<sup>138</sup> The warning fell on deaf ears. Both varieties fell as a percentage of the national crop but importantly production volumes did not decline. Furthermore, contrary to APMB advice, the rate of planting in other varieties actually accelerated, albeit with one important caveat.<sup>139</sup> New investment was increasingly directed away from tart varieties, such as Granny Smith, preferred in European markets towards new varieties such as Braeburn and Royal Gala, sweeter apples believed to appeal to Asian consumers (see Figure 7.2).

Figure 7.2. Move to sweeter varieties: New Zealand apple volumes harvested, 1950-2014 (% of vol).



NB: Data before 1975 and after 2010 have been included to illustrate the full evolution in varieties.

Source: ANZ Bank. Data sourced from Statistics NZ & Hort NZ. Note: Delicious was immaterial after 1980.

The inability of the APMB to control the rate of planting was a clear illustration of industry fragmentation, a problem that was similarly evident at a governance level. Crucially, the historically divisive debate regarding the differential levy continued to

<sup>136</sup> New Zealand APMB, *Annual Report*, 1984.

<sup>137</sup> Mannering, *100 Harvests*, 115.

<sup>138</sup> *Ibid*, 115, 116 & 131.

<sup>139</sup> Coriolis Research, *Overview of the New Zealand Apple Industry In A Global Context* (Auckland: Pip-fruit New Zealand, December 2006), 13. The APMB lacked enforcement powers.

exacerbate tensions between family growers on one hand and larger corporate growers and investors on the other. Most pointedly, family farmers blamed the latter group for the uncontrolled rise in apple planting and the increasing likelihood of excess supply.<sup>140</sup> These divisions were played out in industry politics. In 1984, the Hawke's Bay Fruit Growers Association (HBFGA) proposed an ultimately unsuccessful remit to the national pip-fruit growers association, abolishing the differential levy.<sup>141</sup> The move, a significant departure from HBFGA's position in the 1970s, highlighted the extent to which Hawke's Bay's corporate growers had built influence within provincial governance structures at the expense of smaller growers. Furthermore, discussions with orchardists of the period reveal significant disagreement between the two groups regarding industry deregulation. Family growers tended to support centralised distribution through the APMB.<sup>142</sup> In contrast, corporate growers were more inclined towards developing their own brands and marketing plans.<sup>143</sup> These differing visions resulted in the uncontrolled growth of subscale and underutilised pack houses.<sup>144</sup> Moreover, declining cohesion was confirmed anecdotally. In 1987, the HBFGA social committee held its last meeting.<sup>145</sup>

Despite the fractious nature of industry politics, the economics of apple production in the late 1980s and early 1990s were substantially better than previous decades, a positive that both reinforced the step change in new planting that occurred after 1981 and encouraged the adoption of new varieties. Between 1980 and 1990, land use efficiency nearly doubled (see Table 7.1). Furthermore, apple prices soared. In inflation-adjusted terms, New Zealand apples were sold for an average of US\$0.30c/Kg in 1975. By 1991, real prices had surged to US\$0.85c/Kg, and in the same year operating margins among Hawke's Bay apple orchards averaged 52.3%, a rise of nearly 20% since the mid-1980s.<sup>146</sup> Strong profits provided the justification for yet more planting by larger family growers and corporate investors (see Figure 7.1), a surge that was accompanied by further structural change. Investment continued to favour sweeter apples rather than legacy varieties such as

---

<sup>140</sup> Author in various discussions with John Loughlin April 2017.

<sup>141</sup> Mannering, *100 Harvests*, 107 & 110.

<sup>142</sup> Author in discussion with Robert Sykes, CEO Orchard Investments Ltd, August 10<sup>th</sup> 2017.

<sup>143</sup> Mannering, *100 Harvests*, 126-129.

<sup>144</sup> John Wilton, HBFGA, quoted in Mannering, *100 Harvests*, 134. 123 pack houses existed in 1993.

<sup>145</sup> Mannering, *100 Harvests*, 89.

<sup>146</sup> Coriolis Research, *Overview of the New Zealand Apple Industry*, 21. Refers to sector average.

Granny Smith. Sturmer, another tart variety, was the most commonly planted apple in 1946 but virtually immaterial by 1990 (see Figure 7.2).

**Table 7.1. Apple trees planted/ha, 1940-2010.**

1940	250
1960	550
1980	1,000
1990	1,250-2000
2010	2,500-3000

Sources: Mannering, Hort Research, Johnny Apple Seed Ltd & Orchard Investments Ltd.

Although growth in pip-fruit volumes appeared to be well founded, in 1992 APMB warnings regarding a future apple glut were finally realised when huge quantities of South African fruit reached Europe, suppressing prices in New Zealand's key market.<sup>147</sup> The problem brought long simmering discontent to the surface. Excess supply hit legacy varieties Granny Smith (still 25% of Hawke's Bay output) and Red Delicious (22%) particularly hard, and per carton prices plunged to \$5.00 against approximately \$20.00 in 1991.<sup>148</sup> Operating margins in the Hawke's Bay pip-fruit sector collapsed, falling from 23.1% in 1992 to just 3.6% in 1993.<sup>149</sup> The problems of 1993 brought long standing ideological disagreements to a head. The industry's most divisive issues since the 1930s had been single desk regulations, levies and centralised distribution.<sup>150</sup> Until the early 1990s, strong profits and the social bonds forged in the industry's pioneering decades remained sufficient to keep these issues from becoming destructive. But as profits plunged, the facade of unity cracked. In the early 1990s, the levy was abolished altogether<sup>151</sup> and in 1994, the domestic pip-fruit market was deregulated.<sup>152</sup> Although 98.4% of Hawke's Bay growers voted to retain the APMB's export monopoly (via ENZA – a board subsidiary), industry relations were now extremely sour between free market proponents (mostly corporate growers and/or large-scale family owned companies)<sup>153</sup> and smaller family orchardists.<sup>154</sup>

The crisis of the early to mid-1990s brought to particular attention the accelerated level of planting that had taken place since 1981. In 1995, Hawke's Bay's share of the New

<sup>147</sup> Mannering, *100 Harvests*, 130. Reflected the resumption of exports following the abolition of apartheid.

<sup>148</sup> *Ibid*, 130–132. Compared to 46% and 16% in 1975.

<sup>149</sup> Coriolis Research, *Overview of the New Zealand Apple Industry*, 21. Stone-fruit growers were under similar pressure. Irving & Inkson, *It Must Be Wattie's*, 83-121. Hail storms in 1993/94 were a further difficulty.

<sup>150</sup> Mannering, *100 Harvests*, 75, 101-106.

<sup>151</sup> *Ibid*, 112.

<sup>152</sup> *Ibid*, 132 & 133. 70% of Hawke's Bay growers voted in favour.

<sup>153</sup> Most notably the Paynter, Moffett, Hope, Taylor and Crasborn families.

<sup>154</sup> Mannering, *100 Harvests*, 134.

Zealand pip-fruit industry reached 40%, more than double that of the 1950s, and in the same year the province's orchard area reached an all-time high of 7,959ha (see Table 2.1).<sup>155</sup> But Hawke's Bay was not alone in expanding output: between 1985 and 1995 the number of pip-fruit growers across New Zealand more than doubled.<sup>156</sup> Similarly, between 1981 and 1995, pip-fruit plantings in New Zealand increased by an annual average of 7.5% p.a, well above the 2.8% p.a growth posted between 1949 and 1981 (see Figure 7.1). The comparison illustrates the extent of the unrestrained planting that gathered pace after 1981, a problem that was so severe by 1995 that it ended the much-vaunted co-operative model that had dominated industry relationships since 1948.

Vegetable Growers: search for diversification and scale as processors restructure.

Hawke's Bay vegetable growers entered the 1970s with a still disproportionate reliance on the processing sector. In 1970, there were 991 process growers in Hawke's Bay, a number four times greater than that of fresh vegetable growers.<sup>157</sup> Similarly, process vegetables accounted for over 90% of the total area in garden.<sup>158</sup> In contrast, other New Zealand provinces featured a more even split between fresh and processed.<sup>159</sup> Consequently, Hawke's Bay's was of great importance to the New Zealand food processing industry. In the mid-1970s, the province accounted for just over 10% of all fresh vegetables grown in New Zealand but 43% of all process vegetables.<sup>160</sup> In 1982 the Ministry of Agriculture and Fisheries suspended the collection of vegetable production data but it is clear the processing sector remained the dominant buyer of Hawke's Bay vegetables in the early 1980s.<sup>161</sup> In 1982, of Wattie's two most important processing crops, less than 1% of peas and approximately 17% of tomatoes were grown for fresh consumption.<sup>162</sup> Similarly, nearly all beans and sweet-corn were grown for processing.<sup>163</sup>

---

<sup>155</sup> Coriolis Research, *Overview of the New Zealand Apple Industry*, 13.

<sup>156</sup> *Ibid*, 4.

<sup>157</sup> *NZOYB*, 1975, Chapter 14b.

<sup>158</sup> *Ibid*.

<sup>159</sup> *Ibid* & *NZOYB*, 1979, Chapter 14b. In 1978, 47% of New Zealand vegetables were grown for fresh consumption.

<sup>160</sup> *NZOYB*, 1974, Chapter 14b.

<sup>161</sup> *NZOYB*, 1985, Chapter 14b.

<sup>162</sup> *NZOYB*, 1984, Chapter 15b.

<sup>163</sup> *Ibid*.



The structure of vegetable growing in Hawke's Bay remained static into the early 1980s but following the introduction of the Closer Economic Relations (CER) free trade agreement with Australia in 1983, Watties rationalised its portfolio of Hawke's Bay growers, diversified suppliers and prioritised Australian exports. Faced with mounting competition from Australian manufacturers, Watties reduced tomato suppliers from twenty-four to six<sup>164</sup> and removed local growers altogether from several other categories.<sup>165</sup> Restructuring continued into the 1990s and in a significant departure from its historic strategy Watties, still New Zealand's largest vegetable processor, began to source from lower cost overseas suppliers. Between 1990 and 1995, imports of partly processed vegetables rose by nearly 30% and imports of unprocessed vegetables doubled.<sup>166</sup> But ironically the firm became no less important to Hawke's Bay vegetable growers. In the early 1990s, offshore market development, particularly in Australia, became a priority for the company.<sup>167</sup> Dominated by Watties, exports of New Zealand processed vegetables surged from \$4.7m in 1975 to \$57.0m in 1985 and \$151.1 in 1995.<sup>168</sup> The Hawke's Bay growers that survived the Wattie cull did well from expanded Australian sales as exports of vegetables historically important to local growers soared. Frozen pea exports leapt from \$1.5m in 1975 to \$34.0m in 1995.<sup>169</sup> Similarly, exports of sweet-corn, which were virtually unknown prior to 1975, reached \$25.1m in the same year.<sup>170</sup> By the mid-1990s, progress was such that Australian sales rivalled the more established Japanese market.<sup>171</sup> But Watties was no longer just a Hawke's Bay firm, and the company's success in Australia generated a sharp lift in vegetable growing in other New Zealand provinces.<sup>172</sup> Between 1990 and 1995, the national area devoted to vegetables, both fresh and processed, rose 50% to 7,340ha.<sup>173</sup>

---

<sup>164</sup> Irving & Inkson, *It Must Be Wattie's*, 96.

<sup>165</sup> Ibid.

<sup>166</sup> "Vegetable imports by category, 1995," Statistics New Zealand, accessed August 15<sup>th</sup>, 2017, <http://www.stats.govt.nz/infoshare/ViewTable.aspx?pxID=4d26f4c2-0019-47bf-a9cf-bd0014cb4bc3>

<sup>167</sup> Irving & Inkson, *It Must be Wattie's*, 115.

<sup>168</sup> "Horticultural Facts & Figures, 1999," Hort Research, 3, accessed July 20<sup>th</sup>, 2018,

<http://www.freshfacts.co.nz/files/new-zealand-horticulture-facts-and-figures-1999.pdf>

<sup>169</sup> Ibid. In 1962, Hawke's Bay accounted for nearly 60% of all peas harvested for canning/processing.

<sup>170</sup> Ibid.

<sup>171</sup> Ibid.

<sup>172</sup> Watties opened new plants in Canterbury (Christchurch) and South Canterbury (Timaru).

<sup>173</sup> "Agriculture," Statistics New Zealand, accessed August 17<sup>th</sup>, 2017,

<http://www.stats.govt.nz/infoshare/ViewTable.aspx?pxID=b91f5748-17fd-422c-8eeb-36795dfc8a53>

Hawke's Bay vegetable growers able to meet Wattie's stringent quality and crop requirements survived, but underperforming local growers were ruthlessly discarded, a fact apparent in land usage statistics. In contrast to national trends, the area of Hawke's Bay devoted to vegetable growing fell 32% between 1985 and 1995 (see Table 2.1). The power imbalance between small growers and Watties that had existed since the 1950s was central to the decline. Returns from vegetable growing in Hawke's Bay had lagged those of pip-fruit since the mid-1960s, and the loss of supply contracts in the early 1990s forced many family-owned vegetable-growing businesses to convert their properties to other uses or leave their land unplanted. Between 1985 and 1995, approximately 900ha of vegetable land switched to other horticultural crops and a further 2,000ha was left unplanted (see Table 2.1). Land values played a critical role in decision making. Crucially, rural land values fell 22.3% between 1985 and 1989 (see Table 2.3). Lacking a buyer for their produce, unwilling to sell their land at suppressed prices or unable to afford the capital cost of conversion to either grapes or pip-fruit, many small-scale vegetable growers let substantial amounts of land on the Heretaunga plains lie fallow.<sup>174</sup>

The contrast with large, corporate vegetable growers is stark. Unlike small growers, company owned growers had the financial strength to diversify away from Watties and embrace new products. After 1990, new vegetable varieties appeared in Hawke's Bay, most notably buttercup squash.<sup>175</sup> On account of its superior storage properties, squash was not a process vegetable and, unlike most other vegetables, it could be exported fresh. As such, squash attracted superior margins.<sup>176</sup> Hawke's Bay quickly established a dominant position in the vegetable. Large family owned companies such as Bostock<sup>177</sup> and Brownrigg Agriculture were early adopters, planting several thousand hectares, mostly for Asian markets.<sup>178</sup> In 1975, squash was completely unknown in Hawke's Bay but by 1995 the

---

<sup>174</sup> Refer Table 2.2. The wine industry took up much of the unused land in the early 2000s.

<sup>175</sup> Japan was the dominant market.

<sup>176</sup> Claire Rogers, "Financial bite goes on growers," *The Dominion*, February 2<sup>nd</sup>, 2013.

<sup>177</sup> "Buttercup Squash," Bostock New Zealand, accessed September 20<sup>th</sup>, 2017, <http://www.bostock.nz/product/buttercup-squash/>

<sup>178</sup> "Export Squash," Brownrigg Agriculture, accessed September 20<sup>th</sup>, 2017, <http://www.brownrigg.co.nz/cropping/export-squash/>

province accounted for approximately 40%<sup>179</sup> of New Zealand's total squash exports of \$57.7m.<sup>180</sup>

The examples of Bostock and Brownrigg illustrate how changing market dynamics encouraged the corporatisation of family vegetable growers, a strategy that led to greater scale and diversity.<sup>181</sup> Brownrigg, founded in 1930, was corporatised in 1989.<sup>182</sup> Bostock followed suit in the late 1980s.<sup>183</sup> Subsequent growth was explosive. In the decade following corporatisation, Brownrigg posted revenue growth of nearly 30% p.a (compounded).<sup>184</sup> Similarly, Bostock, focused on a diversified range of organic products, became one of New Zealand's leading agribusinesses.<sup>185</sup>

Horticultural processors: an era of rapid change forces Watties to restructure.

Watties continued to trade successfully after Jim Wattie's death. Growth in absolute terms after 1975 is inflated by acquisitions but both margins and returns on equity are suggestive of a company in good financial health. Furthermore, as Hawke's Bay's third largest employer, the company remained a core element in the province's commercial landscape.<sup>186</sup> Of great importance, a key post-war continuity remained in place. Import protection was vital to Wattie's early success and continued to be so between 1975 and the early 1980s, a fact recognised by former Wattie's CEO David Irving.<sup>187</sup> Consequently, the advent of CER in 1983 and the progressive abolition of tariffs after 1985 brought significant pressure to the firm's competitive position, a strain that would in time contribute to the demise of Watties as a New Zealand owned firm.

---

<sup>179</sup> "Buttercup Squash," NZButtercupsquash.com, accessed September 20<sup>th</sup>, 2017

<http://www.nzbsc.com/growing.php>

<sup>180</sup> "Horticultural Facts & Figures, 1999," 3.

<sup>181</sup> Irving & Inkson, *It Must Be Wattie's*, 65-67.

<sup>182</sup> "A Great Partner," Brownrigg Agriculture, accessed September 18<sup>th</sup>, 2017,

<http://www.brownrigg.co.nz/brownrigg/>

<sup>183</sup> "Story," Bostock New Zealand, accessed September 12<sup>th</sup>, 2017, <http://www.bostock.nz/about/story/>

<sup>184</sup> "A Great Partner."

<sup>185</sup> Coriolis Research, *The Investors Guide To The New Zealand Food & Beverage Industry*, 103. Vegeez limited is another example. See "Vegeez," Vegeez Ltd, accessed Jul 5<sup>th</sup>, 2018 <http://www.vegeez.co.nz/> and "HB Business," Business Hawke's Bay, accessed July 20<sup>th</sup>, 2018, <http://www.businesshawkesbay.co.nz/news/index.htm?articleId=52>

<sup>186</sup> Irving & Inkson, *It Must Be Wattie's*, 32. Only Whakatatu and Tomoana were larger.

<sup>187</sup> *Ibid*, 34.

In the mid/late 1970s, changing social and business conditions began to erode Wattie's privileged position in the New Zealand economy. Following the death of its founder the company transitioned to a new, less experienced leadership group that included Jim Wattie's two sons.<sup>188</sup> Moreover, the period saw two highly symbolic events. In 1976, the first industrial action in the company's history suggested erosion in the social compact between the company and its employees.<sup>189</sup> Second, in 1979 Watties negotiated a manufacturing and distribution agreement with global food manufacturer, Heinz, the first time the company had partnered with a multinational.<sup>190</sup> In financial terms, Watties was performing well (see Table 7.2). But senior management of the time describe the company as a sleepy provincial business that had a "preoccupation with government intervention" which led to a state of "relative neglect."<sup>191</sup> Although Watties operated with an independent Board of Directors both Gordon and Ray Wattie were members. Hence it was equally accurate to describe the company as a complacent family firm run by the sons of its founder. Investors held similar views, and in late 1979 Wattie's share price slumped to a seven year low of \$1.00.<sup>192</sup>

The company's share price woes were being closely watched by competitors, and in 1980 Wattie's management was rocked by an unsolicited bid for 25% of the company by a Nelson based food manufacturer and baker run by two brothers from the Goodman family.<sup>193</sup> Watties in turn tabled a blocking bid for 25% of the Goodman Group. The resulting standoff was left unsettled but the Goodman's gained board representation, a position that was subsequently used to influence Wattie's investment strategy. In November 1983, Watties and the Goodman Group jointly purchased a 25% interest in New Zealand Forest Products (NZFP), a business quite unlike that of both suitors.<sup>194</sup> NZFP countered with a bid for 100% of Watties creating a complicated cross shareholding structure.<sup>195</sup> The resulting mess was eventually settled amicably but the saga confirmed the arrival of a more combative era in New Zealand business.

---

<sup>188</sup> Conly, *The First Fifty Years*, 175.

<sup>189</sup> *Ibid*, 171.

<sup>190</sup> *Ibid*.

<sup>191</sup> Irving & Inkson, *It Must Be Wattie's*, 57 & 59.

<sup>192</sup> *Ibid*; Conly, *The First Fifty Years*, 145. Wattie's share price was \$2.25 in July 1973 and \$1.00 in 1980.

<sup>193</sup> Irving & Inkson, *It Must Be Wattie's*, 57-59. Goodman Group was primarily a baker.

<sup>194</sup> Guy Robinson, "Spatial Changes in New Zealand's Food Processing Industry: 1973-1984," *New Zealand Geographer*, Vol.44, Issue 2 (October 1988): 75.

<sup>195</sup> *Ibid*, 76.

**Table 7.2. Wattie Industries Limited: select financial data, 1980-1983.**

Year	Turnover	Net profit	Shareholder equity	Return on equity	Net operating margin
1980	\$390,000,000	\$16,000,000	\$144,000,000	11.1%	4.1%
1983	\$574,000,000	\$35,000,000	\$245,000,000	13.6%	6.1%

Sources: Wattie Industries, New Zealand Companies Office, Conly.

The Goodman bid was highly symbolic for another reason - Watties was now considered a takeover target (a case of predator turned prey). Furthermore, the bid emphasised the importance of building greater scale and adopting new ways of doing business, realisations that gained particular momentum following the introduction of CER in March 1983.<sup>196</sup> Prior to CER, Australian owned food companies had never been more than moderately active in New Zealand and the agreement was regarded with great trepidation by Watties.<sup>197</sup> As a consequence, the company embarked on a significant programme of change to prepare for the expected entrance of Australian competitors. Importantly, Watties embraced more sophisticated marketing practices, launched new products in the Australian market and reduced operating costs. In contrast to the insular reign of Jim Wattie, the company now sought the views of outsiders. In 1983, Watties commissioned a report by global consultancy, McKinsey, which supported extensive reorganisation.<sup>198</sup> And, as we have seen, in a move that still resonates in Hawke's Bay today long-standing grower relationships were restructured aggressively.<sup>199</sup>

Following the election of the Fourth Labour government in July 1984, New Zealand trade policy was subject to further reform, a change that led to consolidation among local food manufacturers. Prior to 1984, tariff protection was among the highest in the OECD.<sup>200</sup> Consequently, food products manufactured by multinationals were largely absent in New Zealand's small market.<sup>201</sup> But after 1985 a programme of unilateral tariff reductions was introduced with the aim of full abolition by 1996. Meanwhile, import licensing was

<sup>196</sup> "New Zealand economic & financial chronology 2014-1982," Reserve Bank of New Zealand, accessed July 12<sup>th</sup>, 2017, <http://www.rbnz.govt.nz/about-us/nz-economic-and-financial-chronology>

<sup>197</sup> Irving & Inkson, *It Must Be Wattie's*, 45 & Conly, *The First Fifty Years*, 93.

<sup>198</sup> Irving & Inkson, *It Must Be Wattie's*, 61.

<sup>199</sup> *Ibid*, 96. Growers were aggressively culled. Anonymous discussions with growers highlight the extent to which this has not been forgotten (nor forgiven) thirty years later.

<sup>200</sup> OECD, *OECD economic surveys: New Zealand 1988/89* (Paris: OECD Publishing, 1989), 39.

<sup>201</sup> Irving & Inkson, *It Must Be Wattie's*, 34.

progressively dismantled, and in 1986 all tariffs were subject to a general 5% reduction.<sup>202</sup> The former tariff regime had undoubtedly aided Hawke's Bay food manufacturers. Sheltered by tariffs, employment in the province's fruit and vegetable processing industry rose by 69.4% between 1973 and 1979.<sup>203</sup> Furthermore, the absence of imports had enabled Watties to create and then dominate numerous new product categories.<sup>204</sup> The abolition of import protection forced food manufacturers in New Zealand to search for improved economies of scale<sup>205</sup> and in 1987 Goodman Fielder launched a successful bid for the 65% of Watties it did not own.<sup>206</sup> The new company, known as Goodman Fielder Wattie (GFW) immediately faced "mounting pressure from international companies"<sup>207</sup> and management argued that the merged company had to "restructure to survive."<sup>208</sup> In practical terms the policy saw Wattie factories shuttered in Timaru and Gisborne resulting in several hundred job losses.<sup>209</sup>

Although it is difficult to assess the financial performance of Watties once the firm became a fully integrated division within a much bigger corporate, the merger with Goodman Fielder can be judged a success in terms of enhanced competitiveness and a continued focus on diversification opportunities. Watties, with a market capitalisation of NZ\$494m in 1983, made up less than a quarter of the combined entity.<sup>210</sup> But because of its comparatively small size Watties benefitted greatly from being part of a larger Australasian company, an advantage that allowed the business to compete profitably against multinationals such as Heinz Australia.<sup>211</sup> In the late 1980s and early 1990s, with the support of GFW, Watties further developed its long standing product and market diversification

---

<sup>202</sup> Lewis Evans and Martin Richardson, "Trade Reform in New Zealand: Unilateralism at Work?" Victoria University of Wellington, February 1998, In *Relaxed Reciprocity: Historical and Modern Experience with Unilateral Trade Liberalization*, ed. J. Bhagwati, (Cambridge, Massachusetts: MIT Press, 1998), 11 & 61. For tariff rates in 2009 refer "Tariffs in New Zealand," *NZIER Viewpoints, Working Paper 2010/1* (2010): 6, accessed June 30<sup>th</sup>, 2018, [https://nzier.org.nz/static/media/filer\\_public/53/67/536738d3-47d5-4aee-b322-897fad0bc443/wp\\_2010-1\\_tariffs\\_in\\_new\\_zealand.pdf](https://nzier.org.nz/static/media/filer_public/53/67/536738d3-47d5-4aee-b322-897fad0bc443/wp_2010-1_tariffs_in_new_zealand.pdf)

<sup>203</sup> Robinson, "Spatial Changes," 76.

<sup>204</sup> Conly. *The First Fifty Years*, 81.

<sup>205</sup> *Ibid*, 175.

<sup>206</sup> Robinson, "Spatial Changes," 75. In 1982, Goodman acquired 10% of Wattie Industries on the NZX.

<sup>207</sup> Irving & Inkson, *It Must Be Wattie's*, 73.

<sup>208</sup> *Ibid*, 83 & 83-121.

<sup>209</sup> *Ibid*. In an extension of this rather dispiriting theme, Waitaki (a GFW subsidiary), was instrumental to the closure of the Whakatu freezing works in the same year.

<sup>210</sup> Robinson, "Spatial Changes," 75 & 76.

<sup>211</sup> Irving & Inkson, *It Must Be Wattie's*, 115.

strategy as part of a conscious decision to develop alternative revenue streams “rather than fight a long losing battle against imports.”<sup>212</sup>

Less positively the true catalyst for lasting change would prove to be Goodman’s M&A strategy. The addition of Watties added a significant division but facing tough competition from multinational food manufacturers, the Goodman brothers remained desperate for even greater scale. Consequently, GFW embarked on a debt fuelled acquisition binge. In 1992, with leverage at unsustainable levels, the architect of the strategy, GFW Chairman Pat Goodman, resigned.<sup>213</sup> In the same year, faced with a rapidly deteriorating financial position, GFW accepted a NZ\$565m bid for Watties by H.J Heinz of Pittsburgh.<sup>214</sup> Following the sale, several GFW executives disparaged Wattie’s performance.<sup>215</sup> But more accurately such comments aimed to justify the sale of a business acquired with great fanfare a mere five years earlier. In contrast, New Zealand equity analysts of the time regarded Watties as one of GFW’s better performing divisions.<sup>216</sup> In truth, GFW was forced to sell one of the company’s more marketable businesses to salvage its own balance sheet.

The Heinz era began with great excitement in October 1992. Wattie executives had never felt part of GFW and were pleased to move on.<sup>217</sup> Heinz was similarly enthused, CEO Tony O’Reilly describing the purchase as a “home run.”<sup>218</sup> Most importantly, Watties was seen as a complementary business and keen to retain the unique “Wattie Way,” Heinz sought to grow the business rather than retrench.<sup>219</sup> Moreover, Wattie’s plants in Hastings and elsewhere in New Zealand were regarded as more cost effective than Heinz factories in Asia, most notably Japan.<sup>220</sup> Furthermore, Heinz ensured that the firm would not be run as a division of Heinz Australia<sup>221</sup> and the US parent invested heavily in new plant, including the

---

<sup>212</sup> Ibid, 81.

<sup>213</sup> “Goodman Fielder Ltd. History,” Funding Universe, accessed September 20<sup>th</sup>, 2017, <http://www.fundinguniverse.com/company-histories/goodman-fielder-ltd-history/>

<sup>214</sup> Neville Gibson, “Buffet bags top Kiwi food brand,” *National Business Review*, February 15<sup>th</sup>, 2015.

<sup>215</sup> Author in meeting with Goodman Fielder investor relations executives, April 1993.

<sup>216</sup> Author in discussion with former ABN Amro New Zealand equity analysts, August 2<sup>nd</sup>, 2017.

<sup>217</sup> Irving & Inkson, *It Must Be Wattie’s*, 130.

<sup>218</sup> H.J Heinz Limited, *Annual Report*, 1993-94.

<sup>219</sup> Irving & Inkson, *It Must Be Wattie’s*, 181.

<sup>220</sup> Ibid, 174.

<sup>221</sup> Ibid, 156.

purchase of Tomoana's former freezing rooms in 1995.<sup>222</sup> For rebranded Heinz Wattie (HW) the outlook was bright but change was, nevertheless, inevitable. The internationalisation that Heinz brought to Watties came with aggressive performance targets as well as an uncompromising North American style of management that unsettled some New Zealand managers.<sup>223</sup> Even more importantly, Watties was now integrated into a global supply and manufacturing chain, a fact that further questioned the historic importance of Hawke's Bay growers to the company.

### Summary.

The period from 1975 to 1995 was characterised by 'Disruption' and 'Adjustment' in Hawke's Bay horticulture. Disruptors included deregulation, tariff reform and apple gluts whilst adjustment strategies included increased corporatisation and the search for scale. Together these forces loosened social and commercial bonds between growers, as did the re-emergence of long-standing ideological differences regarding centralised control of pip-fruit sales. Disruption extended to the processing sector. As protection ended competitive forces multiplied, corporations jostled for dominance, and established business relationships were questioned. By 1990, the post war consensus, typified by generally harmonious inter-relationships within Hawke's Bay horticulture, was in tatters. The creation of GFW and the purchase of Watties by Heinz, as well as the abolition of the APMB's domestic monopoly, were events emblematic of sharply altered social, political and business connections. The new era led to significant reform and the transition to a structure based on innovative varieties, greater scale and diversification. Adjustment extended to land use change, most particularly away from vegetables. But many small growers, particularly those with limited financial capabilities, struggled to adapt. In contrast, corporatised family businesses and company owned growers prospered. By 1995 a process of structural attrition was well advanced, one in which the weak or small were placed at a severe disadvantage.

### 1995 – 2010: Recovery and Stabilisation.

Between 1995 and 2010, Hawke's Bay horticulture continued to recover from the social, cultural and commercial disruptions that had emerged in the preceding two decades.

---

<sup>222</sup> "History," Wattie's Foods, accessed August 10<sup>th</sup>, 2017, <http://www.watties.co.nz/Our-History>

<sup>223</sup> Irving & Inkson, *It Must Be Wattie's*, 149, 151 & 152.



In common with earlier periods, strategies included innovative fruit and vegetable varieties, new markets and land use change. However, unlike the period 1975 to 1995, recovery was aided by the adoption of alternative business models and the entrance of the first viable alternative to Watties since the early 1970s: McCain Foods. By 2010, a sense of stability had emerged in most sectors. But success was uneven. Cohesion remained elusive in the pip-fruit sector and small growers continued to struggle. Similarly, processors were unable to emulate the 1960s success of Watties.

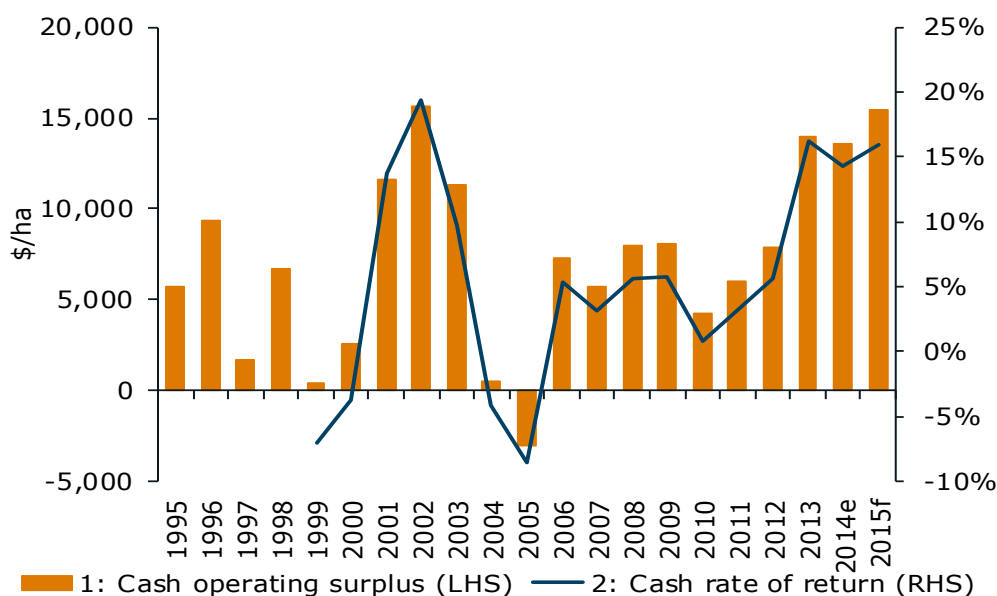
**Fruit growers: Pip-fruit industry remains in chaos leading to further deregulation and the emergence of a new business model.**

Profitability in the New Zealand pip-fruit sector became extremely volatile after 1995, a consequence of the heightened rate of planting that occurred after 1981. As Figure 7.3 suggests, cash operating surpluses between 1995 and 2000 were insufficient to cover interest and wages. Effectively, orchardists went unpaid for their labours for five consecutive years. Nor did they receive a return on capital employed. The dynamic is best understood in conjunction with Figures 7.1 and 7.2. Accelerated rates of planting after 1981 beset the industry with excess supply and, despite greater diversification, over exposure to legacy varieties. By 1995, Hawke's Bay was by some margin New Zealand's dominant apple growing region (see Figure 7.4) and understandably the problems experienced by the New Zealand pip-fruit industry were replicated in the province. Data from the Ministry of Agriculture and Fisheries show that the average Hawke's Bay orchard lost approximately \$2,000 per planted hectare in 1999/2000.<sup>224</sup>

---

<sup>224</sup> New Zealand Ministry of Agriculture & Fisheries (NZMAF), Economic Orchard Surplus (EOS) – EOS (2000).

Figure 7.3. New Zealand apple industry: volatile profitability, 1995-2015.



1: Cash operating surplus excludes financing costs, rent, depreciation and wages of management allowance/drawings. 2: Cash rate of return is economic orchard surplus/total orchard assets. Economic orchard surplus includes wages of management allowance. NB: Data after 2010 has been included to indicate ongoing stabilisation. Sources: ANZ & Ministry of Primary Industries (MPI), orchard data 1995-2015.

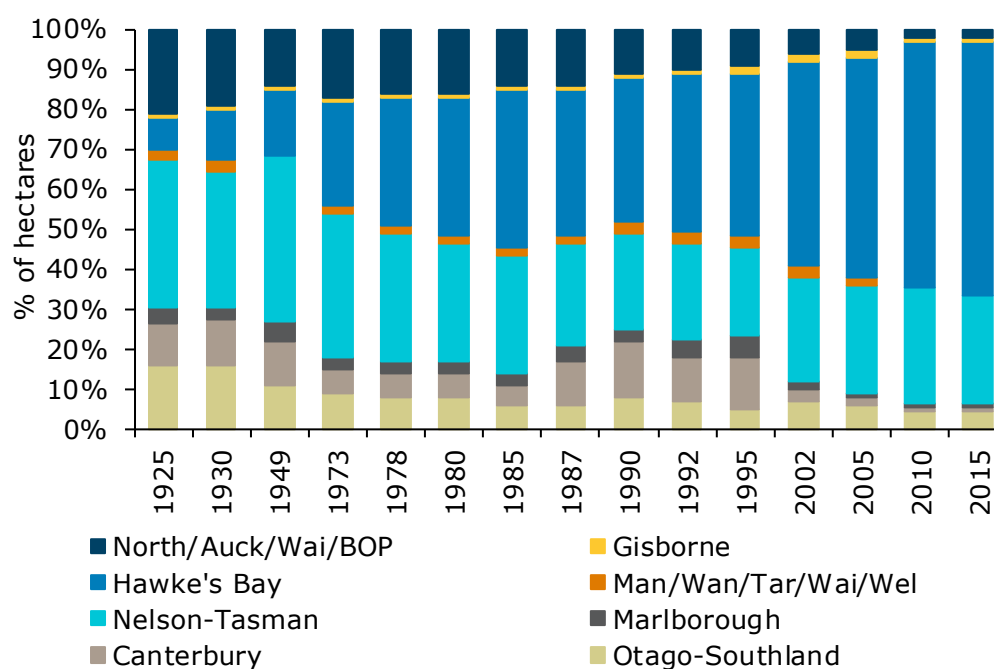
The collapse in pip-fruit profitability that occurred after 1995 provided the catalyst for the most significant structural change in the industry since the 1930s - termination of the APMB's export monopoly. For more than seventy years, industry regulation, government intervention and the single desk marketing structure of the APMB were topics of intense debate in Hawke's Bay.<sup>225</sup> In the late 1990s, these issues had lost none of their sensitivity. But the industry's structure was now vastly different to earlier decades when small scale family growers dominated pip-fruit. In 2001, anxious to develop their own distribution systems and brands, corporate growers and large-scale family growers successfully lobbied the Clark Government, leading to the abolition of the APMB's export monopoly. In June of that year, Agriculture Minister Jim Sutton tabled the Apple and Pear Industry Act Repeal Bill, ending APMB's single desk status.<sup>226</sup> Following export deregulation, the number of pip-fruit exporters increased sharply, reaching fifty-five in 2001 and ninety in 2005.<sup>227</sup>

<sup>225</sup> Mannering, *100 Harvests*, 66, 67 & 75.

<sup>226</sup> "Apple and Pear Industry Act Repeal Bill," Jim Sutton MP, accessed September 20<sup>th</sup>, 2017, <https://www.beehive.govt.nz/speech/apple-and-pear-industry-act-repeal-bill-first-reading>

<sup>227</sup> ANZ Bank & Pip-fruit New Zealand, *ANZ Agrifocus*, December 2015, 4.

Figure 7.4. New Zealand apple growing area: provincial percentages, 1925-2015 (% of total ha).



Sources: ANZ, Pip-fruit NZ, Ministry of Primary Industries (MPI) & NZAPMB. Data before 1975 and after 2010 have been included to illustrate the full history of regional pip-fruit production.

Despite these early signs of success, export deregulation resulted in a sharp decline in the number of pip-fruit growers and failed to resolve the structural over supply of apples. Between 1999 and 2010 the number of pip-fruit growers in New Zealand declined from 1,500 to 400.<sup>228</sup> In contrast, regulatory reform raised the profile of Hawke's Bay companies such as Apollo Apples (Beaton Family), Johnny Apple Seed/Yummy Fruit Company (Paynter Family), Taylor Corporation (Taylor Family), Mr Apple (Scales Corporation Ltd), Orchard Investments Limited (Sykes Family) and Bostock. By 2000, corporatised family growers and listed companies formed the industry's dominant grouping, not small family growers as was the case in the 1950s and 1960s.<sup>229</sup> Consolidation and rationalisation did not, however, cure pip-fruit's structural problems. In 2001, deregulation appeared to deliver an instant financial revival (see Figure 7.3) and in 2003 the average Hawke's Bay orchard posted a near record profit of approximately \$12,000/ha.<sup>230</sup> Recovery lasted a single year. In the 2004/05 season, the average Hawke's Bay orchard plunged to a record loss of \$4,000/ha when export apple prices collapsed due to aggressive competition between New Zealand producers.<sup>231</sup> The fall devastated the Hawke's Bay pip-fruit sector. Between 1995 and 2005 the area of Hawke's

<sup>228</sup> Ibid, 5.

<sup>229</sup> Includes horticultural assets held in family owned company structures.

<sup>230</sup> NZMAF, Economic Orchard Surplus (EOS) – EOS (2003).

<sup>231</sup> Ibid (2005).

Bay devoted to orchards fell by 22.5% to a level not seen since 1965 (see Table 2.2). The decline was replicated elsewhere in New Zealand. Between 1995 and 2008 the area of New Zealand in pip-fruit fell by an annual average of 5% (see Figure 7.1).

In the late 2000s the industry finally began to stabilise, a reflection of rising Asian demand, the adoption of innovative varieties and an infusion of new capital. In 2010, Europe/UK still accounted for over half of all pip-fruit exports, but Asian markets had moved from relative immateriality in the 1980s to 23% (see Table 7.3). Similarly, tart varieties preferred by the European market, such as Granny Smith, were now rivalled by sweeter apples demanded by Asian consumers. The trend had been underway for over thirty years but the shift in emphasis towards sweet, bright red apples accelerated after 1995 (see Figure 7.2). The change required enormous quantities of new capital, as much as \$40,000/ha in 2001.<sup>232</sup> Fortunately, the need for additional resources was well matched with corporatisation of the pip-fruit sector.<sup>233</sup> With greater diversification, large family growers and companies offered a more attractive proposition for lenders and were better placed to partner with the developers of new apple varieties, commonly offshore research institutes.<sup>234</sup> In contrast, for orchardists saddled with less desirable varieties and limited equity, conversion to new varieties such as Cripps Pink and Pacific Rose was unachievable due to a lack of development finance.<sup>235</sup>

**Table 7.3. New Zealand apple export destinations, 1984-2010 (% of total).**

	1984	1996	2005	2010
Continental Europe	45%	36%	44%	37%
UK (incl Eire)	17%	24%	18%	15%
Americas	15%	20%	18%	19%
Asia	7%	19%	16%	23%

Sources: NZOYB, 1984-2012, Pip-fruit NZ, Hort Research, MPI, Freshfacts (1984-2010) & Coriolis. 1985 and 1996 breakdowns not available.

The need for large amounts of adjustment capital led to new ownership and financing mechanisms but equity returns remained disappointing. In sharp contrast to the

<sup>232</sup> "Orchard Establishment Costs Low relative to US," AgFirst Consultants HB Ltd, last modified January, 2000, <http://www.agfirst.co.nz/wp-content/uploads/2017/06/Orchard-Establishment-Costs-Low-Relative-To-U.S..pdf>. Includes trellising and new rootstocks.

<sup>233</sup> "The Rise and Fall and Rise of Nigel Cooper," *Hawke's Bay Today*, July 28<sup>th</sup>, 2015.

<sup>234</sup> The developers of new apple varieties often required that a minimum number of trees be planted.

<sup>235</sup> Ibid & author in various discussions with CEO Orchard Investments Ltd, Robert Sykes, August 2017.

1940s and 1950s, when orchards were typically owned by small growers, approximately 50% of new plantings after 2005 occurred on leased land.<sup>236</sup> Unable to justify the combined costs of land (approximately \$50,000/ha) and conversion, even well-resourced growers prioritised capital for improved rootstocks, packaging, distribution channels and trellising systems. The latter innovation, which enabled growers to plant high productivity dwarf trees, lifted intensity to 3,000 trees per hectare, three times greater than that of the 1980s (see Table 7.1). Moreover, by 2010, lease terms of fifteen years at 5% p.a./ha (value), with an option to extend for a further fifteen years, had become commonplace in the province.<sup>237</sup> The emergence of lease arrangements aligned with a precipitous decline in the number of pip-fruit growers. Between the mid-1980s and 2010, the number of active growers in New Zealand declined by 80%.<sup>238</sup> Despite massive consolidation, equity returns for survivors remained disappointing. Cash returns recovered after 2005 but in 2010 the return on equity invested in a standard Hawke's Bay pip-fruit orchard was a paltry 2.6%, well below the 5.0% achieved by lessors.<sup>239</sup>

The financial situation was no better in other branches of the fruit growing industry in Hawke's Bay. Importantly, under the ownership of Heinz, Watties was less willing to assist struggling small scale growers, a change particularly evident in stone-fruit. As corporate growers aggressively pursued new apple varieties, the area in stone-fruit plummeted as a percentage of the area planted in fruit (see Table 7.4). Historically second only to pip-fruit, the decline reflected the preference for apples. But Wattie's revised procurement strategy was equally influential. For example, the company's new offshore sourcing model saw demand for Golden Queen peaches cut from 10,000 tonnes to 5,000 tonnes p.a.<sup>240</sup> As Golden Queens had been a foundation product for Watties since the 1930s, the downgrade was symbolic of structural change. But Heinz Wattie executives were unapologetic. CEO David Irving described such policies as emblematic of the "end of the long golden days of the post-war welfare state."<sup>241</sup>

---

<sup>236</sup> Ibid.

<sup>237</sup> Ibid.

<sup>238</sup> Rogers, "Financial Bite Goes on Growers."

<sup>239</sup> Ministry for Primary Industries (MPI), *Horticulture and Arable Overview*, 2010, 8.

<sup>240</sup> Newman, "Wattie's: How Close To Closing?"

<sup>241</sup> Irving & Inkson, *It Must Be Wattie's*, 90.

**Table 7.4. Production & acreage (pip-fruit & stone-fruit): Hawke's Bay, 1968/69 vs. 2012.**

	% of total fruit area – 1968/69	% of total fruit area – 2012
Apples	44.9%	74.8%
Stone-fruit	42.3%	12.5%
Other	12.8%	12.7%

Sources: Horticulture NZ, Hawke's Bay Regional Resource Survey (1970). 2010 figures unavailable.

Vegetable growers: industry seeks diversification and scale to offset low relative returns.

Between 1995 and 2010, the Hawke's Bay vegetable growing sector continued to pursue product and market diversification. As vegetable growers harnessed Hawke's Bay's favourable mix of good soils, temperate climate and aquifers to meet changing market demands, the sector diversified into new varieties. At the same time, the area devoted to established crops such as peas and sweet-corn oscillated sharply, suggesting a willingness on the part of growers to adjust to annual changes in market prices as much as the changing needs of processors (see Table 7.5).<sup>242</sup> Watties remained an important buyer after 1995 but Hawke's Bay growers sought to reduce reliance on the company. Although the presence of a guaranteed buyer, albeit not always benevolent, provided benefits in the 1950s and 1960s, dependence on Watties provided a painful lesson in the early/mid 1980s. Moreover, process contracts meant most Hawke's Bay growers were unable to access the higher margins offered by fresh produce.

In the late 1990s, Hawke's Bay vegetable growers looked to reduce these structural vulnerabilities through exports of non-traditional crops to Asian markets and deeper engagement with the domestic market for fresh vegetables. Following the now-established example of squash, growers lifted output of other vegetables suitable for sea freight to Japan, particularly onions.<sup>243</sup> Furthermore, growers looked to develop improved links with the domestic fresh vegetable market both directly with supermarkets and indirectly through auctioneers and distributors such as Turners & Growers. The dual focus strategy succeeded, and the area of the province in vegetables recovered by 90% between 1995 and 2010 (see Table 2.2). Increased demand for vegetables had a positive impact on rural land values.

<sup>242</sup> MPI, *Horticulture and Arable Overview, 2010*, 10 & Horticulture NZ, *Freshfacts 2014*.

<sup>243</sup> Horticulture NZ, *Freshfacts 2014*.

Between 2000 and 2010 the value of cropping land increased from an average of just over \$20,000/ha to approximately \$55,000/ha.<sup>244</sup>

**Table 7.5. Hawke's Bay - major vegetable varieties, 1997–2012 (planted area in hectares).**

	1997	2002	2007	2012 <sup>245</sup>
Squash	2,370	2,795	3,117	3,248
Peas/beans	1,294	654	1,062	2,506
Asparagus	513	449	189	110
Potatoes	349	481	491	589
Onions	nil	363	517	662
Sweet-corn	n/a	1,821	2,411	1,050
Tomatoes	n/a	428	418	n/a

Sources: Horticulture NZ - Freshfacts (1997-2012).

The increase in land values was further supported by the entrance of a new horticultural processor and a willingness to pursue land use change. In 1996, McCain Foods entered Hawke's Bay.<sup>246</sup> The arrival of a second major multinational processor reconfirmed the attractiveness of Hawke's Bay as a centre for food manufacturing and introduced a new buyer for a broad array of vegetables.<sup>247</sup> The resulting competition stimulated both planting rates and demand for suitable land.<sup>248</sup> Interest was particularly intense for properties with irrigation and drainage<sup>249</sup> and, in a reversal of the late 1980s and early 1990s, over half of all new vegetable growing land was sourced from the now struggling pip-fruit sector (see Table 2.2). Given the twin imperatives of drainage and irrigation, the most obvious source of new cropping land was that of struggling pip-fruit orchards with underperforming legacy varieties dating from the 1960s and 1970s. Importantly, after a decade and a half of disappointing returns from traditional apple varieties, such as Granny Smith, the financial reserves of such growers was exhausted. Consequently, leasing or selling orchard land to corporate vegetable growers became an extremely attractive option for older pip-fruit growers.

A sharp increase in the size of the average vegetable plot accompanied the conversion of pip-fruit orchards to vegetables. Meanwhile, the number of vegetable

<sup>244</sup> "Rural Report (Report Period Ending January 2011)," 3.

<sup>245</sup> Figures from 2010 are not available.

<sup>246</sup> "McCain upgrades Hastings processing plant," *Exporter Today*, August 15<sup>th</sup>, 2010.

<sup>247</sup> *Ibid.*

<sup>248</sup> *Ibid.*

<sup>249</sup> "Rural Report (Report Period Ending January 2011)."

growers fell. In common with pip-fruit, the consolidation of vegetable growing properties became a significant theme after 1975 as growers sought economies of scale in order to offset margin pressure. Between 1995 and 2010, the trend accelerated as larger vegetable growers acquired both adjoining properties and pip-fruit orchards. As the big got bigger, smaller growers were squeezed out: in 2012 only seventy two vegetable growers were left in Hawke's Bay, equating to an average of approximately 122ha/grower.<sup>250</sup> It is astonishing that a 2.3ha vegetable block was considered financially viable in 1952<sup>251</sup> and that the average vegetable block was approximately 6.7ha/grower in 1964.<sup>252</sup> The enormous increase in the size of the average vegetable block since the 1950s is all the more startling as, unlike the 1960s, land ownership by Hawke's Bay's major vegetable processors was not meaningful in 2010. The only example was a 57ha organic vegetable farm - and that was located in Canterbury.<sup>253</sup> Consequently, by 2010 medium/large family owned companies with fifty hectares or more dominated land ownership in the vegetable sector.

Paradoxically, greater scale, diversification and a broader demand base did not reverse the established problem of low relative returns. From 2006 to 2008, Hawke's Bay squash growers recorded an average gross return of \$1,010/ha whilst the equivalent figure for sweet-corn was \$1,378/ha.<sup>254</sup> Based on an average value for cropping land of \$50,000/ha at the time, gross returns of 2.0%/2.8% p.a remained very low. In contrast, the comparative figure for Hawke's Bay pip-fruit was 5.6%.<sup>255</sup> Vegetable growing was similarly less profitable than pip-fruit in the 1950s and 1960s and not even the adoption of fresh vegetable crops could ensure competitive returns. As squash output rose prices inevitably declined, and in 2010 returns from squash were little more than those of process vegetables.<sup>256</sup>

---

<sup>250</sup> "Farms by Farm type – TA. 2012 Ag census," Statistics New Zealand, accessed August 18<sup>th</sup>, 2017 [http://m.stats.govt.nz/browse\\_for\\_stats/industry\\_sectors/agriculture-horticulture-forestry/2012-agricultural-census-tables/farm-counts.aspx](http://m.stats.govt.nz/browse_for_stats/industry_sectors/agriculture-horticulture-forestry/2012-agricultural-census-tables/farm-counts.aspx) & Table 2.2. A decline of nearly 95% since 1970.

<sup>251</sup> NZOYB, 1953, Chapter 20b.

<sup>252</sup> NZOYB, 1965, Chapter 14b.

<sup>253</sup> "Kowhai Farm," accessed July 9<sup>th</sup>, 2018, <http://www.lincoln.ac.nz/About-Lincoln/Lincoln-University-Farms/?sti=1>. The farm was run in partnership. Wattie's first land purchase was in 1945 when 88 acres of land was acquired for vegetables. See *The Orchardist*, 5<sup>th</sup> July 1945.

<sup>254</sup> NZMAF, *Vegetable and arable farm monitoring reports*, 2008, 2009 & 2010.

<sup>255</sup> MPI, *Horticulture and Arable overview, 2010*, 8.

<sup>256</sup> NZMAF vegetable and arable farm monitoring reports, 2008 & 2010, 92.



### Horticultural Processors: the arrival of McCain Foods changes industry dynamics.

Though Hawke's Bay remained a Wattie's enclave under the management of Heinz, the era of unquestioned dominance was ebbing. In the immediate post war decades, Wattie's supremacy was so entrenched that even multinational food manufacturers were hesitant to invest in New Zealand. Accordingly, the Heinz takeover in 1992 was the first significant investment in the province by a multinational food processor in thirty-five years. Similarly, the entry of Canadian multinational, McCain Foods represented a major structural change. McCain was founded as a family-owned concern in 1957 and expanded to Australia in 1968. Like Watties during the 1950s and 1960s, the company grew by acquiring rivals and their approach was no different in New Zealand. In 1990, McCain purchased Timaru vegetable processor, Alpine Food Company, and in 1996 the company added Grower Foods, a small processor based in Hastings.<sup>257</sup> Importantly, McCain's production strategy differed to that of Heinz Wattie. The former was disproportionately dependent on potato-based products whilst the latter offered a much broader range. As a result, the addition of a Hawke's Bay plant enabled McCain to build a presence in fruit-based products, a segment of the market in which they were under-represented.<sup>258</sup> Hawke's Bay growers thus gained the first viable alternative to Watties since the demise of Unilever, Hastings, in 1975.

Heinz Wattie (HW) initially coped well with the arrival of McCain. The company's strategy since the 1980s, to "defend our New Zealand base and expand internationally," was a ready-made response.<sup>259</sup> Furthermore, McCain was a well-known competitor in most, if not all, of HW's existing markets. Nevertheless, the aggressive reduction in suppliers that Watties had undertaken since the early/mid 1980s enabled McCain to reach critical mass more rapidly than expected, and many discarded Heinz Wattie growers describe the relief of receiving an unsolicited phone call from McCain's procurement managers.<sup>260</sup> It is unimaginable that such approaches would have been successful, or indeed tolerated, in the

---

<sup>257</sup> "Humble Beginnings," McCain Foods, accessed August 10<sup>th</sup>, 2017, <https://mccainfoodservice.co.nz/about/our-history/>. Also see – Patrick O'Sullivan, "New Look McCain's plant opens in Hastings," *Hawke's Bay Today*, February 19<sup>th</sup>, 2011 & Daniel Stoffman, *From The Ground Up – The First Fifty Years Of McCain Foods* (Toronto: McCain, 2007), 75.

<sup>258</sup> Ibid (McCain).

<sup>259</sup> Irving & Inkson, *It Must Be Wattie's*, 141.

<sup>260</sup> Author in discussions with Eskdale and Bayview fruit growers. August 2017. Names withheld on request due to commercial sensitivity.

days of Jim Wattie. Although HW was now a very different company to that of the Jim Wattie era, Heinz executives, nonetheless, regarded the company's business culture as a key competitive advantage in the battle against McCain.<sup>261</sup> Consequently, Heinz "made no attempt to change Watties," and the company remained separate to Heinz Australia.<sup>262</sup> Furthermore, Heinz encouraged HW to pursue its own set of growth initiatives. Substantial new investments were made in Hastings after 1995 and the firm continued to develop new opportunities offshore.<sup>263</sup> Between 1993 and 1997, HW expanded its Japanese sales by 65%,<sup>264</sup> and by 2010/11 more than 60% of HW's product range was exported with Australia the key destination.<sup>265</sup>

Although processed food exports accelerated under Heinz ownership, the strategy introduced greater risk to HW, most notably foreign exchange volatility. Following CER, Wattie's most aggressive competitors came from Australia and confronting these challengers in their home market became a logical priority.<sup>266</sup> The emphasis continued under the ownership of Heinz, and Heinz Wattie (HW) was very successful in a number of important food categories in Australia.<sup>267</sup> Consequently, by the early 2000s, Australian dollar receipts represented an estimated 40% of total HW revenues. Less positively, offshore success came with heightened risk. Fixed/pegged exchange rates prior to 1985 meant export earnings were relatively predictable in New Zealand dollar terms. In contrast, floating exchange rates exposed exporters such as HW to exchange rate volatility.

Earnings volatility at HW became particularly intense in the decade following 2000. Table 7.6 details the performance of Heinz Wattie in the decade beginning 2001 and comparison with Tables 6.4 & 6.5 shows a negative contrast between the relatively linear growth in revenues and operating profits seen after 1960 and those of the 2000s. Furthermore, in 1983, the year before Watties was consolidated into Goodman Fielder, J.Wattie Canneries recorded revenues of NZ\$573m and operating profits of NZ\$35m (see Table 7.2). By 2010, Watties had become a bigger company but per annum growth rates

---

<sup>261</sup> Irving & Inkson, *It Must Be Wattie's*, 144, 149, 151 & 181.

<sup>262</sup> *Ibid*, 155 & 156.

<sup>263</sup> *Ibid*, 160, 168, 171 & 177.

<sup>264</sup> *Ibid*, 177.

<sup>265</sup> Claire Rogers, "Relocation stings Heinz Wattie," *The Dominion*, November 20<sup>th</sup>, 2012.

<sup>266</sup> Irving & Inkson, *It Must Be Wattie's*, 115.

<sup>267</sup> *Ibid*, 174.

were not flattering. Revenues had grown 36.6% in twenty-seven years, an average annual growth rate of only 1.36% p.a. Understanding the underperformance of Heinz Wattie after 1995 requires a closer examination of foreign exchange rates, most particularly the volatile relationship between the New Zealand and Australian Dollars. In 1983, the New Zealand Dollar (NZD) was worth A\$0.74c. By 1994, the NZD had reached A\$0.82c, a level that was only slightly lower in 2001 (A\$0.80c). In 2005, the NZD rose sharply to A\$0.93c before falling back to A\$0.80c by the beginning of 2010, a broad trading range of 16.25%.<sup>268</sup> The need to price Australian exports in constant local currency terms severely hampered growth, a problem noted as early as 1995 by CEO David Irving. Irving describes how HW “hit the wall” (suffered a sharp fall in profitability) when the NZD briefly soared above A\$0.90c.<sup>269</sup>

**Table 7.6. Heinz Wattie: selected financial data, 2001-2010.**<sup>270</sup>

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Revenues	\$605m	\$582m	\$601m	\$591m	\$617m	\$716m	\$686m	\$718m	\$700m	\$783m
Net Profit	\$68m	\$18m	\$14m	\$43m	\$44m	\$108m	\$50m	\$60m	\$59m	\$72m

Sources: New Zealand Companies Office & HW New Zealand. Heinz was paid a special dividend of \$155m in 2001. Returns on equity calculations are therefore meaningless.

The entry of McCain provides another explanation for HW’s relatively poor performance after 1995. But it was equally true that McCain was not immune to the same competitive pressures and foreign exchange risks faced by Heinz Wattie. In 2006, McCain Foods New Zealand reported sales of NZ\$243m, a staggering rise from nil in just ten years. Growth of such dimension can only have suppressed the financial performance of its main rival. But in contrast to their sales growth, McCain’s profitability was very disappointing. The company posted small profits in the first five years of operation but in 2005 and 2006, years in which HW competed aggressively and the New Zealand dollar rose sharply against the Australian Dollar, McCain recorded significant losses.<sup>271</sup> Growth thereafter was negligible, and in the 2010/2011 year McCain Foods New Zealand reported sales of NZ\$247m, barely higher than that of 2006.<sup>272</sup> By 2010, competition between HW and McCain’s had reached a stalemate but both companies continued to invest in Hawke’s Bay, a fact that emphasised

<sup>268</sup> IRESS & Thompson Reuters.

<sup>269</sup> Irving & Inkson, *It Must Be Wattie’s*, 65 & 168.

<sup>270</sup> Revenue figures are the more telling of the two numbers due to varying levels of taxation (%).

<sup>271</sup> New Zealand Companies Office, company number 358,737.

<sup>272</sup> Rogers, “Relocation stings Heinz Wattie.”

the province's ability to attract and retain a new generation of multinational food manufacturing companies.<sup>273</sup>

### Summary.

The period 1995 to 2010 was one of 'Recovery' and 'Stabilisation' whereby participants embraced new business models, developed greater scale and diversified supply arrangements and markets. For pip-fruit growers, success was uneven. Companies, often controlled by long established Hawke's Bay families, could access new capital which enabled them to plant more desirable varieties. In contrast, many undercapitalised smaller growers either liquidated or adopted a new model of ownership (leasing). Both outcomes led to land use change and consolidation, albeit returns remained underwhelming for survivors. Vegetable growers had a broadly similar experience. The size of the average vegetable farm rose spectacularly after 1995. At the same time, corporatisation gained further ground and, despite the entrance of McCain, the number of growers plunged. With improved access to capital, corporate and large family growers planted new, fresh vegetable varieties. Land values subsequently surged but, again, relative returns remained low. The themes of greater scale and diversification were similarly important to processors. In order to offset competition from McCain, HW continued to develop new markets in Australia and elsewhere. Furthermore, supply arrangements were reconfigured as Heinz Wattie sought to exploit the scale advantages available through its multi-national parent. Less positively, profitability failed to match that of earlier eras and came with increased volatility whilst McCain's growth was soon capped as HW sought to defend itself from the new entrant.

### Conclusion.

Government policies did much to shape the history of Hawke's Bay horticulture between 1975 and 2010. In the decade following 1975, single-desk regulations and tariff protection remained essential to the success of horticulture. Furthermore, tax incentives supported an ultimately unsustainable surge in planting. Although the New Zealand economy was progressively deregulated after 1985, it was not until 1994 that the APMB's domestic monopoly ended. But as subsidies were absent from horticulture, agricultural

---

<sup>273</sup> Ibid.

reform after 1985 had less direct impact. Of greater importance, processors had already begun to restructure their businesses following the introduction of CER in 1983. Although rising offshore competition forced Watties to diversify and develop greater scale, these strategies did not lead to lasting independence. As for pip-fruit, deregulation came in two bursts. 1994 was important but it was not until the early 2000s that the sector was fully deregulated. As a result, restructuring did not gain full traction until the mid-2000s.

Scale, diversification, corporatisation, new business models and the importance of capital access are further themes of importance. Growers had pursued greater scale and diversification since the mid-1970s but in the 1990s these trends accelerated. The size of orchard and vegetable plots increased prodigiously, and corporatisation enabled larger growers to access the capital required to reconfigure their businesses. Those that did not were either forced to leave the industry or lease their properties to better capitalised participants. Prior to 1994, the APMB had effectively acted as an 'infrastructure bank' for small growers and the end of single-desk regulations meant that capital access, something many small growers lacked, became a critical determinant of business success. The availability of adjustment capital was similarly important to the adoption of new varieties. Sweet, red apples for Asian markets continued to displace tart varieties favoured by European consumers, and comparison between the 1970s and 2000s shows a significant change in pip-fruit styles. Varietal change is similarly apparent in vegetable growing. Process vegetables dominated the years prior to 1995 but this pre-eminence began to erode as fresh vegetable growing gained ground. Again, growers that were unable to pursue non-traditional varieties, such as squash, were forced from the industry. A further commonality between fruit and vegetable growers should be noted. Diversification for both activities extended beyond varietal selection. Export markets were developed in Asia and McCain, an important new buyer, gave growers an alternative to Watties. Less positively, returns from vegetable growing continued to lag those of fruit growing.

By 2010, Hawke's Bay horticulture had stabilised, but recovery remained uneven and a number of structural problems were left unresolved. The pip-fruit industry remained fractious, the result of a long and, at times, bitter ideological battle between large and small growers. New varieties and rising productivity had placed the sector on a firmer footing than the 1990s, but progress remained the preserve of growers able to access adjustment capital.

In vegetable growing, the entrance of McCain provided some relief for growers reliant on processors, but the new entrant was, like Heinz Wattie, a multinational. Consequently, when compared to the period prior to 1975, the new structure replaced local feudalism with a group of corporate outsiders. As for the processors themselves, the sector was increasingly stable after 2005. But in common with pip-fruit and vegetable growers, profitability and growth failed to match that of the halcyon period from 1945 to 1975 and came with the added problem of sharply higher earnings volatility.



# Chapter Eight: Hawke's Bay

## Entrant Primary Sectors 1945-2010.

---

### Introduction.

Two criteria explain the decision to classify forestry and viticulture as 'entrant' primary sectors. First, for much of the period from 1945 to 2010, forestry and viticulture remained far smaller than Hawke's Bay's dominant land-based sectors of pastoral farming and horticulture. Second, although both sectors were present from the earliest stages of the settler economy, it was not until the 1970s and 1980s that exotic forestry and viticulture gained sufficient scale to be considered sectors in their own right. Consequently, 'entrant' classification reflects either relatively small size and/or comparatively recent development.

Key arguments in this chapter include the extent to which government policies and changing consumer trends shaped both industries in Hawke's Bay. Exotic forestry owes its very existence to government planting initiatives, and the sale of these forests in the 1980s attracted new types of owners and gave local processors the feedstock scale needed to justify investments. At the same time, the cessation of agricultural subsidies provided the impetus for tree planting on marginal pastoral farmland. Government policies, similarly, supported the nascent wine industry. Most importantly, a government subsidised vine extraction scheme in the mid-1980s enabled the industry to adjust to changing consumer tastes, a move that laid the basis for growth in subsequent decades. In both the forestry and viticulture sectors, large private companies, some overseas-owned, came to dominate.

Important primary sources used in this chapter include New Zealand Official Yearbooks, interviews with industry participants, the archives of Statistics New Zealand, Hawke's Bay Regional Museum and local newspapers. Secondary sources include the forest sector histories of Wright & Locke and the wine industry histories of Sweet and Cooper.<sup>274</sup> Other sources include the annual reports of forestry and wine companies. Both sections draw

---

<sup>274</sup> Matthew Wright and Arthur Locke, *Working Together: The History of Carter Oji Kokusaku Pan Pacific Ltd, 1971-1993* (Napier, Pan Pacific Forest Industries, 1999); Sweet, *Wine: Stories from Hawke's Bay*; Michael Cooper, *Wine Atlas of New Zealand* (Auckland, Hachette, 2008).



upon the work of industry organisations and relevant government departments, particularly the Ministry for Primary Industries and its forerunners.

### Hawke's Bay Forestry Sector 1945-2010.

A slow start for exotic timber as native logging dominates.

At the conclusion of WW1, concern emerged at the rapid decline and wasteful use of New Zealand's indigenous forests. In 1919, to ensure closer oversight of existing forests, a Department of Forestry was formed and in 1920 the State Forest Service was established (renamed the New Zealand Forest Service or NZFS in 1949).<sup>275</sup> Tasked with building an exotic forest industry to replace the use of depleting native trees, the State Forest Service planted 376,000 acres of plantation forest (mostly pine) on public land between 1923 and 1936.<sup>276</sup> Although the pace of state planting eased significantly after 1937, the government's exotic forestry estate totalled 465,000 acres in 1955 with a further 449,000 acres planted on privately held lands. Although these forests were relatively immature, exotic forest output was equal to half of New Zealand's timber needs by the mid-1950s. Production was dominated by a single species – Monterey/Radiata Pine. Although only 6% of New Zealand forests were classed as exotic in 1960, 59% of all non-indigenous plantings were classified as Radiata.<sup>277</sup> After 1960, exotic planting gained significant momentum. Exotic forests grew in size from 1.3m acres in 1965<sup>278</sup> to 1.7m acres in 1975, an increase that led to a sharp decline in native logging.<sup>279</sup> By the mid-1970s, indigenous forests provided approximately 11.5% of total wood production, a figure that declined to 4.0% by 1989 (see Table 8.1).<sup>280</sup>

<sup>275</sup> NZOYB, 1920, Chapter 17, NZOYB, 1921-22, Chapter 17 & NZOYB, 1956, Chapter 21.

<sup>276</sup> NZOYB, 1956, Chapter 21.

<sup>277</sup> NZOYB, 1961, Chapter 16. The total for pine as a whole was 76%.

<sup>278</sup> NZOYB, 1965, Chapter 15.

<sup>279</sup> NZOYB, 1976, Chapter 16. State planting rates increased five-fold between 1961 and 1976. Private rates increased ten-fold.

<sup>280</sup> NZOYB, 1990, Chapter 16.2 & 16.3.

**Table 8.1. New Zealand timber production and sources, 1945-1980.**

Year	Output (board feet- millions)	% exotic	% indigenous
1945	340	26.2%	73.8%
1950	478	32.4%	67.6%
1955	616	47.6%	52.4%
1960	694	51.2%	48.8%
1965	736	64.3%	35.7%
1970	1,008	86.8%	13.2%
1975	1,123	88.5%	11.5%
1980	1,135	90.2%	9.8%
1985	977	93.9%	6.1%
1989	795	96.0%	4.0%

Sources: NZOYB, 1956 & 1961, 1966, 1976, 1981, 1989.

In Hawke's Bay, continued availability of native logs and a shortage of suitable land slowed the shift to exotic forestry. But as pastoral farming profits sank after 1975, the sector grew strongly. In the 1930s, the need to control water runoff and provide soil stabilisation underpinned the province's earliest exotic plantings, most of which were Radiata pine.<sup>281</sup> But these were non-commercial forests. In the mid-1960s, though the merits of Radiata as a timber crop gained broad acceptance, uptake remained small. In 1965, exotic forests occupied a mere 8,000ha of Hawke's Bay, and 42% of the province's timber needs continued to be met by native felling. By 1975, the area in exotics had grown to 24,000ha but Hawke's Bay remained an insignificant part of the national exotic estate of over 692,000ha.<sup>282</sup> The limited availability of suitable land, most of which was located on the periphery of the province and committed to pastoral farming, posed a particular problem. As the profitability of these properties relied on the price of wool, commercial forestry was considered sub economic in the 'wool boom' era of the 1950s and 1960s. But after 1975, as the value of wool continued to fall in real terms, forestry conversions gained momentum at a ratio of nearly 1:1. The area in exotics more than doubled between 1975 and 1985 and doubled again by 1995, a total increase of 89,000ha, most of which was planted on marginal pastoral land. In the same period (1975 to 1995), the pastoral area of Hawke's Bay declined by 81,000 ha (see Table 2.1).

<sup>281</sup> *Hawke's Bay Regional Resource Survey*, 104 & 105.

<sup>282</sup> NZOYB, 1976, Chapter 16, section 15.

**Table 8.2. Early government owned exotic forests in Hawke's Bay, dates of establishment & area.**

Gwavas	1944	7,105 acres
Esk	1950	4,889 acres
Mohaka	1958	4,671 acres
Kaweka	1964	2,634 acres

Sources: Hawke's Bay Regional Resource Survey & Trotman, 152.

The conversion of pastoral land to exotic forest faced the further impediment of farmer opposition. Most specifically, the permanent loss of productive farmland to exotic forest was widely regarded as short-sighted commercial folly. In 1959, the President of Hawke's Bay Federated Farmers, P.S Plummer, issued a strongly worded statement questioning the wisdom of converting farmland to forest, and reticence on the part of farmers soon became a pattern.<sup>283</sup> In 1961, NZFS Director of Forest Management, A.P Thompson, described forestry as the "poor handmaiden of agriculture" and observed that forestry is expected to "justify any encroachment" onto agricultural land, no matter how low its quality.<sup>284</sup> The problem of farmer opposition was not unnoticed by the Holyoake Government and in 1970, in order to accelerate the rate of planting in Hawke's Bay, a forestry encouragement loan scheme was implemented by the NZFS.<sup>285</sup> Despite planting incentives, pastoral sector resistance to forestry remained entrenched and exotics were continually forced onto "remote, steeper less productive land" due to the "objections of farming interests."<sup>286</sup> Similarly, the commercial viability of forestry in the province remained an enduring concern. In 1983, a survey of pastoral farmers within the Wellington Conservancy (which at that time included Hawke's Bay) suggested that the financial advantages of farm conversions were insufficient on their own to motivate exotic planting.<sup>287</sup>

Fluctuations in forest planting reflect the profitability of pastoral farming.

As pastoral profitability continued to fall after 1975, 'farm to forest' conversions in Hawke's Bay greatly accelerated. The province was widely regarded as an ideal location for

<sup>283</sup> "State departments quarrel over 5,500 acres of unfarmed land," *Hawke's Bay Herald Tribune*, November 14<sup>th</sup>, 1959.

<sup>284</sup> A.P Thompson and M.B Grainger, "Some Bases for Comparing the Relative Economics of Farming and Forestry In New Zealand," *New Zealand Journal of Forestry*, Vol.8, No.3 (1961): 441.

<sup>285</sup> Parliamentary Debates, 1<sup>st</sup> Session 36<sup>th</sup> Parliament 1970, Hansard Vol.370, 4545.

<sup>286</sup> C.G.R Chavasse, "Forestry and the small grower: Diversification in Forestry," 35.

<sup>287</sup> *Ibid*, 41.

exotic forestry,<sup>288</sup> and by 1985 68,000ha of exotic forests had been planted. A further 45,000ha was added in the following decade, 92% of which was Radiata Pine.<sup>289</sup> Between 1980 and the early 1990s, the size of Hawke's Bay's exotic forestry estate increased by over 50%,<sup>290</sup> and in the same period the area of productive Hawke's Bay land occupied by 'exotics' rose from 4% to 7%.<sup>291</sup> Growth reflected the deteriorating economics of pastoral farming following the cessation of SMPs and ongoing decline in pastoral prices. Ministry of Forestry figures from 1992 indicate that the pre-tax return from Hawke's Bay exotic forestry was between 7% and 12% per/ha<sup>292</sup> compared to less than 4% for pastoral farms.<sup>293</sup> The compelling economics of forestry drove a sharp rise in the size of the exotic estate in Hawke's Bay relative to other New Zealand provinces, and in 1992 5.6% of the national exotic estate was located in the province against 3.9% in 1975.<sup>294</sup>

Although growth was recorded in all districts of Hawke's Bay, a disproportionate percentage of new forest plantings continued to occur on farms located in marginal pastoral areas. In the mid-1980s and early 1990s, new forests were added in areas of low pastoral productivity, such the Esk Valley and Tangoio to the near north of Napier. Moreover, hill country farms near Te Pohue and Te Haroto were converted to exotic forest along with properties at the Kaweka Range end of the Napier-Taihape Road (Kuripapango).<sup>295</sup> Similarly, numerous exotic plantings occurred in the Wairoa District, particularly inland of Wairoa Township and Mahia.<sup>296</sup> These areas shared an important commonality. All were located on the "pioneer fringe."<sup>297</sup> In the immediate post war decades, high wool prices provided the economic justification for pastoralism in these peripheral farming zones but by the 1990s, with wool prices near an all-time low in real terms, conversion became an attractive option for farmers with limited equity.

---

<sup>288</sup> New Zealand Ministry of Forestry (NZMOF), "Regional Studies: Hawke's Bay," February (1994): 15.

<sup>289</sup> NZMOF, "Hawke's Bay Forestry Region - MAF Forestry Outlook," (1992): 49.

<sup>290</sup> Ibid.

<sup>291</sup> Ibid, 49 & 50.

<sup>292</sup> "Regional Studies: Hawke's Bay," 17. Net = 4.6%/7.9%.

<sup>293</sup> See Chapter 3, "1975-1995."

<sup>294</sup> "Hawke's Bay Forestry Region," 49.

<sup>295</sup> See Figure I1.

<sup>296</sup> Ibid, 51, National Exotic Forestry Description (NEFD) 2005, Table 10.9.

<sup>297</sup> Scott, "Farming in Hawke's Bay," 30.

**Table 8.3. Exotic Forestry Area & Growth (000'sha) vs. Stock Units/ha, 1945-2010.**

Year	NZ Area	HB Area	NZ rise (%)	HB rise (%)	SU/ha ratio
1946	332	nil	-	-	8.5
1955	344	5	+3.6%	n/a	10.6
1965	395	7	+14.8%	+40.0%	11.4
1975	692	24	+75.2%	+342.8%	13.9
1985	1095	68	+58.2%	+283.3%	12.7
1995	1478	113	+35.0%	+66.2%	10.4
2005	1811	132	+22.5%	+16.8%	13.7
2010	1738	127	-4.0%	-3.8%	12.6

Sources: NEFD (2011), Hansen/Knowles/Halliday (1-11).

The choice between pastoralism and exotic forestry was not, however, binary. Most importantly, as realisable cash flows from forestry are approximately thirty years in the future, many Hawke's Bay farmers pursued partial conversion. Although a fringe activity for many decades, farm forestry has a long history in the province. The Hawke's Bay Farm Forestry Association held its first field day in 1956,<sup>298</sup> and by the 1960s farm forestry was a small but active participant in the sector.<sup>299</sup> After 1985, small forest holdings, located in prime pastoral areas, proliferated as farmers diversified into forests, either as harvestable shelter belts or as small/medium sized farm lots. The growing acceptance of farm forestry meant that expansion of the exotic forestry area during the mid-1980s comprised both large plantations and smaller holdings, often on small pockets of low-grade land located within otherwise well-performing farms. Although the majority of plantations in the province exceeded 1,000ha in size, relative to other New Zealand regions the number of small lots (100ha or less) was disproportionate in Hawke's Bay.<sup>300</sup> The success of farm forestry in the province reflected strong relative returns. Forests planted on low value areas of established pastoral farms delivered a return on investment approximately three times greater than that of full conversion.<sup>301</sup>

By the early 1990s, forest ownership in Hawke's Bay was diverse and included large institutional investors alongside more established participants such as farmers and processors. Anxious to ensure that their mills had sufficient feedstock, processors were

<sup>298</sup> Kevin Thomsen et al, *Guide to successful Farm Forestry: A Hawke's Bay Perspective* (Napier: New Zealand Farm Forestry Association, 2005), 1.

<sup>299</sup> *Hawke's Bay Regional Resource Survey*, 109.

<sup>300</sup> *Ibid*, 49, 57.

<sup>301</sup> Alex Olssen et al, "A Profit Expectations Dataset for New Zealand, 1990-2008," *Motu Consulting, WP 12-07* (June 2012): 18, accessed November 12<sup>th</sup>, 2017 [http://motu-www.motu.org.nz/wpapers/12\\_07.pdf](http://motu-www.motu.org.nz/wpapers/12_07.pdf). Also see Table 2.4 (Pastoral breeding land). AEA = \$100 pa, Land value range \$7,000/\$2,500 per H.A.

particularly active acquirers of existing forests. Most importantly, Oji Sankoku Forests (OSF) controlled 30,000ha, much of which was purchased from the New Zealand Government between 1988 and 1992.<sup>302</sup> The remainder was split between OSF's New Zealand partner Carter Holt Harvey, farmers, Māori Trusts, HBRC and a small number of forestry investment funds.<sup>303</sup> In 1995, Pan Pac Industries (formerly OSF) was the single largest forestry holder with around 25% of the total exotic area. Nevertheless, small/medium sized woodlots remained of great significance, accounting for approximately 32%. It is similarly important to note the emergence in the mid-1990s of dedicated forestry investment funds such as Roger Dickie and Hancock Natural Resources (collectively 43% in 2010). The entry of professional forestry investors represented an important structural change.<sup>304</sup> These groups were not, however, homogenous. Dickie attracted funds from small scale New Zealand investors whilst Hancock, a large international institution, drew its funds from the US wholesale investment market.

In the early 2000s, after nearly twenty years of rapid growth, the pace of new forest planting in Hawke's Bay slowed appreciably as it did across New Zealand.<sup>305</sup> In common with earlier decades, planting rates reflected the fortunes of the pastoral sector. But unlike the 1980s, the forestry sector was now the comparative underperformer. Consequently, no net addition to the province's exotic forestry estate occurred after 2005, and by 2010 the planted area was slightly smaller in size (see Table 2.1). The decline aligned closely with rising stock carrying rates, a key indicator of pastoral productivity. Estimates from 2004 suggest that on less productive pastoral land (capable of supporting between six and ten stock units/ha) conversion to exotic forestry was a realistic option for Hawke's Bay farmers. But when stock units/ha exceeded twelve, there was little economic incentive to convert.<sup>306</sup> Between 1945 and 2010, stock intensities Hawke's Bay ranged between 8.5x (1945) and 13.9x (1975).<sup>307</sup> After 1975, as pastoral profits fell, carrying rates on Hawke's Bay pastoral properties entered a protracted period of decline, a trend closely correlated with increased

---

<sup>302</sup> Ibid, 49-56. Also see "Regional Studies: Hawke's Bay," 8.

<sup>303</sup> Ibid.

<sup>304</sup> New Zealand Ministry of Agriculture & Fisheries (NZMAF), "Hawke's Bay Forest Industry and Wood Availability Forecast," (2008): 5.

<sup>305</sup> Ibid & NEFD (April 2011): 6, 7, 20 & 21.

<sup>306</sup> L.W Hansen, R.L Knowles & M Halliday, "Growth and Profitability of Radiata Pine Farm Forestry In Hawke's Bay and Wairarapa," *Forest And Farm Plantation Management Co-operative*, Report 89 (May 2004): 2 & 11.

<sup>307</sup> Refer Table 2.2.

rates of forest planting.<sup>308</sup> Conversely, when intensities recovered between 1995 and 2005, the size of the exotic estate peaked and then fell slightly. The declining appeal of forestry was further reinforced by a sharp fall in export log prices after 1994 (see Table 8.4), a negative that reduced a key revenue stream and thus the economic rationale for new exotic forests, large plantations and small farm woodlots alike.

**Table 8.4. Export log prices: value in real & nominal terms, 1992-2010.**

	Real Index	Nominal – Dec quarter (\$/tonne)
1992	1.60	\$154
1995	1.75 (peaked at 2.7 in 1994)	\$140
2000	1.50	\$109
2005	1.00	\$93
2010	1.00	\$115

Sources: Statistics NZ (log price series: NZ Log-price-series-to-june.xls), MPI & Motu (WP12-07) estimates, 8. Notes: data not collected prior to 1992, all grade average.

Change in forest ownership was a further impediment to exotic planting in Hawke’s Bay but forests planted in earlier decades ensured a healthy outlook for the sector. The sale of the last government owned forests in 1992 removed the most significant developer of large-scale exotic forestry in New Zealand. At the same time, confusion regarding the position of exotic forests within the proposed carbon trading regime dissuaded private investment.<sup>309</sup> Furthermore, US investment funds displayed a preference for existing rather than new forests. Fortunately, the size and age profile of the existing exotic forestry estate in Hawke’s Bay underwrote many years of future wood supply. In 2010, 29.2% of the planted area in the province was ten years or less in age. The equivalent figure for New Zealand was 25.8%.<sup>310</sup> Exotic forestry in Hawke’s Bay was a late starter but the province’s relatively youthful forests resulted in an attractive growth outlook for its forestry sector.

Forestry processors: as native timbers dwindle, exotic wood processing surges.

Given the general absence of exotic forests in Hawke’s Bay in 1945, processors remained disproportionately reliant on indigenous forests for several decades thereafter. Native timber mills had been active in Hawke’s Bay since the 1860s and clearances related to the expansion of pastoral farming provided a convenient and regular supply of native

<sup>308</sup> Stock intensities provide a useful proxy for long term farm profitability as they reflect the extent to which farmers are able to invest in and maintain the productive capacity of their properties.

<sup>309</sup> “Commodifying Carbon,” UK Overseas Development Institute, last modified November 2010, <https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/6307.pdf>

<sup>310</sup> NEFD (April 2011), 30 & 31.

logs, mostly rimu.<sup>311</sup> After WW2, New Zealand timber processors began to reduce the use of native logs but in contrast to other provinces Hawke's Bay had very little in the way of exotics to fill the void.<sup>312</sup> Consequently native timber mills, most of which were located on the mountainous edge of the province, remained very active. In 1969, the intensity of native forestry was 50% higher in Hawke's Bay than nationally (see Table 8.5), and for the seventeen timber mills that operated in Hawke's Bay at the time (all of which were privately owned), native logs remained an essential feedstock.<sup>313</sup>

**Table 8.5. A late transition: Hawke's Bay timber mill feedstock, 1955-90.**

Year	HB % exotic	HB % indigenous	NZ % indigenous
1955	51.9%	48.1%	47.6%
1960	46.7%	53.3%	48.8%
1965	58.3%	41.7%	35.7%
1969	59.0%	41.0%	27.1%
1990	99.5%	0.5%	neg

Sources: *Hawke's Bay Regional Resource Survey* & NZMAF (2008).

The inevitability that native logging would cease forced the processing sector in Hawke's Bay to restructure, a change that laid the basis for sustainable long-term growth. Between 1970 and the early 1990s, native logging collapsed in Hawke's Bay.<sup>314</sup> The decline had a significant impact on timber milling and nine mills closed, leaving just eight in operation in 1992 (see Table 8.6). As the majority of exotic forests in the province had not yet reached maturity, a severe shortage of logs developed and in the same year the province's entire log production schedule was pre-committed until 2000.<sup>315</sup> Nevertheless, Hawke's Bay's relatively painful transition to exotic logs did not hamper the development of the province's wood processing sector.<sup>316</sup> Large processors, such as Pan Pacific Industries (Pan Pac), were able to draw on supplies from outside of the province to augment their own forests.<sup>317</sup> Furthermore, in the mid-1990s forests planted in the mid-1960s (such as Kaweka) began to mature.

<sup>311</sup> *Hawke's Bay Regional Resource Survey*, 107.

<sup>312</sup> *Ibid*, 112.

<sup>313</sup> *Ibid*.

<sup>314</sup> "Hawke's Bay Forest Industry and Wood Availability Forecast," 29 & 31.

<sup>315</sup> "Regional Studies: Hawke's Bay," 22.

<sup>316</sup> Pan Pac's Whirinaki plant would be considered small scale in Japan. See - Frances Maplseden, "Japanese Sawmilling industry – Current Situation, Historic Trends and Comparison with the NZ Industry," *New Zealand Journal of Forestry Science*, Vol.23, No.2 (1993): 211 & 212.

<sup>317</sup> "Regional Studies: Hawke's Bay," 9. Pan Pac's 550,000 tonne annual intake was exclusively exotic.



As the supply of exotic logs gradually improved the processing sector grew prodigiously in Hawke's Bay, most particularly Pan Pac. Between 1992 and 2010, timber processing capacity maximums increased threefold, timber production rose by a factor of 3.6 and timber exports increased by a factor of approximately three.<sup>318</sup> Unlike earlier decades, growth was shared with second tier mills. but Pan Pac continued to dominate by a very wide margin. The company accounted for 65% of the growth in Hawke's Bay processing capacity between the early 1990s and 2010, and with approximately 80% of all volumes Pan Pac remained by some margin the dominant force in Hawke's Bay forestry (see Table 8.6). In 2010, the firm's Whirinaki plant was not only the largest facility of its type in the province but the only one capable of processing more than 10,000-25,000 cubic metres of timber per year.

**Table 8.6. Hawke's Bay sawmills and timber processing capacity, 1992 & 2010 (million cubic meters p.a).**

Entity	Location	1992	2010	%
Pan Pacific Industries (Pan Pac)	Whirinaki	120,000	300-480,000	79%
Permilltreat Timbers	Fernhill	5,000-10,000	closed 2001.	nil
Waipawa Timber	Waipawa	5,000-10,000	10,000-25,000	4%
Clapham Sawmilling/Clyde Lumber	Wairoa	< 5,000	10,000-25,000	4%
Hedley & Sons/East Coast Lumber	Wairoa	< 5,000	10,000-25,000	4%
Waitane Timber Products	Napier	<1,000	10,000-25,000	4%
Tumu Timbers	Hastings	< 1,000	secondary only	
Waipuna Lumber	Porangahau	< 1,000	secondary only	
Napier Pine	Napier	n/a	10,000-25,000	4%
Kiwibackyard Co	Waipukurau	n/a	500-5000	1%
	Maximum Vol	153,000	610,000 <sup>319</sup>	

Sources: NZ Ministry of Forestry (2008), NZ Ministry of Primary Industries & Mitchell Dayesh.

#### Case Study: Pan Pac Forest Products (1973-2010).

Pan Pac has anchored the Hawke's Bay forest industry since 1973 and as such the company provides an excellent way to assess sector trends from the early 1970s through to 2010. Although the concept of a large-scale pulp and timber mill was first mooted in November 1965 it was not until the formation of Pan Pac in 1973 that real progress occurred.<sup>320</sup> From inception Pan Pac had strong international links. Carter Consolidated, a privately-owned Auckland based forestry company established in 1896, held 60% but two

<sup>318</sup> "Hawke's Bay Forest Industry and Wood Availability Forecast," 29 & 30. Figures estimated for 2008-2010.

<sup>319</sup> Hawke's Bay's total capacity including the Pan Pac pulp mill was estimated at 1.1m cubic meters in 2008.

See Ibid, 3.

<sup>320</sup> Wright & Locke, *Working Together*, 6.

Japanese forest products companies, Oji Paper and Sanyo Kokusaku Pulp,<sup>321</sup> owned the balance.<sup>322</sup> Although Carter was based outside of Hawke's Bay the company offered its Japanese partners an advantage not available from local firms. Under the terms of the partnership agreement, Carter Consolidated was responsible for log supplies<sup>323</sup> and in 1970 the firm had unexpectedly won a tender for 220m cubic meters of exotic logs from the government owned Kaingaroa Forest,<sup>324</sup> a supply arrangement that continued until 1992.<sup>325</sup> Of equal importance, in 1971 Carter amalgamated with established Hawke's Bay timber processor, Robert Holt & Sons, fortuitously the owner of 25,000ha of Radiata Pine.<sup>326</sup> Consequently, the log supply pressures responsible for the demise of native timber mills in the province did not apply to the Pan Pac joint venture. The involvement of Carter Consolidated and the acquisition of Robert Holt, which ended local ownership of large-scale forestry assets in Hawke's Bay, were essential to the creation of Pan Pac but New Zealand involvement in the venture did not last. In 1991, a renamed Carter Holt Harvey reduced its interest in Pan Pac to 10%, and in 1993 the Japanese partners assumed full control on a pro-rata basis.<sup>327</sup> In 2007, Oji moved to 100% ownership.<sup>328</sup> Despite these various shareholding changes, Pan Pac's strategy remained as it was in 1973. Whirinaki still operated as a dual-purpose plant producing both timber and pulp. Likewise, the mill continued to acquire logs from external parties with continuity of supply provided by Pan Pac's own plantation forests.

The vertical integration strategy employed by Pan Pac since 1973 generated impressive growth in both production volumes and exports. In 1974, 79,000 tonnes of pulp and 28,000 cubic meters of timber were produced.<sup>329</sup> By 1993, output had increased to

---

<sup>321</sup> "Regional Studies: Hawke's Bay," 9.

<sup>322</sup> Wright & Locke, *Working Together*, 10.

<sup>323</sup> *Ibid*, 57. Hawke's Bay was chosen on account of its projected, not current, wood supplies.

<sup>324</sup> *Ibid*, 8 & 53.

<sup>325</sup> *Ibid*, 61.

<sup>326</sup> *Ibid*, 53.

<sup>327</sup> *Ibid*.

<sup>328</sup> "Process Water Discharge - Resource Consent Application," Mitchell Dayesh and Pan Pac Forest Products, last modified 27<sup>th</sup> June, 2017, <http://www.hbrc.govt.nz/assets/Document-Library/Consents/Notified-Consents/CD170262W-and-CL170267O-Pan-Pac-Application-AEE-FINAL-29-June-2017.pdf> pg 1. Sanyo Kokusaku sold its interest in order to focus on the Australian market following its merger with Jujo Paper (which created Nippon Paper).

<sup>329</sup> Wright & Locke, *Working Together*, 150, 151.

200,000 tonnes of pulp and 120,000 cubic metres of timber.<sup>330</sup> In the following decade and a half a number of plant reconfigurations and expansions were made. Together these lifted design capacity to 1.2 million (m) tonnes of logs and 480,000 cubic metres of timber per annum, New Zealand's largest single site timber mill.<sup>331</sup> From its earliest days, exports, particularly to Asia, were essential to Pan Pac's viability. In 2010, Chinese revenues made up 30% to 35% of Pan Pac's entire income,<sup>332</sup> and the firm accounted for 35% of all Radiata Pine imported into China from New Zealand.<sup>333</sup> The company's Japanese owner and other Asian buyers remained the main buyers of pulp, 98% of which was exported.<sup>334</sup> Pan Pac did not disclose consolidated accounts until 2000 so it is difficult to assess the long-term financial performance of the firm. Nevertheless, revenue growth after 2000 was impressive. Between 2000 and 2010, revenues rose from NZ\$150m to NZ\$250m. Although derivative hedges (electricity and foreign exchange) and forest revaluations distort profit numbers, returns on shareholder equity in the same period were maintained within a respectable range of 3.0% and 6.5%.<sup>335</sup> One recurrent negative should, however, be noted. In common with other primary exporters such as Heinz Wattie, Pan Pac's profitability has struggled whenever the New Zealand dollar has appreciated sharply, a problem most prominent in 2006.<sup>336</sup>

In addition to processed timber and pulp, log exports remained a substantial component of the forestry industry in Hawke's Bay after 2000. Again, Pan Pac provides a good example. Although the company was established as a wood products manufacturer, the company has a long history in the log export trade. In the early 2000s, as much as 19% of company revenues were sourced from exports of raw logs along with smaller amounts of pine chips (1%-3% of company revenues).<sup>337</sup> Similarly, since the 1960s, log exports have been integral to the Hawke's Bay forest industry. Of the 1.7m cubic metres harvested in 2008, 1.1m cubic meters was processed (pulp & timber) and between 0.53m and 0.60m cubic metres (approximately 32%-35%) was exported in unprocessed form. Three

---

<sup>330</sup> "Regional Studies: Hawke's Bay," 9.

<sup>331</sup> "Resource Consent Application," 1.

<sup>332</sup> Bonnie Flaws, "China trade by the numbers," *Dominion Post*, March 8<sup>th</sup>, 2019.

<sup>333</sup> "Resource Consent Application," 1 & 2.

<sup>334</sup> *Ibid.*

<sup>335</sup> Pan Pac Forest Products Limited, *Annual Reports*, 1999-2010.

<sup>336</sup> "Struggling Pulp Firm Calls For Government Action," *Hawke's Bay Today*, April 22<sup>nd</sup>, 2006.

<sup>337</sup> Pan Pac Forest Products Limited, *Annual Reports*, 1999-2003.

explanations account for the decision of Pan Pac and others to export, rather than process, a large percentage of their raw logs. First, tariffs on semi processed and processed timber imports continued to be levied by China and other Asian states at levels between 5% and 15%. Second, the economics of log exports were underpinned by the willingness of offshore sawmills to pay a premium for unprocessed New Zealand soft woods such as Radiata Pine. Importantly, lower labour costs in Asia justified higher extraction rates of 70%, some 10%-20% higher than New Zealand mills such as Pan Pac. Consequently, expanding Pan Pac's Whirinaki plant to meet the full increase in the supply of exotic logs from Hawke's Bay forests was regarded as uneconomic.<sup>338</sup> Finally, since the 1990s, the supply of structural & pruned logs has generally been sufficient in the Hawke's Bay market. Hence, milling more logs onshore risked flooding local supply chains and the viability of existing mills.

Forestry exports drive growth at Port of Napier (1960 – 2010).

Since the 1960s, exports of logs and forest products have been a source of growth and a driver of investment at Napier Port. The first log exports from New Zealand occurred in 1958, and the Japanese market was among the first offshore markets developed.<sup>339</sup> Given that Japanese companies were invested in Pan Pac from its inception, it is unsurprising that Japan was an early destination for Hawke's Bay logs. Exports from the Port of Napier to Japan began in August 1967,<sup>340</sup> and from a small base of 258 tons in that year, volumes spiked to 142,919 tons within two years.<sup>341</sup> But as a breakwater port, Napier's existing facilities were not designed with large scale log exports in mind, and Higgins Wharf was subsequently constructed to meet the demands of the new trade.<sup>342</sup> In the 1960s, transport connections to the port were further upgraded in order to accommodate logs sourced from adjacent provinces, such as Manawatu.<sup>343</sup>

Volumes continued to rise after 1968 but log exports proved to be less reliable than was hoped and it was not until 1990 that broad based growth emerged. Initially, the long-term prospects for the Napier log trade appeared to be extremely encouraging. In 1968, plans to build three dedicated log ships for the Napier-Japan route were announced by Mr T

<sup>338</sup> Author in discussion with former BZW New Zealand Forestry analysts, September 2018.

<sup>339</sup> NZOYB, 1965, Chapter 15.

<sup>340</sup> *Hawke's Bay Regional Resource Survey*, 178.

<sup>341</sup> *Ibid.*

<sup>342</sup> Stevenson, *People & Port: A Century of Napier Port*, 291.

<sup>343</sup> *Ibid.*, 288.

Kitamura of Nichimen Lumber of Japan who stated “The Japanese log trade is here to stay.”<sup>344</sup> Unfortunately problems soon emerged, specifically a critical lack of log marshalling and storage space.<sup>345</sup> Despite reclamation work and the addition of Higgins Wharf, congestion became severe, and on May 19<sup>th</sup> 1976 the trade abruptly collapsed.<sup>346</sup> After a four year hiatus, log exports recommenced only to be suspended again in 1981 following a dispute between the New Zealand Forest Service (NZFS) and Japanese log buyers.<sup>347</sup> In 1987, as harvest volumes continued to rise, Japanese log exports resumed.<sup>348</sup> Even so, the NZFS looked to diversify away from the Japanese market towards Korea and Taiwan.<sup>349</sup> After 1990, exports of forest products through the Port of Napier increased sharply, a reflection of investment in local processing and other value added strategies such as wood chips. Log exports increased threefold to reach a record in 2003 but then tapered off. In contrast, exports of sawn timber more than doubled by 2007, and in the same year 240,000 tonnes of pulp was exported to Japan,<sup>350</sup> an increase of 20% since 1994.<sup>351</sup>

**Table 8.7. Forty years of growth: Port of Napier forestry exports, 1968-2007 (cubic metres).**

	Log exports	Timber exports	Total
1968	145,212	nil	145,212
1976-1979	suspended	nil	nil
1980	negligible	negligible	negligible
1981-1987	suspended	negligible	Negligible
1990	192,000	106,392	298,392
1995	194,963	127,708	322,671
2000	345,453	156,074	501,527
2003	608,250 (peak)	203,595	811,845
2007	542,213	274,468	816,681

Sources: Statistics NZ (log series), MPI, Stevenson, Hawke’s Bay Regional Survey (2010 figures not available), Port of Napier archives (Hawke’s Bay Regional Museum, Boxes 306, 308, 310 and 311).

## Conclusion.

The comparatively late switch from natives to exotics is a visible feature of Hawke’s Bay forestry after 1945. Although the New Zealand government was an active developer of new forests in the province after WW2, the exotic estate was negligible prior to 1975.

<sup>344</sup> Ibid, 287.

<sup>345</sup> Ibid, 285-288.

<sup>346</sup> Ibid, 285 and Hawke’s Bay Harbour Board, *People & Port – Supplement*, 32.

<sup>347</sup> Ibid, 33 & 34.

<sup>348</sup> Ibid, 80.

<sup>349</sup> Ibid.

<sup>350</sup> “Hawke’s Bay Forest Industry and Wood Availability Forecast,” 29.

<sup>351</sup> “Regional Studies: Hawke’s Bay,” 9.

Reasons for the late uptake are several fold. Farm clearances meant native forests, although in rapid decline, provided the most economic feedstock for Hawke's Bay mills until the 1970s. Meanwhile, high pastoral profits reduced the incentive for farmers to convert to forest. But after 1975, exotic forestry grew prodigiously. Much of the early growth was attributable to the practical exhaustion of native forests, a fact that forced the development of exotics. But following the cessation of pastoral subsidies and the advent of a severe agricultural recession in the mid-1980s, land use change accelerated. Notably the first properties to convert were marginal farms, dependant on high wool prices, located on the 'pioneer fringe' of the province. Similarly, farm forestry (woodlots) gained momentum and from 1975 to 1995, pastoral farmland was swapped into exotic forest at a ratio close to 1:1. But after 1995 the era of rapid growth began to ebb and by the mid-2000s the area of the province in exotics began to fall as pastoral profits recovered relative to the returns available from forestry.

Although the pace of planting eased after 1995, wood availability continued to rise as forests planted between 1965 and the mid-1980s reached maturity. The increase prompted growth in both processing volumes and log exports, positives that underpinned expansion at the Port of Napier and Pan Pac. Napier Port historically encountered bottlenecks. But with greater investment, export volumes peaked in 2003 at a level three times greater than that of the 1990s. Similarly, maturing forests lifted the processing sector. Although the number of timber mills more than halved between 1945 and 2010, rising exotic output underwrote substantial growth in processing capacity in the province between 1992 and 2010. Much of the expansion was, however, attributable to a single company - Pan Pac – and by 2010 control and ownership within the Hawke's Bay forest industry had become heavily concentrated. Pan Pac and investment funds controlled approximately 70% of the total exotic area, a structure in stark contrast to the 1950s when the New Zealand Government was by some margin the dominant forest owner in the province. The point highlights another key finding. Government policies have played a central role in the development of Hawke's Bay forestry since WW2. NZFS planting schemes, pastoral subsidies, the end of SMPs and forest privatisations have all shaped the sector. The last of these facilitated another important theme - the emergence and dominance of the sector by foreign owned processors and the entry of specialist investment funds.

## Hawke's Bay Viticulture & Wine Making Sector 1945-2010.

Five distinct development phases and three wine style eras from 1945 to 2010.

In Hawke's Bay, exotic forestry and viticulture share an important commonality. Both activities were immaterial in 1945 relative to pastoralism and horticulture. Furthermore, although grape growing and wine making were established in Hawke's Bay as early as 1851, the sector was little more than a cottage industry until the mid-1970s. Participants were either 'part-timers' or saw their involvement as a hobby. Focused on the local market for fortified wines, exports were virtually unknown. Similarly, the area of the province devoted to grapes remained extremely small. Consequently, viticulture is the most recent of the province's primary industries in terms of significant commercialisation.

The Hawke's Bay wine industry experienced five distinct development eras between 1945 and 2010. In practical terms the first was a continuation of the pioneering era that had begun with the Marists. But in the mid-1970s, the foundations of long-term economic sustainability were laid. Production was dominated by sweet Germanic styles, such as Muller Thurgau, a category considered well matched with the cool New Zealand climate and New Zealanders (then) inexperience with wine. What is termed the 'foundation era' lasted until 1985 when, in response to over-supply, a Government scheme paid growers to remove Germanic varieties. In the decade that followed, a period of structural reform occurred that saw these styles replaced by higher quality table wines, both white and red.<sup>352</sup> The resulting re-orientation of the industry led to an era of rapid growth that peaked in the mid/late 1990s. Between 1992 and 1995 the area in vineyard rose by 40%, a rise in part attributable to the entry of offshore wine companies.<sup>353</sup> At the same time, a lively export trade emerged. The fourth era lasted until 2008 when a severe over supply of low-quality Sauvignon Blanc, New Zealand's flagship variety, led to another correction.<sup>354</sup> Recovery was incomplete in 2010 but a fifth era had begun as multinational wine companies and large New Zealand corporations emerged from the crisis with enhanced positions of control.

---

<sup>352</sup> Michael Cooper, *The Wines & Vineyards of New Zealand*, 10.

<sup>353</sup> *Ibid*, 92.

<sup>354</sup> Described colloquially as "Savalanche." Although largely a Marlborough phenomenon, the event destroyed the supply and demand dynamic of the entire industry.

**Table 8.8. Five Eras of Hawke's Bay viticulture, 1945-2010.**

	Area (ha)	Wineries	Growers	Era	Main Style
1945	59	3	3	Pioneer	Fortified
1975	880	4	20	Foundation	Fortified
1985	1,734	10	132	Reform	Germanic
1995	2,276	24	168	Rapid growth	Table White
2005	4,326	62	168	Rapid growth	Table White/Red
2010 +	4,947	85	122	Correction	Table White/Red

Sources: New Zealand Wine Review (1976), Michael Cooper, Statistics New Zealand - infoshare, New Zealand Winegrowers Inc Annual Reports, Hawke's Bay Vintners – Regional Survey 1985. Era names by author.

### Evolving consumer tastes drive change at the vineyard level.

As the size of the Hawke's Bay wine industry gradually increased after WW2, the artisan, or pioneering, era that existed in 1945 was progressively replaced by a foundation phase. Although more sophisticated, the province's wine industry continued to lack scale and both stages were typified by small vineyards and a very limited number of wineries. In 1975, the average vineyard size of 25ha was little changed on 1945. But what truly separates the two periods is a broader acceptance of grape growing, as evidenced by the number of contract growers which increased from three in 1945 to twenty in 1975. Unsurprisingly, given its small size, winemaking in the post war decades remained the preserve of clerics (Mission) and enthusiastic pioneers such as Tom McDonald, Robert Bird (Glendale), Cecil Vidal and recent European immigrants such as Denis Kasza.<sup>355</sup> Production of wine was either experimental or quasi-artisan and the industry was run on extremely limited means. A dearth of investment capital confronted all participants with one notable exception. Between 1947 and 1950, established Australian wine maker McWilliams set up a winery and invested in vineyards in Hawke's Bay.<sup>356</sup> The involvement of a well-known offshore investor set an important precedent as it provided external affirmation of the province's potential as a wine region.

Overseas interest was undoubtedly a great vote of confidence in the Hawke's Bay wine industry, but external perspectives did little to alter established production patterns. Since the conclusion of WW2, fortified wines had remained dominant in both New Zealand and Hawke's Bay, and in 1962 as much as 88% of national output was either sherry or

<sup>355</sup> Sweet, *Wine: Stories of Hawke's Bay*, 33-40, 118.

<sup>356</sup> Cooper, *The Wines & Vineyards of New Zealand*, 9.



port.<sup>357</sup> In 1962, McWilliams merged with Hawke's Bay's then second largest winery, McDonald's Wines, to create the country's leading wine company.<sup>358</sup> The merged entity, subsequently controlled by New Zealand's two largest brewers, remained wedded to fortified wines,<sup>359</sup> and in 1972 nearly 90% of company vineyards were oriented towards sherry.<sup>360</sup> Furthermore, in 1973 McWilliams' management rejected a recommendation from its key Hawke's Bay winemaker, Peter Hubscher, in favour of Germanic and sparkling wines, styles that were increasingly fashionable overseas.<sup>361</sup> McWilliams was not alone. In the early/mid 1970s, Glenvale Wines in Bayview remained focused on their "special strength Sherry" and other fortified wines.<sup>362</sup> Others such as Lombardi were similarly resistant. Accordingly, Vermouth and liqueurs remained essential elements of the company's product range throughout the 1970s.<sup>363</sup>

After 1975, Germanic styles gained ground and the dominance of fortified wines gradually eroded, a change that led to the expansion of grape growing relative to other land uses. Although fortified wines remained a core product, secondary level producers such as Glenvale and Lombardi began planting varieties such as Riesling, Black Hamburg and Sauterne.<sup>364</sup> Other wine makers followed suit. In 1977, Brookfields, formerly a Sherry specialist, ceased making fortified wines altogether,<sup>365</sup> and in 1979 the arrival of a new winemaker at Mission resulted in a renewed focus on dry white table wines.<sup>366</sup> Likewise, after acquiring Te Mata Estate in 1974, John Buck commenced the production of Cabernet Sauvignon and Bordeaux blends.<sup>367</sup> Another feature of the new era was a sharp rise in the area planted in grapes. Between 1975 and 1985, the area of the province in grapes rose from 880ha to 1,734ha with most of the increase coming from the conversion of pastoral

---

<sup>357</sup> Sweet, *Wine: Stories of Hawke's Bay*, 38.

<sup>358</sup> Cooper, *The Wines & Vineyards of New Zealand*, 93.

<sup>359</sup> Sweet, *Wine: Stories of Hawke's Bay*, 102.

<sup>360</sup> *New Zealand Wine Review* (1973), Quotes Tom McDonald.

<sup>361</sup> Sweet, *Wine: Stories of Hawke's Bay*, 48. Founded in 1964, the *New Zealand Wine Review* ceased publication in 1978 (Final editor Dick Scott).

<sup>362</sup> Alexander Turnbull Library, "Glenvale Vineyards Ltd: Special extra strength, contains 39% proof spirit. Glenvale medium dry golden sherry, produced and bottled in New Zealand by Glenvale Vineyards Ltd, Bay View, Napier", reference Eph-B-ALCOHOL-Labels-1960/1970s-01-058-6.

<sup>363</sup> Sweet, *Wine: Stories of Hawke's Bay*, 45 & 46.

<sup>364</sup> *Ibid*, 43-46.

<sup>365</sup> Cooper, *The Wines & Vineyards of New Zealand*, 94.

<sup>366</sup> *Ibid*, 103.

<sup>367</sup> Cooper, *The Wines & Vineyards of New Zealand*, 108 & 109. To become Colrairie – a blend of Cabernet Sauvignon, Cabernet Franc and Merlot.

and orchard land on the Heretaunga Plains (see Table 2.1). Growth was so intense that the industry had the feel of a gold rush, and in three years alone (1980-1983) grape plantings increased by nearly 50%.<sup>368</sup> Despite a lack of financial data from the period, the sharp rise in the planted area suggests that industry economics were reasonably attractive in the mid-1970s vis-à-vis alternatives such as orchards, cropping and pastoral farming. Vineyard conversions were, nonetheless, not always successful. A 1985 review of the sector conducted by Hawke's Bay Vintners suggested that too many of the province's vineyards were located on wet, heavy soils better suited to orchards and that these poorly chosen sites lowered the quality of the resulting wine.<sup>369</sup> As Alan Limmer of Stonecroft Wines observed in 1985, "A guy would diversify by ripping out peaches and putting in vines on a site originally chosen as ideal for orchard ... those sites were only good for servicing the bulk-wine industry."<sup>370</sup>

By 1985 the Hawke's Bay wine sector was not only significantly larger than 1975 but based on a completely different set of varieties. Plantings of Muller Thurgau and Chenin Blanc were now substantial, and by the early 1980s sweet table whites accounted for 52% of New Zealand's total wine output against little more than 4% in the early 1960s (see Table 8.9). As these varieties increased in popularity, fortified wine production went into full retreat. But just as wines such as Sherry and other 'fortifieds' had become unfashionable in the mid-1970s, the same retreat happened to Germanic styles in the mid-1980s. Given its disproportionate exposure to Muller Thurgau and Chenin Blanc (see Table 8.10) Hawke's Bay was highly exposed to the change, a vulnerability well illustrated with reference to McWilliams. In 1985, the company's production of Muller Thurgau exceeded demand by over 50%<sup>371</sup> and with more than half of Hawke's Bay plantings in Germanic or sweet styles, the province's wine industry faced a serious over-supply of unfashionable wine.<sup>372</sup> The problem was further entrenched by the fact that one third of all New Zealand plantings were in a single Germanic variety, Muller Thurgau.<sup>373</sup> Moreover the small size of vineyards

---

<sup>368</sup> Hawke's Bay Vintners, *A Hawke's Bay Regional Wine and Grape Industry Study* (Napier: Hawke's Bay Vintners & Eastern Institute of Technology, 1985), 6.

<sup>369</sup> Michael Cooper, *Hawke's Bay, Wine Atlas of New Zealand: 2<sup>nd</sup> Edition* (Auckland: Hachette, 2008), accessed June 30<sup>th</sup>, 2018, [http://michaelcooper.co.nz/region-info/#\\_idAnchor-5](http://michaelcooper.co.nz/region-info/#_idAnchor-5)

<sup>370</sup> Ibid. Quoted by Cooper.

<sup>371</sup> Sweet, *Wine: Stories of Hawke's Bay*, 100.

<sup>372</sup> Hawke's Bay Vintners, *Regional Wine and Grape Industry Study*, 6.

<sup>373</sup> Sweet, *Wine: Stories of Hawke's Bay*, 100.

restricted diversification opportunities: although larger than the New Zealand average of ten hectares, the standard Hawke's Bay vineyard was thirteen hectares in size in 1982, little more than half that of 1975.<sup>374</sup> Growers and winemakers were not only over exposed to a declining variety but had failed to develop the operational depth needed to ride out an industry downturn.

**Table 8.9. Fortified & Germanic wine styles collapse: New Zealand wine production, 1962-2010.**

	1962	1976	1982	1985	1990	1995	2005	2010
Fortified	88%	47%	28%	20%	10%	8%	neg	neg
Sparkling (estd)	6%	4%	12%	12%	12%	11%	5%	1%
Table White	4%	42%	52%	60%	70%	71%	76%	84%
Table Red	2%	7%	8%	8%	8%	10%	19%	15%

*Table White Comprised of:*

Germanic	32%	7%	3%
Dry white	35%	68%	81%
Other white	4%	1%	neg

Sources: Wine Institute of New Zealand and New Zealand Winegrowers Inc Annual reports.

**Table 8.10: Muller Thurgau reigns supreme: Hawke's Bay dominant varietal mix, 1983 (%ha).**

Muller Thurgau	38.3%
Chenin Blanc	8.8%
Palomino	7.2% (fortified for Sherry)
Cabernet Sauvignon	7.2%
Chardonnay	5.2%
Sauvignon Blanc	4.5%
Chasselas	3.8%
Gamay Beaujolais	2.4%
Gewurztraminer	2.2%
Pinot Noir	2.0%
Others	18.4% (comprised of twelve other varieties)
	100%

Source: Hawke's Bay Vintners (1985).

Government intervention lays basis for long term growth.

Unlike primary industries such as sheep farming, which were experiencing similar structural pressures in the mid-1980s, government intervention in the wine sector was both generous and comprehensive. Industry veterans, such as Allan Scott, suggest the policy was the result of lobbying by "well connected" wineries, several of which were in receivership.<sup>375</sup>

<sup>374</sup> Hawke's Bay Vintners, *Regional Wine and Grape Industry Study*, 7.

<sup>375</sup> Allan Scott, "How a crazy government scheme created a billion-dollar industry," *National Business Review*, May 5<sup>th</sup>, 2017. The Labour Government appears to have 'blinked' as the agricultural collapse of the mid 1980s

The result was impressive. The carve out for wine was such that a bounty of \$6,175/ha, estimated at four years' income for the average contract grower,<sup>376</sup> was paid following the removal of existing vines.<sup>377</sup> The extraction scheme was, understandably, very successful. On a national basis, 1,515ha of established vineyard were removed from production,<sup>378</sup> approximately 25% of New Zealand's total vineyard area.<sup>379</sup> With 27% of the national vineyard area in 1985, Hawke's Bay was inescapably involved (see Table 8.12). A total of 534ha, or 33.4% of all extractions, occurred in the province with Hawke's Bay contract growers the most active of all participants in the scheme.<sup>380</sup> The impact can be seen in land use statistics. After peaking in 1983 at 1,937ha, the area of the province in vineyard fell 24% by 1985/86.<sup>381</sup>

The calamity of the early/mid 1980s led, unavoidably, to structural change, most notably rising corporatisation, rationalisation and growth in low margin bulk wine. Although Hawke's Bay growers received \$3.35m in restructuring payments, industry conditions were such that a significant number of Hawke's Bay wineries collapsed or were sold.<sup>382</sup> In 1984, following the takeover of Dominion Breweries, McWilliams became a division of Brierley Investments,<sup>383</sup> and in 1986 Bayview winery Glenvale (owned by pioneer era winemaker Robert Bird), entered receivership and was sold to George Fistonich of Villa Maria, one of New Zealand's largest winemakers.<sup>384</sup> In the same year, Montana Wines (a large New Zealand owned wine maker based in Auckland) bought Penfolds, owner of McDonald's Wines.<sup>385</sup> In the late 1980s, a second phase of corporatisation began. Initially Brierley left McWilliams to its own devices, content to use the investment for cash flow. But desperate

---

accelerated. Furthermore, unlike pastoralism, the wine industry was not part of an existing subsidisation scheme therefore the policy was politically more palatable.

<sup>376</sup> Sweet, *Wine: Stories of Hawke's Bay*, 101.

<sup>377</sup> J.F.S Cooper, J Chester and R.Y Cavana, "A Policy Making Framework for the New Zealand Wine Industry," 24 (paper presented to 12<sup>th</sup> International Conference of the Systems dynamics Society – Stirling Scotland, 1994), accessed June 30<sup>th</sup>, 2018,

[https://www.systemdynamics.org/assets/conferences/1994/proceed/papers\\_vol\\_1/coope023.pdf](https://www.systemdynamics.org/assets/conferences/1994/proceed/papers_vol_1/coope023.pdf)

<sup>378</sup> Wine Institute of New Zealand, *Annual Report*, 1986, 15.

<sup>379</sup> Cooper, Chester & Cavana, "A Policy Making Framework," 26 & Ibid, 15.

<sup>380</sup> Warren Moran, *New Zealand Wine, The Land, the Vines, the People* (Auckland: Auckland University Press, 2016), Chapter 6.

<sup>381</sup> Hawke's Bay Vintners, *Regional Wine and Grape Industry Study*, 6.

<sup>382</sup> Cooper, Chester & Cavana, "A Policy Making Framework," 26. Also see - Cooper, *The Wines & Vineyards of New Zealand*, 10.

<sup>383</sup> Sweet, *Wine: Stories from Hawke's Bay*, 102.

<sup>384</sup> Ibid, 120. Delegats and Villa Maria also went into receivership but survived. See Cooper, *The Wines & Vineyards of New Zealand*, 10.

<sup>385</sup> Dita De Boni, "Sober approach to wine trade," *New Zealand Herald*, December 9<sup>th</sup>, 2000.

for capital following the 1987 stock market crash, Brierley sold the company's vineyards to Montana Wines, and by 1990 the McWilliams brand had been fully dismantled.<sup>386</sup> Moreover, major wine companies engaged in aggressive pricing tactics. The strategy was particularly painful for smaller wineries, businesses that were already undercapitalised.<sup>387</sup> In order to survive production of low margin bulk wine grew strongly, a defensive strategy that remained common in Hawke's Bay until the early 1990s.<sup>388</sup> Nevertheless, persistent cash flow pressures forced many smaller wineries to sell their vineyards to specialist grape growers. Consequently, externally sourced grapes (contract growing) became dominant in the industry. In 1960, 96% of grapes grown in New Zealand were grown by the winemakers themselves. By 1989, the percentage had fallen to just 25%.<sup>389</sup>

In the early 1990s, the Hawke's Bay wine industry entered a more positive era, one founded on yet another evolution in wine styles and changed consumer tastes. Between 1985 and 1995, the area of the province devoted to grapes rose by over 30% (see Table 8.8). As in Marlborough, Sauvignon Blanc, a dry white wine, was an important contributor to the rise. But unique to Hawke's Bay much of the increase was driven by plantings of red blends and Syrah, and in the process the province began to emerge as New Zealand's premier region for red wines (see Table 8.11). In common with previous cycles, land use change was substantial. Much of the required area was sourced from cropping land, the conversion of which was shared evenly between viticulture and a resurgent pip-fruit sector (see Table 2.1).

**Table 8.11. Hawke's Bay specialises in Reds: Dominant varieties, 2010 (% of total production).**

	Hawke's Bay	Gisborne	Marlborough	NZ
Red Blends	35.5%	9.7%	0.8%	6.2%
Sauvignon Blanc	20.5%	neg	85.8%	65.5%
Chardonnay	20.1%	49.2%	3.3%	9.9%
Pinot Gris/Aromatics	10.1%	41.1%	3.2%	4.8%
Pinot Noir	6.1%	neg	6.0%	8.9%
Other	7.7%	neg	0.9%	4.7%

Source: New Zealand Winegrowers Inc Annual Report - Vineyard Survey Data (2010 & 2016).

<sup>386</sup> Sweet, *Wine: Stories from Hawke's Bay*, 102.

<sup>387</sup> "Flying the flag for Kiwi wine," *New Zealand Herald*, January 1<sup>st</sup>, 2010.

<sup>388</sup> Warren Moran, *New Zealand Wine, The Land, The Vines, The People*, Chapter 5. Also see - Cooper, *The Wines & Vineyards of New Zealand*, 10. Bulk wine manufacturing is a low cost and quick way to realise cash flow following harvest.

<sup>389</sup> Cooper, Chester & Cavana, "A Policy Making Framework," 24.

Although the rapid increase in grape plantings suggested that industry recovery was well advanced by 1995, profitability remained a significant problem, particularly for smaller Hawke's Bay's growers and wineries. Unfortunately, it is difficult to assess the financial condition of the Hawke's Bay wine industry in the mid-1990s. Wineries and growers were either privately owned and/or part of large conglomerates. Consequently, regional data are largely unobtainable. It is clear, however, that the malaise of the mid/late 1980s left a lasting impact on the structure of Hawke's Bay viticulture, most particularly wineries. Of the ten wineries operating in 1985, only four were still operating in 1995.<sup>390</sup> Most importantly, cash flow generation remained a significant problem. Vines planted in 1986/87 following the extraction scheme, were unlikely to have provided fruit in economic quantities until the early/mid 1990s.<sup>391</sup> The resultant lack of liquidity and shortage of redevelopment capital was a key reason why ten years after the 'great vine pull' of the mid 1980s as much as 20% of New Zealand production was still in a largely unwanted variety - Muller Thurgau.<sup>392</sup>

Although recovery from the 1985 crisis was slow to emerge, the Hawke's Bay wine industry continued to attract new participants, a theme that led to investment in new sub-regions and rising internationalisation. Between 1995 and 2005, Hawke's Bay's wine production increased from 20,632 tonnes to 28,098.<sup>393</sup> The rise was driven by investment in new locations. The first conversions of pastoral land to grapes occurred in the Gimblett Gravels area to the west of Hastings during the early 1980s but production increased rapidly after 1995.<sup>394</sup> Similarly, new vineyards were established at Dartmoor, Te Awanga and Haumoana in the early/mid 1990s and Crownthorpe after 2000.<sup>395</sup> Foreign monies financed much of the expansion, and by 2005 a number of new companies such as Church Road<sup>396</sup> (French: 1989), Seleni (NZ: 1997), Craggy Range (US: 1997) and Elephant Hill (German: 2003) had been introduced to the province.<sup>397</sup> Between 1995 and 2005, the combination of New Zealand and international investment lifted the grape growing area of the province by 90%

---

<sup>390</sup> Hawke's Bay Vintners, *Regional Wine and Grape Industry Study*, 3.

<sup>391</sup> A newly planted vine takes three years to produce and a further three years to reach production maturity.

<sup>392</sup> New Zealand Wine Growers, *Annual Report*, 2005, 23.

<sup>393</sup> *Ibid.*

<sup>394</sup> Sweet, *Wine: Stories from Hawke's Bay*, 109 & 115.

<sup>395</sup> *Ibid.*, 112 & 115.

<sup>396</sup> Montana purchased McWilliams in 1989. Montana was subsequently acquired by Allied Domecq in 2001. In 2005, Allied Domecq was taken over by Pernod Ricard.

<sup>397</sup> Establishment dates sourced from company websites.

(see Table 8.8). The internationalisation of Hawke's Bay viticulture was further extended by several large-scale multinational transactions in the early/mid 2000s. These included the 2002 takeover of Matua Valley by Fosters of Australia as well as the takeover of Corban Wines by Montana Wines in 2000 and the subsequent takeover of Montana by Pernod Ricard of France in 2005.<sup>398</sup> The same dynamic was apparent in the takeovers of Nobilo Wines and Kim Crawford Wines by Constellation Brands (USA) and Vincor (Canada) in 2003.<sup>399</sup> Structural change even extended to 'Mission.' After 140 years as a training facility the last clerics left Greenmeadows in 1990, and in 1996 the business was corporatised under the umbrella of a church owned entity known as Marist Holdings (Greenmeadows) Ltd.<sup>400</sup>

Although growth was substantial between 1995 and 2005, Hawke's Bay fell second to Marlborough as the dominant province of New Zealand's wine industry. In 1982, Hawke's Bay was by some way the largest viticultural province in the country, with 32.4% of the total vineyard area.<sup>401</sup> Hawke's Bay's dominance had been in place since the 1960s but after 1983 the pace of new planting in Marlborough exceeded that of Hawke's Bay and the relative importance of the province fell (see Table 8.12). Although Syrah and Bordeaux blends were undoubtedly successful, by 2005 the Hawke's Bay wine industry (4,326ha) was significantly smaller than that of Marlborough (9,877ha).<sup>402</sup> The comparative decline of Hawke's Bay had a positive spinoff, nonetheless. The success of Marlborough Sauvignon Blanc attracted new international investors to New Zealand and a number of these invested in Hawke's Bay. Constellation, for example, regarded their Hawke's Bay investments as a hedge against weather and disease related risks in Marlborough, their dominant location.<sup>403</sup>

---

<sup>398</sup> Coriolis Research, "An overview of the New Zealand wine industry," *Wine Industry Potential* (May 2006): 11.

<sup>399</sup> Ibid.

<sup>400</sup> Author in discussion with Mission winemaker, Paul Mooney, Easter 2006.

<sup>401</sup> Hawke's Bay Vintners, *Regional Wine and Grape Industry Study*, 7.

<sup>402</sup> New Zealand Wine Growers, *Annual Report*, 2005, 22.

<sup>403</sup> Author in discussion with Constellation Wines viticulturalist, James Nightingale, October 2015.

**Table 8.12. Relative decline: Hawke's Bay as a % of total national vineyard area, 1960-2010.**

	1960	1965	1975	1985	1995	2005	2010
Percentage	40.4%	20.2%	22.8%	27.0%	27.5%	21.1%	14.8%
HB total (ha)	161	172	880	1,734	2,276	4,326	4,947
NZ total (ha)	400	850 est	3,860	6,422	8,276	20,502	33,425

Sources: NZ Yearbooks (1946, 1951/2, 1960 & 1970), New Zealand Winegrowers Inc (2010), New Zealand Vineyard surveys (1975, 1986 & 1995).

A second major crisis begins.

The renaissance of Hawke's Bay wine appeared secure by the mid-2000s, but a repeat of familiar problems loomed. Ministry of Agriculture figures indicate that the average Hawke's Bay vineyard earned (EOS/ha) \$10,000/ha in 2005, an unparalleled level that lifted the value of viticulture land to over \$50,000/ha.<sup>404</sup> The unprecedented boom sparked an almost immediate 15% lift in the area planted in grapes.<sup>405</sup> Harvest tonnages showed even greater growth. In 2009, Hawke's Bay harvested 40,985 tonnes of grapes, a rise of 45% in just four years. Even so, Hawke's Bay was not the centre of industry exuberance. In the same period, New Zealand volumes doubled and Marlborough output rose by a staggering 237%.<sup>406</sup> Unfortunately, these enormous production increases occurred in the midst of the worst quality vintage in thirty years during the 2007/08 season.<sup>407</sup> Worse still, in the same year, the New Zealand grape crush came in 40% above already inflated expectations.<sup>408</sup> The result was a huge surplus of poor quality wine that had to be marked down in price to sell, a problem that afflicted all grape growing areas. A second major crisis had begun.

In terms of severity, the crisis of 2008 matched that of 1985/86. But unlike the previous downturn there was no government assistance and the industry was forced to seek internal resolutions. The severity of the crisis is best conveyed in the price of Sauvignon Blanc, the industry's key financial reference point. The per tonne price of Hawke's Bay

<sup>404</sup> Ministry of Agriculture & Fisheries (MAF), "Hawke's Bay vineyard monitoring model, 2005." EOS is calculated as: net cash income less vineyard working expenses less depreciation less wages of management.

<sup>405</sup> New Zealand Winegrowers, *Annual Report*, 2005, 24. Quoted figures highlight the explosion in planting rates rather than production given the three-year delay between planting and first vintage.

<sup>406</sup> *Ibid*, 25.

<sup>407</sup> Author in discussion with Hawke's Bay wine industry participants, December 2017. Names with-held on request due to commercial sensitivity. Late rains led to very low quality.

<sup>408</sup> "Flying the flag for Kiwi wine."



Sauvignon Blanc fell from approximately \$1,850/tonne in 2007 to approximately \$700/tonne in 2008, some 30% below the average variable cost of production/ha.<sup>409</sup> Discussions with Hawke's Bay growers suggest that it was completely impossible to sell uncontracted grapes. But even then, a supply contract was no guarantee. Numerous wineries reneged on long standing supply partnerships, a situation that was made all the more confusing as many long standing 'contracts' were made on a verbal basis several years prior.<sup>410</sup> The financial impact was instantaneous. From \$10,000 in 2005, EOS/ha fell to \$2,000, a level insufficient to service most bank loans.<sup>411</sup> Nor were prices quick to recover. In 2010/11, average grape prices, across a basket of varieties, remained nearly 30% below that of 2007/08.<sup>412</sup>

The lasting impact of the 2008 crisis was a severe decline in confidence combined with a loss of innocence and industry collegiality. As court action between growers and wineries became common place, growers recriminated at the 2002 decision to unite the Hawke's Bay Grape Growers Association with the body representing wineries, a merger that locked in power imbalances.<sup>413</sup> Furthermore, the corporatisation of the industry that had taken place since the 1980s is regarded by many growers as a key reason why the 2008 crisis was so insidious. Many growers entered the industry during earlier eras. These were more innocent times when trust and a sense of partnership between growers and wineries was the norm, a culture best evidenced by 'handshake' deals and a widespread lack of formal (or poorly crafted) contracts. By 2008, the key price setters in the New Zealand wine market were tough multinationals and large New Zealand companies, not the pioneer or artisan wine makers that dominated the 1970s and 1980s. With Constellation, Villa Maria and Pernod Ricard now dominant, the industry had become a less forgiving place.<sup>414</sup>

---

<sup>409</sup> Author in discussion with Hawke's Bay wine industry participants, December 2017. Names with-held on request due to commercial sensitivity. Supported by New Zealand Winegrowers Inc figures. Hawke's Bay Sauvignon is generally sold at a 10%-20% discount to that of Marlborough due to lower quality perceptions.

<sup>410</sup> Author in discussion with numerous growers in Hawke's Bay throughout 2017. Names with-held on request due to commercial sensitivity.

<sup>411</sup> MAF, "Hawke's Bay vineyard monitoring model, 2008."

<sup>412</sup> New Zealand Wine Growers, *Annual Report*, 2010, 23.

<sup>413</sup> Author in discussion with numerous growers in Hawke's Bay October 2017. Names with-held on request due to commercial sensitivity. Hawke's Bay Vintners was established in 1979, Sweet, *Wine: Stories from Hawke's Bay*, 127.

<sup>414</sup> "Flying the flag for Kiwi wine."

Although the industry had lost its pioneering innocence, the large corporations that now dominated continued to invest in Hawke's Bay, albeit on a highly selective basis and at a rate sharply lower than earlier eras. Importantly, most growth was concentrated in small sub-regions, such as the Gimblett Gravels, areas that were suited to Syrah, now the province's most sought-after variety.<sup>415</sup> Gimblett Gravels Syrah did much to position Hawke's Bay as a premium red wine region, a positive that encouraged new planting and from 2005 to 2010 the area in grapes rose 14%. Nevertheless, growth remained well below the 90% level recorded in the previous decade (see Table 8.8). Furthermore, the geographical focus was extremely uneven. Vineyards with less desirable heavy soils were converted back to vegetables and other crops (see Table 2.2), changes that had a noticeable impact on the value of viticultural land. Between 2005 and 2010, the average value of a hectare of vineyard land/vines in Hawke's Bay fell by 15%.<sup>416</sup> But again the impact was highly regionalised. The value of vineyards located on heavy soils, which were not suited to premium wine, declined by approximately 25% to approximately \$70,000/ha, whereas properties located on the prized Gimblett Gravels rose by a similar percentage, selling between \$100,000/ha and \$130,000/ha in early 2010.<sup>417</sup>

By 2010, the Hawke's Bay wine industry, though recovering, exhibited structural (scale) inefficiencies. The majority of wineries were profitable, but the best metrics were enjoyed by enterprises at either end of the size spectrum. Small (\$1m revenue) and large scale (\$20m plus) wineries performed comparatively well with operating margins of 19%-21%. But most medium sized wineries (\$1m-\$5m) remained unprofitable.<sup>418</sup> Despite mixed financial performances, the number of wineries in the province peaked at sixty-eight in 2010, a rise of twenty-three on pre-crisis levels. In contrast, the number of growers fell sharply from a pre-crisis level of 168 to 122 (see Table 8.8). For growers, EOS/ha recovered to approximately \$5,800/ha, well below historic highs but, nonetheless, sufficient to service bank loans.<sup>419</sup> Meanwhile, confidence remained rather shallow, with one grower

---

<sup>415</sup> The nearly Bridge Pa triangle is somewhat similar.

<sup>416</sup> "Rural Report (Report Period Ending January 2011)."

<sup>417</sup> Morice & Co, *Hawke's Bay Rural Market Commentary* - Autumn 2009, 1.

<sup>418</sup> Deloitte, *Vintage 2011 New Zealand wine industry benchmarking survey*, (December 2011): 6. Also see - ANZ Bank, New Zealand Economics, *ANZ Agri Focus*, "Turning water into wine," accessed December 27<sup>th</sup> 2017 <https://www.anz.co.nz/resources/3/0/309e22004ab1bf7ab62afe415e15c706/ANZ-AgriFocus-20120330.pdf>

<sup>419</sup> MAF, "Hawke's Bay vineyard monitoring model, 2010."

commenting in 2017 that the key difference between the recovery of the late 1980s and that of 2010 was that the large wineries had “sucked the margin out of the industry.”<sup>420</sup>

Although the rising influence of multinationals and large corporations was problematic for some, mostly growers, the ability to tap into global distribution channels was undoubtedly positive for the wine industry in both Hawke’s Bay and New Zealand. Most obviously, the presence of North American companies such as Constellation Wines facilitated a sharp lift in exports to the USA and other offshore markets. At the same time, New Zealand owned wineries Villa Maria and Delegates developed their own international distribution networks. The net result was a sharp rise in wine exports. In 2000, 68% of New Zealand wine was consumed domestically and 32% was exported. Just one decade later the reverse was true.<sup>421</sup>

**Table 8.13. Rising market diversification: New Zealand wine export markets by value % (1995 vs. 2010).**

	1995	2010
UK	65%	35%
Australia	8%	30%
Sweden	8%	neg
Japan	5%	1%
Other	5%	3%
Canada	4%	4%
Ireland	3%	1%
USA	2%	22%
Netherlands	neg	3%
Germany	neg	1%

Sources: *NZOYB* (1996 & 2011) and Michael Cooper (The Wines & Vineyards of New Zealand).

## Conclusion.

Although the Hawke’s Bay wine industry is the most recently developed of the province’s primary industries, numerous structural changes characterised the sector within one generation. Although slow to emerge as a distinct industry, the area in grapes was comparable to the more established pip-fruit sector by 2010. Similarly, participant numbers, both growers and wineries, soared after WW2. Moreover, Hawke’s Bay viticulture proved highly adaptable, experiencing three distinct wine style eras spread over five development phases. As the industry evolved from its pioneering phase, the dominance of fortified wines

<sup>420</sup> Author in discussion with Barry Hoy, grape grower of Eskdale, July 8<sup>th</sup>, 2017.

<sup>421</sup> ANZ Bank *Agrifocus*, March 2012, 7. Sources: Statistics New Zealand and New Zealand Winegrowers

declined. By 1975, sweet Germanic wines were dominant, a style typical of what has been termed the foundation era. In turn, these varieties were replaced by dry table whites and reds, styles that first emerged during the reform era and now more commonly associated with the period of rapid growth that commenced in the late 1990s. Importantly, by 2010 Hawke's Bay was the country's premier red wine region. Profitability and growth since 1945 have, however, been far from linear, and most importantly two major crises have shaken the province's wine industry.

Crucially, during the first crisis in the mid-1980s, a government subsidised extraction scheme was enacted. Helpfully, the scheme enabled growers to reorient their businesses away from Germanic styles towards more desirable varieties at minimal cost. Although growers experienced short term cash flow problems, the transition occurred without widespread financial distress at the vineyard level. In contrast, wineries were decimated and few of those operating in 1985 were still in business ten years later. Despite these difficulties, growth thereafter was very strong as the province gained from the switch towards more fashionable styles such as Sauvignon Blanc, Bordeaux blends and Syrah. Unlike the first crisis, the second great crisis that began in 2008 saw the adjustment burden fall more heavily on growers than wineries, a group that was now dominated by well capitalised multinationals and large New Zealand wine companies.

The power imbalance evident after 2008 saw grower numbers fall for the first time and in 2010 the wine industry was controlled by a small number of large corporations, most of which were focused on Marlborough rather than Hawke's Bay. In a reversal of the pioneering era, the province was now a smaller sibling to its larger South Island counterpart. Furthermore, although corporatisation lifted both the Hawke's Bay and New Zealand wine industry to a greater level of export success, doing so came at the cost of trust and collegiality, both of which were hallmarks of the industry in its formative years. Despite such problems, the growth of the Hawke's Bay wine industry since 1945 is suggestive of significant success. Expansion has been volatile but the ability of sector to survive two devastating crises and attract large sums of international capital demonstrated its economic sustainability.



# Conclusion.

---

## Introduction.

A range of staples supported the development of the Hawke's Bay primary sector between 1945 and 2010. Although diverse, all primary sector categories shared important commonalities such as adaptability and inter-changeability, features that do much to explain its broader success. Consequently, this thesis argues that although aspects of classical staples theory were evident in Hawke's Bay after 1945, the history of the province's primary sector does not support interpretations of classical theory as a 'staples trap.' Furthermore, Hawke's Bay's distinct multi-polar model challenges the notion that primary sector based economic development is undesirable. It is particularly significant that scholars have not previously considered staples theory in the context of a dynamic system of interchangeable primary sectors. Classical theorists Innis and Mackintosh examined single staples. Contemporary scholars, such as Ville and Wicken, emphasise institutional settings. In contrast, this thesis finds that Hawke's Bay's primary economy was successful between 1945 and 2010 due to its unique flexibility, both within and between staple sectors, an argument that is supported by both land price data and land use statistics.

## The Hawke's Bay Primary Economy (1945-2010) – Key Historical Themes.

The most important feature of the Hawke's Bay primary economy after 1945 is the prevalence of land use change of which the Heretaunga Plains provides the starkest example. At the end of WW2, the plains were dominated by sheep farming but in the following decades land use progressively migrated from pastoralism towards horticulture and viticulture. Similarly, statistical archives show that land use change was extensive in many hill country areas where forestry replaced pastoralism. Consequently, Hawke's Bay agriculture employed a very flexible production model, a reflection of natural advantages including a temperate climate that permitted the interchangeable production of primary goods on a single parcel of land. The decisions of primary producers lay at the heart of the land change dynamic. Most importantly, farmers and growers showed a willingness to adapt land use in response to commodity price movements and government policies. Moreover,

land use change provides an explanation as to why Hawke's Bay farm land provided a competitive investment return after WW2. Most land owners were not trapped within a single production cylinder and the consequent ability to tap into alternative land uses provided a 'backstop' for rural land prices during periods of low returns or economic crisis. As a consequence, between 1945 and 2010, capital returns on Hawke's Bay rural land rivalled those of alternative investments such as New Zealand equities.

Of equal importance, diversification and scale benefits accrued within individual primary production cylinders, a process based on strong entrepreneurial instincts. The archives of Hawke's Bay Federated Farmers and Statistics New Zealand show that after 1945 the emphasis on pastoral farms alternated between meat and wool several times over. Likewise, processors changed focus from low margin frozen carcasses to higher margin chilled products and grower's embraced new varieties (both fruit and vegetable). In the same manner, viticulturalists switched from fortified wines to Germanic styles and subsequently red blends and dry whites. Similarly, foresters migrated from native species to exotics. At the same time, all participants embraced new genetics, agricultural technologies and cross breeding innovations. Moreover, exports diversified, most particularly away from Europe toward Asia, and the size of the average farm, orchard and vineyard rose sharply. Importantly, larger blocks permitted the production of a wider range of products and provided a way to build economies of scale, an advantage of particular importance during periods of low/declining commodity prices. Larger size was not, however, a complete remedy. In 2010, pastoral returns remained well below those of the 1950s and 1960s, albeit these decades preceded most of the structural decline in soft commodity prices.

The advent of larger-scale farms was accompanied by the evolution of larger family owned properties into private companies, the emergence of new models of ownership and a shift from local capitalism to international corporate capitalism. Although family farms continued to dominate the pastoral sector, horticulture, viticulture and forestry were eventually dominated by corporations. In the process, the ideals upon which pip-fruit and wine were founded, collegiality and cohesion built around small family farms, declined. On the other hand, corporatisation generated greater investment capital, a positive that provided the means by which to build scale advantages, plant new varieties and pursue diversification. At the same time, new models of ownership emerged in processing and

distribution. In the years prior to 1975, provincial champions, comprised of influential individuals and companies as well as key institutions, propelled the growth of the primary sector. But in subsequent decades these leaders were displaced. Typically, local firms failed if they did not diversify or innovate, a theme most apparent in meat freezing and wool distribution where provincial champions were replaced by larger New Zealand companies. In the same way, multinationals came to dominate horticultural processing, wine and forestry. By contrast, after 1995 overseas investment was absent in meat and wool processing, historically Hawke's Bay most important secondary activities. The reason is the deep malaise that fell on pastoralism after 1985, a theme in stark contrast to the halcyon years of the 1950s and 1960s when international investors such as the Vestey family and Swift & Co were active. One other observation regarding processors is worthy of note. Despite vastly greater size, the profitability of multinationals Heinz Wattie and McCain New Zealand failed to match that of Watties in the 1960s. Watties success was partly based on protective tariffs and near monopoly in the domestic market, benefits neither multinational enjoyed.

The importance of tariffs brings to the fore the influence that government policy had on the development of the primary sector in Hawke's Bay after WW2. In addition to tariffs, regulation and deregulation, tax incentives and agricultural subsidies all played a prominent role and their impact permits one to locate the Hawke's Bay story in the wider history of the New Zealand economy since 1945. Tariffs enabled several local companies, most notably Watties, to build the operational scale needed to launch successful export businesses. But less positively Hawke's Bay illustrates the distortions of productivism, a concept backed in the first instance by New Zealand farmers and later pursued by the New Zealand government as a remedy for the decline in agricultural returns. Historical evidence from Hawke's Bay suggests that productivism and its policy offspring (most notably SMPs), rendered the task of structural adjustment to declining commodity prices and changed market conditions substantially more difficult by entrenching failing models of pastoral production.

Lastly, efficient local access to world markets proved particularly important to Hawke's Bay. From the late 1800s, the Port of Napier provided an essential distribution point for Hawke's Bay's primary sector. Shipping links pioneered by the wool industry



provided the foundation for subsequent exports of frozen meat. Once established these distribution systems were then available to horticulture, forestry and wine. With reference to von Thunen's theory, these shipping links brought the Metropolis closer to Hawke's Bay. Immediately after WW2 the Metropolis was located in Europe but by 2010 the centre of commercial gravity had relocated to Asia, a fact apparent in the province's export figures. In 1945, the Metropolis was London alone. By 2010, London had been joined by Tokyo, Hong Kong, Shanghai and Sydney.

### The Hawke's Bay primary economy – 1945-2010: success or failure?

Although each sector of the Hawke's Bay's primary economy displays marked differences in shape and form, a pivotal commonality exists – a reliance on and exposure to rural land. Accordingly, analysis of rural land prices provides a way to assess the province's primary economy since 1945. As data gleaned from land valuation archives shows, rural land prices performed strongly between 1950 and the mid-1980s when an unprecedented collapse occurred, a decline greater in magnitude than the Great Depression. The fall was largely attributable to the cessation of agricultural subsidies, showing that commodity prices and farm profitability are not the only determinants of rural land values. Although the collapse of the mid/late 1980s was without precedent, valuation archives indicate that Hawke's Bay rural land was, nonetheless, an excellent investment after WW2. Between 1945 and 2010, rural land delivered compound capital growth of 8.1% p.a, a return not significantly below the long-term return of New Zealand equities (+9.8% p.a). Moreover, it is an important historical fact that all rural land categories participated. Inter-changeability of use is a key reason why the movement in the price of rural land has, more often than not, been mirrored across differing primary activities. Equally, all sectors have unavoidably been exposed to major themes in New Zealand economic history, a reality that explains the use in this thesis of the same chronological parameters for all agricultural categories. Despite these commonalities, each primary activity has had its own story to tell.

Wool was undoubtedly the star of the 1950s and 1960s, so much so that without high wool prices the pastoral fringe of Hawke's Bay would not have developed. The boom relegated sheep meat, although a profitable undertaking, to a second-tier product and capped diversification into beef. Importantly, the change in the emphasis that occurred

after 1945 was in sharp contrast to the war years when meat production was a national priority. Underpinned by two wool booms, Hawke's Bay sheep farming remained extremely profitable until the late 1960s and early 1970s. Although the price of wool and sheep meats fell in real terms and growth in pastoral productivity slipped, rising sheep numbers provided sufficient offset. Nevertheless, the negatives of changing retail trends, product substitution and a lack of product innovation could not be solved by productivism alone, and the government responded to the slump of the mid 1970s by intensifying the use of subsidises (SMPs). Unfortunately, the policy made the inevitable adjustment more painful for all participants – farmers and processors alike. Following the cessation of SMPs in 1985, the area of Hawke's Bay devoted to pastoral uses collapsed as did sheep numbers. Consequently, the profitability of pastoral farming in Hawke's Bay never again matched the 1950s and 1960s. The same applies to processors and distributors. Although new processors such as Pacific Beef emerged both before and after the crisis and others, such as Cavalier, performed relatively well, the demise of Whakatu, Tomoana, Richmond Meats, UEB, Tuckers wool scour and Williams & Kettle is emblematic of failure. That woollen goods manufacturers failed to develop branded goods other than in woollen carpets, was a further negative.

Horticulture too, experienced painful structural change. Between 1945 and the mid-1970s, growth and profitability enriched growers and processors alike. Two monopolies, one regulatory (APMB) the other predatory (Watties), ensured stability and gave local growers a guaranteed buyer. Nevertheless, underlying change was underway. Most importantly, the business and social norms established in the 1950s and 1960s faced mounting pressure. Cohesion was declining and the regulatory and protectionist policies upon which the monopolies relied were increasingly questioned. Together these changes eroded the foundations that underpinned horticultural growth after 1945, and by the late 1990s profitability for all participants was sharply lower than the immediate post war decades. Instructively, the profits of multinational food processors failed to match those posted by locally owned firms in the decades prior to 1975. The same theme applied to growers. In 2010, orchard returns remained substantially below the 1950s - a level broadly comparable to that of pastoral farming.

Hawke's Bay's other important land based primary sectors, viticulture and exotic forestry, provide a significant contrast to pastoralism and horticulture to the extent they emerged as distinct sectors much later than their more established counterparts. Despite their relatively recent development, these late entrant sectors displayed a similar development pattern: rapid initial growth followed by either a rapid slowdown (forestry) or periodic crisis (viticulture). In a further commonality with more established primary sectors, both forestry and viticulture enjoyed lengthy periods where the relative decline of another primary sector provided an opportunity. In the 1950s and 1960s, when forestry struggled to find a future beyond native logging, the area devoted to pastoralism surged. By contrast, when meat and wool were mired in crisis during the mid-1980s, new forests were planted on marginal pastoral lands. Likewise, when horticulture was depressed, viticulture emerged as a viable alternative. Similarly, cropping and fruit growing have acted interchangeably. Consequently, in the 65 years following 1945, the province experienced a dynamic and ongoing process of land use change as farmers and growers sought to maximise land prices and profitability. By extension, participants displayed a marked willingness to adjust business models, investment patterns, markets, products and processes to adapt to changed economic circumstances.

Finally, assessment of the Hawke's Bay primary sector must recognise the importance of the three chronological periods employed. Quite clearly, success was not universal. The first period (1945-1975) was one of 'Continuity & Change'. Underpinned by the restoration of many pre-war certainties, the thirty years following WW2 represented a high-water mark for primary sector profitability. In contrast, the years of 'Disruption & Adjustment' from 1975 to 1995 were problematic and the period was punctuated by crisis and collapse which led to structural reform. The subsequent era from 1995 to 2010, 'Recovery & Stabilisation,' was based on the strengths established in the halcyon period after WW2, decades that left the province with a rich legacy - a productive base of sufficient quality, breadth and flexibility to survive the calamitous 1980s and provide a platform for eventual recovery. By the late 1990s and early 2000s each sector had adjusted to a new set of realities, albeit success was uneven. Although profitability at all levels of the primary sector never regained the heights of the decades prior to 1975, capital appreciation

provided sufficient recompense for most farmers and growers. Similarly, processors and other secondary level participants had by 2010 adjusted to an era of lower cash returns.

### Hawke's Bay's Primary Sector and Staples Theory.

As Hawke's Bay is a primary based economy of long standing, classical staples theory provided a suitable analytical framework in which to situate this thesis. Most importantly, pastoralism, horticulture, forestry and viticulture are activities that match Mackintosh and Innis' independent contention that natural endowments determine the staple produced. There is little doubt that Hawke's Bay's favourable climate, soils, topography and water availability represent the preconditions required for the range of primary activities undertaken in the province. Furthermore, several of the structural problems associated with staples-based development are apparent in the period from 1945 to 2010. The theory that rapid growth in primary based economies was inevitably followed by diminishing returns and heightened volatility is a pattern clearly evident in the province. More positively, as the Hawke's Bay primary processing industry shows, staples can lead to advanced (secondary and tertiary) industrial structures. Consequently, Hawke's Bay development since WW2 aligns more with Mackintosh than Innis.

Mackintosh's position ultimately implies the importance of linkages, the presence of which did much to ensure Hawke's Bay is not an example of a 'staples trap.' Scholars such as Nurkse and Caves regard linkages as a pre-requisite for economic success and crucially both forward and backward linkages are evident in Hawke's Bay: forward linkages revealed by secondary processing, and backward linkages in international shipping links through the Port of Napier. Both linkages have been extremely influential since 1945. Furthermore, that the sheep industry created international distribution channels challenges McCarty's contention that pastoralism provides comparatively weak linkage effects. A less obvious linkage has been similarly influential. Although a disproportionate reliance on pastoralism emerged during the 1950s, subsequent land use change provided the transmission mechanism, or linkage, required to ensure the province did not over-invest in a single export sector. As a result, resources were switched between primary activities to maximise returns. Linkages also facilitated diversification. Hawke's Bay remained dependent on the UK market during the 1950s and 1960s, but the backward linkage of strong transport connections had

greatly reduced the extent of historic dependency by 2010. Consequently, Watkin's concept of a 'staples trap' does not apply to the province. Nevertheless, despite the emergence of a multi-nation Metropolis that included Asia, the province's economic development since 1945 is unavoidably aligned with Ehrensaft and Armstrong's concept of 'dominion capitalism.'

The development of the province's primary economy since 1945 provides a number of other distinct differences with classical staples theory. Innis and Mackintosh worked within a single primary cylinder (fur and cod, respectively). In contrast, Hawke's Bay offers a multi-cylinder primary model with significant interaction between each sub-sector. Despite the relative sophistication and complexity of such a system, Hirschmann's suggestion that primary producers are relegated to a subservient role that limits their ability to generate adequate returns has relevance in Hawke's Bay. There is little doubt that the economic viability of small farmers and growers in the province slipped between 1945 and 2010. But the similarly poor performance of secondary processors after 1995, nevertheless, suggests the presence of forces beyond those of the provincial economy such as rising competition following the globalisation of food manufacturing. It is, however, important to stress the relative nature of the decline as the province successfully negotiated three very distinct eras of economic development. Consequently, Hawke's Bay's successful multi-dimensional primary development model has strong commonality with the beliefs of Ville and Wicken and De-Ferranti. Importantly, free trade and foreign investment played an influential role in the development of the province's economy both before and after 1945. Furthermore, historical evidence since WW2 suggests that the province's primary cylinders have acted in accordance with what Ville and Wicken referred to as 'enabling sectors.'

In common with international interpretations of staples-led development, New Zealand discussions regarding staples theory, academic as well as political, are both positive and negative. At one extremity, Sutch's advocacy of industrialisation casts doubt on the desirability of a primary based economy. By contrast, scholars such as Condliffe and Gould and officials such as Lang took a less negative position, arguing that New Zealand agriculture was highly productive and therefore a solid base for future growth. Historical evidence exists to support both groups. In the 1950s and 1960s, decades when Sutch's protectionist vision was widely implemented, cash profitability in the Hawke's Bay primary sector was

extremely good. It is important to stress that growers were not protected, only processors. Consequently, any benefit that growers accrued was indirect. Nonetheless, once protection ended the profits of both growers and processors fell sharply. A number of disadvantageous consumer and economic trends contributed to the decline, but the synchronised under-performance of both primary producers and food manufacturers suggests that industrialisation was not a development panacea. Crucially, in the two decades following WW2, profitability was approximately two-three times higher than the 1990s and beyond. Therefore, import protection clearly coincided with a period of inflated profitability for processors such as Watties. Local firms nevertheless failed to capitalise on the advantage by developing the skills and resources needed to survive as independent firms, a finding that questions Sutch's advocacy of infant industry theory. On the other hand, the appalling lows of the mid-1990s do little to further the positive perspectives of Condliffe and Gould.

Profitability is clearly an important indicator of success for both processors and producers but for the latter group land prices are an additional benchmark. Importantly, from 1945 to 2010, land price appreciation in Hawke's Bay enabled farmers to earn a return comparable to that of other investments. The finding backs Easton's 1983 study of rural land prices in the period from 1958 to 1973. Easton's research, however, does not represent the full post war experience. His analysis covers the most profitable period in New Zealand agricultural history and consequently he does not compare the buoyant 1950s and 1960s with the disappointing 1990s and 2000s. On the other hand, Easton highlights the importance of the land price dynamic and the causal link with farm profitability. Even so, other drivers must be recognised. Although not a complete solution for industry ills, diversification and scale efficiencies were capitalised into land values quite quickly after 1945, even during the post liberalisation period of the 1990s and 2000s. The finding confirms that productivity gains posted by New Zealand agriculture, and noted by Gould, Hawke and Easton, remain essential to the rationality of investing and participating in New Zealand agriculture.

Finally, the history of staples theory has been a long battle between negative and positive interpretations, a debate in which the importance of linkages has been similarly recurrent. Although Hawke's Bay's multidimensional primary economy offers a distinctly different model to previous interpretations, linkages are firmly in place between the

broader primary sector and other sectors of the provincial economy. Of equal importance, land use change means linkages exist within the primary sector itself, a model that has sufficient flexibility to permit the addition of new primary activities. No other interpretation of staples theory considers these possibilities.

## Key Findings.

This thesis has tested the idea that economic development based on the primary sector is somehow backward, a model of development unbecoming an economy such as New Zealand. As the Introduction indicates, for lengthy periods in the twentieth century, influential officials saw industrialisation as the pre-requisite for improved economic outcomes. Although significant disagreement existed, the belief became embedded in New Zealand government policy during the 1950s and 1960s. Although New Zealand's traditional strengths in agriculture were never fully disregarded by policy makers, the strategy of 'insulation' assumed that a relative decline in its influence was desirable, a way for New Zealand to lift the sophistication and wealth of its economy. Despite the assumption, this thesis shows that it is possible to create a sustainable primary based economy albeit a number of preconditions are essential, most particularly the capacity to grow an interchangeable range of primary products.

. Adaptability, innovation and diversification explain why Hawke's Bay is not an example of a 'staples trap.' The province's diversified primary sector coupled with land use flexibility enabled agriculture to adjust to declining productivity growth and commodity prices as well as the loss of subsidies and protection. Most importantly, between 1945 and 2010 land use change and the capitalisation of productivity gains into rural land values generated capital returns for farmers and orchardists that rivalled those of alternative investments. Furthermore, diversification (markets and products) as well as a willingness to innovate (greater scale, new ownership models, corporatisation, technology and varieties) delivered a second tier of flexibility. Participants that did not employ these strategies were either absorbed by more successful rivals or liquidated.

Moreover, the province's development was assisted by strong transport links, dominant primary sector institutions, increased scale and international investment, most

notably in primary processing. But it is equally true that the multinationals that entered the province's food processing industry after 1980 achieved levels of cash profitability substantially below those recorded in the immediate post war decades by the dominant local processor. Importantly, the 1950s and 1960s, years of high prices and protection, were unique for both New Zealand agriculture and food manufacturers. In subsequent decades cash profitability fell sharply and remained very low relative to the value of assets employed, a conclusion that applied equally to all participants – farmers, growers and processors alike. Land use change, increased scale and corporatisation did not provide a full answer.

This thesis has shown that Hawke's Bay has many of the hallmarks of staples theory, but these are ameliorated by the diversified nature of primary production in the province, most importantly the ability to alter land use and production models in response to price signals, government policy changes and changing social and business norms. That a well-structured and internally flexible primary sector located in a New Zealand province can generate comparatively strong, long term capital growth provides a counterweight to negative perceptions of staples-based development. Furthermore, my thesis advances the notion that appreciating land values, not cash profitability, provided the bulk of long term returns to farmers and questions the usefulness of infant industry theory as the basis for long term economic sustainability.

This thesis is the first economic history of Hawke's Bay's land based primary sector (1945 to 2010). There is no scholarly equivalent. Most particularly, although staples theory is an established branch of economic history, academic research has not before considered the diversified model of primary production that exists in the province. For example, the classical theories of Mackintosh and Innis consider staples in a single commodity cylinder whilst many contemporary interpretations stress the importance of macro considerations such as governance and institutions as opposed to the interaction and inter-changeability between staples. Consequently, to date academic research has avoided the complexity inherent to a multi-polar model of staples-led development. The distinct nature of the research undertaken is furthered by the use of several unique historical resources and the synthesis of numerous statistical archives to create new historical information. Crucially, the archives of the Hawke's Bay branch of Federated Farmers have not before been considered



in the context of a multi-sector regional economic history. Furthermore, research uncovered a hitherto unknown historical database - the land valuation records of the Hawke's Bay branch of the New Zealand government's Valuation Department (latterly Valuation New Zealand, Quotable Value & QV). Dating from 1945, and outlined in detail in Chapter Two, these records have not previously been the subject of historical research.

Finally, this thesis shows that staples-based economies, when imbued with sufficient flexibility, are not the trap some academics suggest. Although this has been a very New Zealand-centric study, the finding is of great relevance to a range of countries. Most particularly, Hawke's Bay provides an exemplar for less developed states. On account of its continued reliance on primary exports, New Zealand is an outlier among developed economies. But as Hawke's Bay shows the country's primary sector has both delivered a developed economic base and facilitated its retention. In doing so the province provides a hopeful example to developing countries and regions within them, where staples production is similarly dominant - a case of treasure rather than trap.

# BIBLIOGRAPHY.

---

## PRIMARY SOURCES: Napier.

### Hawke's Bay Regional Museum Archives.<sup>422</sup>

Hawke's Bay Farmers Co-operative Society (1932-1979).

- Assorted Founding documents & financial data: 1932 (ref 58619);
- Financial & operating data 1970 – 1979 (refs 58664 & 68125).

Hawke's Bay Farmers Meat Company (1940-1983).

- Company policies, financial and operating data, labour relations (1940-1969).
  - 1940-1949 (refs 55781, 70273);
  - 1949-1959 (refs 55783, 70016);
  - 1960-1969 (refs 55780, 78946);
- Photographs (refs 67759, 69717);
- Minute books: 1944-1983 (refs 68017, 68019, 68032, 68035, 68037);
- Redevelopment 1976 (ref 800227).

Hawke's Bay Forestry.

- Farm forestry (ref 58971);
- Formative development (ref 58971).

Hawke's Bay meat freezing industry.

- Historical development (refs 63633, 69715).

Hawke's Bay Provincial District Federated Farmers Archives (1944-1989).

- Correspondence files (ref 25362 and archival boxes 309 & 312);
- Newspaper clippings and scrapbooks (refs 25361 & 56127);

---

<sup>422</sup> Archive system references are attached.

- Minutes, reports and letters (refs 36530, 58840, 58843, 58844, 58845, 58846, 58847, 58848, 58849, 58850, 58851, 58852, 58853, 58854, 58855, 58856, 58857, 58858);
- Photographs (refs 58833, 58834, 58835, 58836, 58838, 58839).

John Ormond Papers.

Knight, O.W. Letter No.27 to New Zealand Meat Workers Union, February 9<sup>th</sup>, 1970 (archival box AR876).

Lord Vestey, Speech to Hawke's Bay A&P Society Dinner, October 20<sup>th</sup>, 1988 (archival box AR876).

Port of Napier Archives (1949-1961).

- Refs M95/4, 78946 (1966/67), M2010/95, 70273, M2010/95, 70016, M200/16/1-3, 59227, archival boxes 306, 308, 310 & 311.

Stevenson, Jock. "History of Napier Port" - in manuscript (archival Box 306).

Various Hawke's Bay agricultural.

- Refs 89726, 89799.

Williams & Kettle.

- Assorted founding documents (ref 58555);
- Operating data – 1974 (refs 58614 & 58640).

## **Valuation Department of New Zealand Archives.<sup>423</sup>**

Valuation Department of New Zealand, Research Paper 72-2, 1972.

Valuation Department of New Zealand, Research Paper 83/4, 1983.

Valuation Department of New Zealand, Research Paper 85/4, 1985.

Valuation Department of New Zealand, Research Paper 90/2, 1989.

Valuation Department of New Zealand, Rural Real Estate Market in New Zealand, December 1985.

---

<sup>423</sup> Waghorne Street, Ahuriri.

Valuation New Zealand, Rural Property Sales Statistics, Half Year Ended June 1990.

Valuation New Zealand, Rural Property Sales Statistics, Half Year Ended June 1995.

Valuation New Zealand, Rural Property Sales Statistics, Half Year Ended 30<sup>th</sup> June 1997.

## **Other Napier Archives.**

*Napier Library.*

Hawke's Bay: A Regional Profile, 1999.

Hawke's Bay regional newspapers.

New Zealand Ministry of Forestry (NZMOF): "Regional Studies: Hawke's Bay."

New Zealand Ministry of Works, Hawke's Bay Regional Resource Survey: 1970/1971.

*Eastern Institute of Technology.*

Hawke's Bay Vintners – Regional Survey (1985).

## **OFFICIAL PUBLICATIONS: Wellington.**

### **Statistics New Zealand.**

2006 Census Quick Stats,

<http://stats.govt.nz/Census/2006CensusHomePage/QuickStats/AboutAPlace/SnapShot.aspx?id=2000031&type=ta&ParentID=1000006>

2012 Agri-yearbook.

2013 Census Quick Stats,

[http://archive.stats.govt.nz/Census/2013-census/profile-and-summary-reports/quickstats-about-a-place.aspx?url=/Census/2013-census/profile-and-summary-reports/quickstats-about-a-place.aspx&request\\_value=14074&tabname=](http://archive.stats.govt.nz/Census/2013-census/profile-and-summary-reports/quickstats-about-a-place.aspx?url=/Census/2013-census/profile-and-summary-reports/quickstats-about-a-place.aspx&request_value=14074&tabname=)

Agricultural Census 2007,

[www.stats.govt.nz/browse\\_for\\_stats/industry\\_sectors/agriculture-horticulture-forestry/2007-agricultural-census-tables/land-use-farm-counts.aspx](http://www.stats.govt.nz/browse_for_stats/industry_sectors/agriculture-horticulture-forestry/2007-agricultural-census-tables/land-use-farm-counts.aspx)

Agricultural Census 2012,

[www.stats.govt.nz/browse\\_for\\_stats/industry\\_sectors/agriculture-horticulture-forestry/2012-agricultural-census-tables/land-use.aspx](http://www.stats.govt.nz/browse_for_stats/industry_sectors/agriculture-horticulture-forestry/2012-agricultural-census-tables/land-use.aspx)

Agricultural Census – 2012: farm data,

[http://m.stats.govt.nz/browse\\_for\\_stats/industry\\_sectors/agriculture-horticulture-forestry/2012-agricultural-census-tables/farm-counts.aspx](http://m.stats.govt.nz/browse_for_stats/industry_sectors/agriculture-horticulture-forestry/2012-agricultural-census-tables/farm-counts.aspx)

Agriculture/Hawke's Bay Region/Wool shorn (kg)/1990-1994,

<http://www.stats.govt.nz/infoshare/ViewTable.aspx?pxID=57a6f1a8-dd72-44b2-b38f-52f73203c963>

Agricultural production & land use by regional council,

<http://www.stats.govt.nz/infoshare/ViewTable.aspx?pxID=b91f5748-17fd-422c-8eeb-36795dfc8a53>

Agricultural statistics (1996),

[www.stats.govt.nz/browse\\_for\\_stats/industry\\_sectors/agriculture-horticulture-forestry/agriculture-stats-1996.aspx](http://www.stats.govt.nz/browse_for_stats/industry_sectors/agriculture-horticulture-forestry/agriculture-stats-1996.aspx)

Infoshare: terms of trade data (1926-2010).

<http://archive.stats.govt.nz/infoshare/?url=/infoshare/SelectVariables.aspx&pxID=69e5b2bf-7506-425e-a601-c6eda64a036b>

National Exotic Forestry Description (NEFD), 2005, 2010/11.

New Zealand Digital Yearbook, [www.stats.govt.nz/yearbooks](http://www.stats.govt.nz/yearbooks)

Regional council by kill, animal type,

<http://www.stats.govt.nz/infoshare/ViewTable.aspx?pxID=8776627c-8c1b-42dd-a547-0b570fb8d186>

Vegetable imports by category,

<http://www.stats.govt.nz/infoshare/ViewTable.aspx?pxID=4d26f4c2-0019-47bf-a9cf-bd0014cb4bc3>

Wool export prices, wool export volumes and values, sheep meat exports, total sheep and lambing percentages (1935-2010),

[http://www.stats.govt.nz/browse\\_for\\_stats/economic\\_indicators/prices\\_indexes/historical-wool-export-prices-volumes-2011.aspx](http://www.stats.govt.nz/browse_for_stats/economic_indicators/prices_indexes/historical-wool-export-prices-volumes-2011.aspx)

## **Parliamentary.**

Annual Sheep Returns (*Appendices to the Journals of the House of Representatives: AJHR*)

- AJHR, 1886, H-15.
- AJHR, 1905, H-23.
- AJHR, 1915, H-24.
- AJHR, 1918, H-23.
- AJHR, 1925, H-23.
- AJHR, 1935, H-23.
- AJHR, 1945, H-23.

Apple and Pear Industry Restructuring Act, 1999 (No.96).

Apple and Pear Industry Restructuring Act Repeal Act 2001 (No.50).

Commercial Gardens Registration Act, 1943 (7 GEO VI 1943 No.1).

Death Duties Amendment Act, 1952 (No.76).

Estate and Gift Duties Act, 1955 (No.105).

Import Control Regulations, 1938 (No.161).

Industrial Efficiency Act, 1936 (No.40).

Meat Act, 1939 (No.19).

Meat Act, 1964 (No.71).

Meat Act, 1981 (No.56).

Meat Export Control Act, 1921-22 (No.73).

Orchard-tax Act, 1927 (18 GEO V 1927 No.25).

Servicemen's Settlement and Land Sales Act, 1943 (7 GEO VI 1943 No.16).

Soil Conservation and Rivers Control Act, 1941 (No.12).

Wool Industry Act, 1977 (No.92).

Parliamentary Debates:

- 26<sup>th</sup> Parliament, 5<sup>th</sup> Session: 21<sup>st</sup> August 1943.
- 44<sup>th</sup> Parliament, 1<sup>st</sup> Session: 23<sup>rd</sup> August 1994.
- 37<sup>th</sup> Parliament, 2<sup>nd</sup> Session: 28<sup>th</sup> June, 1974.
- 36<sup>th</sup> Parliament, 1<sup>st</sup> Session: 3<sup>rd</sup> November 1970.

Wool Industry Restructuring Bill, First Reading March 19<sup>th</sup>, 2003,  
[https://www.parliament.nz/en/pb/hansard-debates/rhr/document/47HansD\\_20030319\\_00001428/wool-industry-restructuring-bill-first-reading](https://www.parliament.nz/en/pb/hansard-debates/rhr/document/47HansD_20030319_00001428/wool-industry-restructuring-bill-first-reading)

Royal Commission to inquire into and report upon the Sheep Farming Industry in New Zealand. Parliamentary Paper H-46a, 1949,  
<https://paperspast.natlib.govt.nz/parliamentary/AJHR1949-I.2.4.2.12>

Sutton, Jim (MP). Apple and Pear Industry Act Repeal Bill,  
<https://www.beehive.govt.nz/speech/apple-and-pear-industry-act-repeal-bill-first-reading>

## **OTHER OFFICAL PUBLISHED STATISTICS (BY SECTOR).**

### ***Pastoral.***

Beef & Lamb Economic Service: Performance statistics, East Coast North Island.

Beef & Lamb New Zealand: beef and lamb production statistics & farm survey data 1970-2010.

Figure NZ: Farm production statistics and superphosphate application volumes,  
<https://figure.nz/chart/OM970pROzZ63TuIN-pflozhXL6WF5cLWL>

New Zealand Department of Agriculture, Annual Statistical Report, H-29 (1939-1940): 1-20.

New Zealand Ministry of Agriculture and Fisheries: Hawke's Bay pastoral farm profitability statistics.

New Zealand Ministry for Primary Industries: Hawke's Bay/Wairarapa sheep & beef profitability model and farm monitoring statistics.

New Zealand Wool Board, Department of Statistics: sheep returns (1962 & 1979).

### ***Horticulture.***

New Zealand Apple & Pear Marketing Board – orchard production data.

New Zealand Ministry of Agriculture & Fisheries: Economic Orchard Surplus Model.

New Zealand Ministry of Primary Industries: Orchard Profitability Statistics.

Plant and Food Research and Horticulture New Zealand (Freshfacts): horticultural production data: 1997-2014.

### ***Forestry.***

New Zealand Ministry of Agriculture and Forestry: Hawke's Bay Forest Industry and Wood Availability (Statistical Forecasts).

### ***Wine.***

New Zealand Ministry of Agriculture & Fisheries: Hawke's Bay vineyard monitoring model.



New Zealand Winegrowers Inc: New Zealand Vineyard Survey Statistics.

***Multisector.***

New Zealand Department of Agriculture: Primary Production Statistical Overview, 1957.

New Zealand Ministry of Agriculture and Forestry: vegetable and arable farm monitoring statistics, 1995-2010.

IRESS & Thompson Reuters – archival financial data.

**NEWSPAPERS & INDUSTRY PUBLICATIONS.**

*ANZ Bank – Agrifocus commentaries*

*Baybuzz*

*Bay of Plenty Times*

*Deloitte New Zealand: New Zealand wine industry benchmarking survey*

*Evening Post*

*Exporter Today*

*Hawke's Bay Herald*

*Hawke's Bay Today*

*Hawke's Bay Herald Tribune*

*Horticulture & Food Research Institute of New Zealand*

*Interest.com*

*Ministry of Forestry Outlook*

*Morice and Company property reports*

*Napier Daily Telegraph*

*National Business Review*

*New Zealand Forestry Owners Association Journal*

*New Zealand Ministry for Primary Industries: Horticulture and Arable Overview*

*New Zealand Wine Review*

*New Zealand Winegrowers Inc*

*New Zealand Farmer*

*New Zealand Herald*

*Otago Daily Times*

*Patunamu Forest Journal*

*Pip-fruit New Zealand*

*Rural Delivery*

*Sharechat*

*The Christchurch Press*

*The Dominion*

*The Dominion Post*

*The Guardian*

*The Orchardist*

*The Southland Times*

*The Times*

*Wanganui Chronicle*

*Westpac Agribusiness commentaries*

*Wool Research Organisation of New Zealand (WRONZ)*

## **OTHER PRIMARY SOURCES.**

### ***Annual Reports – Companies Office and Stock Exchange Filings.***

Cavalier Corporation

Hawke's Bay Farmers Meat Company

Hawke's Bay Knowledge Bank

Heinz New Zealand Limited

Johnny Apple Seed Ltd – Havelock North

J. Wattie Canneries

New Zealand Apple & Pear Board

New Zealand Winegrowers Incorporated

New Zealand Wool Services International

Orchard Investments Ltd (OIL) – Hastings

Pan Pac Forest Products Limited

Progressive Meats – Hastings

Williams & Kettle

Williams & Kettle, First Schedule Takeover Notice, 14th November 1996.

Wine Institute of New Zealand

***Speeches, corporate actions, British parliamentary debates and photographs/videos.***

Alexander Turnbull Library, Watt Collection, ref 1/2-080444; F,

<http://www.teara.govt.nz/en/photograph/23452/port-ahuriri-wharf>

Alexander Turnbull Library, “Glenvale Vineyards Ltd: Special extra strength, contains 39% proof spirit. Glenvale medium dry golden sherry, produced and bottled in New Zealand by Glenvale Vineyards Ltd, Bay View, Napier“, ref Eph-B-ALCOHOL-Labels-1960/1970s-01-058-6

Australian Department of Agriculture & Water (DAWR). Canberra.

British Parliament Debates (Hansard). HC Deb 03 December 1969 Vol.792 cc1661-72.

Accessed May 21<sup>st</sup>, 2019. <https://api.parliament.uk/historic-hansard/commons/1969/dec/03/apples-import-quotas>

Hawke’s Bay Digital Archives, Tomoana Freezing Works,

<https://knowledgebank.org.nz/653/720/33150>

Lee, Dr William. “Global economics.” Speech, Citibank investment conference, Sydney October 18<sup>th</sup>, 2016.

Messrs Nelson Brothers'. Prospectus - NELSON BROTHERS, (LIMITED.) Incorporated under The Companies Acts, 1862 to 1880, [http://www.mirrormist.com/the\\_nelson\\_brothers.htm](http://www.mirrormist.com/the_nelson_brothers.htm)

Ormond, Sir John. "Retirement." Speech, Wellington, March 1972 (in *Meat Acts*).

## SECONDARY SOURCES.

### Books.

Ammundsen, R (ed). *From Swamp to City*. Hastings: Hart Publishing, 1961.

Anderson, Len. *Throughout the East Coast: The Story of Williams & Kettle Ltd*. Hastings: Pictorial Publications, 1974.

Baker, J.V.T. *The New Zealand People at War: War Economy* (Wellington, Historical Publications Branch, Department of Internal Affairs, 1965.

Belich, James. *Replenishing the Earth – the Settler Revolution and the Rise of the Anglo World, 1783-1939*. New York: Oxford University Press, 2009.

Boyd, Mary. *City of the Plains: A History of Hastings*. Wellington: Victoria University Press, 1984.

Calder, Mick and Janet Tyson. *Meat Acts: The New Zealand Meat Industry 1927-1997*. Wellington: Meat New Zealand, 1999.

Condliffe, John B. *The economic outlook for New Zealand*. Wellington: Whitcombe & Tombs, 1969.

Condliffe, John B. *New Zealand in the Making: A Survey of Economic and Social Development*. London: George Allen and Unwin, 1959.

Conly, Geoff. *Wattie's: The First Fifty Years*. Hastings: J Wattie Canneries, 1984.

Cooper, Michael. *The Wines & Vineyards of New Zealand*. Auckland: Hodder and Stoughton, 1994.

Cooper, Michael. *Wine Atlas of New Zealand: 2<sup>nd</sup> Edition*. Auckland: Hachette, 2008.

Coriolis Research. *Overview Of The New Zealand Apple Industry In A Global Context*. Auckland: Pip-fruit New Zealand, December 2006.

Crawford, John Grenfell, McDonald, C.M, Dowsett C.P, Williams D.D and Ross A.A. *Wartime Agriculture in Australian and New Zealand 1939-50*. Stanford: Stanford University Press, 1954.

Cronon, William. *Nature's Metropolis: Chicago and the Great West*. New York: W.W Norton & Co, 1991.

De Ferranti, David, Perry, Guillermo E, Lederman, Daniel., and William E Maloney. *From Natural Resources to the Knowledge Economy: Trade and Job Quality*. New York: World Bank, 2002.

Denoon, Donald. *Settler Capitalism: the dynamics of dependent development in the Southern Hemisphere*. Oxford: Clarendon Press, 1983.

Dunlop, Beverley and Kay Mooney. *Hawke's Bay - Profile of A Province*. Auckland: Hodder and Stoughton, 1986.

Easton, Brian. *In Stormy Seas*. Dunedin: University of Otago Press, 1997.

Easton, Brian. "From Run to Float: The Making of the Rogernomics Exchange Rate Policy." In *The Making of Rogernomics*, edited by Brian Easton. Auckland: Auckland University Press, 1989.

Ellis, Craig. *Who Dares Wins Freedom: Graeme Lowe of Lowe Corporation*. Napier: Formula New Zealand, 2004.

Evans, Lewis and Martin Richardson. "Trade Reform in New Zealand: Unilateralism at Work?" Victoria University of Wellington, February 1998. In *Relaxed Reciprocity: Historical and Modern Experience with Unilateral Trade Liberalization*, edited by J. Bhagwati. Cambridge, Massachusetts: MIT Press, 1998.

- Fargher, Ray. *The Best Man Who Ever Served the Crown? A Life of Donald McLean*. Wellington: Victoria University Press, 2007.
- Gould, John D. *The Rake's Progress? The New Zealand Economy Since 1945*. Auckland: Hodder & Stoughton, 1982.
- Grant, David Malcolm. *Bulls, Bears & Elephants: A History of the New Zealand Stock Exchange*. Wellington: Victoria University Press, 1997.
- Grant, P.J. *Hawke's Bay Forests of Yesterday*. Havelock North: P J Grant, 1996.
- Guthrie Smith, Herbert. *Tutira: The Story of a New Zealand Sheep Station*. Edinburgh and London: William Blackwood and Sons, 1921.
- Hall, David. *Emerging From An Entrenched Colonial Economy: New Zealand Primary Production, Britain and the EEC, 1945-1975*. Cham: Palgrave, 2017.
- Hawke, Gary R. *The Making of New Zealand: An Economic History*. Cambridge: Cambridge University Press, 1985.
- Hawke's Bay Vintners. *A Hawke's Bay Regional Wine and Grape Industry Study*. Napier: Hawke's Bay Vintners & Eastern Institute of Technology, 1985.
- Hayward, Dai (ed). *Golden Jubilee, New Zealand Meat Producers Board First Fifty Years*. Wellington: Universal Printers, 1972.
- Hirschmann, Albert O. *The Strategy of Economic Development*. New Haven: Yale University Press, 1958.
- Hirschmann, Albert O. *Essays in Trespassing – economics to politics and beyond*. New York: Cambridge University Press, 1981.
- Innis, Harold Adams. *The fur trade in Canada: an introduction to Canadian economic history*. Toronto: Yale University Press, 1930.
- Innis, Harold Adams. *The cod fisheries: the history of an international economy*. New Haven: Yale University Press, 1940 and Toronto: The Ryerson Press, 1940.

- Irving, David and Kerr Inkson. *It Must Be Watties! From Kiwi Icon To Global Player*. Auckland: David Bateman Publishing, 1998.
- Locke, Cybele. *Workers in the margins: Union Radicals in Post War New Zealand*. Wellington: Bridget Williams Books, 2012.
- MacGregor, Miriam. *Early Stations of Hawke's Bay*. Wellington: Reed, 1970.
- Mackintosh, William A. *The Economic Background of Dominion-provincial Relations*. Toronto: McGill Queens University, 1964.
- Madsen, Jakob B. "Australian economic growth and its drivers since European settlement." In *The Cambridge Economic History of Australia*, edited by Simon Ville and Glenn Withers. 29-51. Port Melbourne: Cambridge University Press, 2015.
- Mannering, Rose. *100 Harvests: a history of fruit growing in Hawke's Bay*. Wellington: PSL Press, 1999.
- McAloon, Jim. *Judgements of all Kinds – Economic Policy-Making in New Zealand 1945-1984*. Wellington: Victoria University Press, 2013.
- McAloon, Jim. "The State and Economic Policy in Twentieth Century Australia and New Zealand: Escaping the Staples Trap." In *Settler Economies in World History*, edited by Christopher Lloyd, Jacob Metzger, and Richard Sutch, 521-544. Leiden: Brill, 2013.
- McClintock, B. *Gordon Coates and the Nation-Building State: 1920-1935*. Kensosha, Wisconsin: Economics Department, Carthage College, 1999.
- McKelvey, Peter. *Steepland Forests: A historical perspective of protection forestry in New Zealand*. Christchurch: University of Canterbury Press, 1995.
- McKinnon, Malcolm. *The Broken Decade – Prosperity, Depression and Recovery in New Zealand, 1928-39*. Dunedin: Otago University Press, 2016.
- McKinsey & Company. *Report to New Zealand Woolgrowers on Improving Profitability: Summary of Recommendation*. Wellington: McKinsey, 2000.

McLean, Ian W. *Why Australia Prospered – The Shifting Sources of Economic Growth*. Princeton: Princeton University Press, 2013.

Moran, Warren. *New Zealand Wine: The Land, the Vines, the People*. Auckland: Auckland University Press, 2016.

Naylor, Tom R. *The History of Canadian Business 1867-1914*, Volumes 1 and 2. Toronto: J. Lorimer Publishing, 1975.

Neill, Robin. *A History of Canadian Economic Thought*. London: Routledge, 1991.

Organisation for Economic Co-operation and Development (OECD). *OECD economic surveys: New Zealand 1988/1989*. Paris: OECD Publishing, 1989.

Organisation for Economic Co-operation and Development (OECD). *Development Centre Studies - The World Economy, Volume 1: A Millennial Perspective, Volume 2: Historical Statistics*. Paris: OECD Publishing, 2006.

O'Malley, Timothy R, William Rose and C Gillion. *Farming and Inflation: a report to the New Zealand Dairy Board and the New Zealand Meat Producers Board*. Wellington: New Zealand Institute for Economic Research, 1973.

Owen, Geoffrey. *From Empire to Europe: The Decline and Revival of British Industry Since the Second World War*. London: Harper Collins, 1999.

Pawson Eric and The Biological Economies Team. *The New Biological Economy – How New Zealanders are Creating Value from the Land*. Auckland: Auckland University Press, 2018.

Philpott, Bryan P. *The Economic Mechanism: Economic Theory in Relation to the New Zealand Economy*. Wellington: Reed, 1973.

Prentice, William T. "The Coming of Toi." In *History of Hawke's Bay*, edited by James Gordon Wilson. Wellington: Reed, 1939.

Roberts, A.A. *A Family Affair: A History of Murray Roberts & Co Ltd*. Hastings: Pictorial Publications, 1982.



Roche, Julian. *The International Wool Trade*. Cambridge: Woodhead Publishing, 1995.

Roche, Michael. *History of New Zealand Forestry*. Auckland: New Zealand Forestry Corporation Ltd, 1990.

Singleton, John and Paul Robertson, *Economic Relations Between Britain and Australasia, 1945-1970*. London: Palgrave, 2002.

Stevenson, Jock. *Port and People: Story of the Port of Napier 1875-1975 (additional title: Century at the Port of Napier)*. Napier: Hawke's Bay Harbour Board, 1977 (addendum published 1989).

Stoffman, Daniel. *From The Ground Up – The First Fifty Years Of McCain Foods*. Toronto: McCain, 2007.

Sulzberger, Jack. *The Richmond Years*. Hastings: Pictorial Press, 1980.

Sutch, William B. *Price Fixing in New Zealand*. New York: Columbia University Press, 1932.

Sutch, William B. *Poverty and Progress in New Zealand*. Wellington: Modern Books 1941.

Sweet, Mark. *Wine: Stories from Hawke's Bay*. Havelock North: Baybuzz Publishers, 2015.

Thomsen, Kevin, Simon Stokes, Alec Olsen and Susan MacIntosh. *Guide to Successful Farm Forestry: A Hawke's Bay Perspective*. Napier: New Zealand Farm Forestry Association, 2005.

Tyack, Kerry R. *The Winemaker – George Fistonich and the Villa Maria Story*. Auckland: Random House, 2012.

Ville, Simon. *The Rural Entrepreneurs: A History of the Stock and Station Agent Industry in Australia & New Zealand*. Cambridge: Cambridge University Press, 2000.

Von Thunen, Johann Heinrich. *Von Thunen's Isolated State*. Translated by Carla Wartenbery, edited by Peter Hall. New York: Pergamon Press, 1966.

Watkins, Mel. *Staples and Beyond: Selected Writings of Mel Watkins*. Edited by Hugh Grant and David A. Wolfe. Montreal: MQUP Publishing, 2006.

Wilson, James Gordon. *History of Hawke's Bay*. Wellington: Reed, 1939.

Wright, Matthew. *Hawke's Bay: The History of a Province*. Palmerston North: Dunmore Press, 1994.

Wright, Matthew and Arthur Locke. *Working Together: The History of Carter Oji Kokusaku Pan Pacific Limited, 1971-1993*. Napier: Pan Pacific Forest Industries, 1999.

Young, Robert (ed). *Hawke's Bay 1967*. Auckland: Breckell & Nicholas Ltd, 1967.

### **Academic journals, articles & research papers.**

Altman, Morris. "Staples Theory and Export-Led Growth: Constructing Differential Growth." *Australian Economic History Review*, Vol. 43, No.3 (November 2003): 230-55.

Australia and New Zealand Banking Corporation. "A Yarn Of Wool." *New Zealand Economics, ANZ Agri-Focus* (April 2013): 1-37.

Australia and New Zealand Banking Corporation. "Pip-fruit sector in full bloom." *New Zealand Economics, ANZ Agri-Focus* (December 2015): 1-41.

Australia and New Zealand Banking Corporation. "Turning water into wine." *New Zealand Economics, ANZ Agri Focus* (March 2012): 1-34. Accessed December 27<sup>th</sup>, 2017.

<https://www.anz.co.nz/resources/3/0/309e22004ab1bf7ab62afe415e15c706/ANZ-AgriFocus-20120330.pdf>

Ballara A and G Scott. *Waitangi Tribunal*, Waipukurau block file, Vol.II, 90-94; Ahuriri block file, Vol.I, 51 & 52; Mohaka block file, Vol.I, 6 & 7.

Buckley, K. "The Role of Staples Industries in Canada's Economic Development." *The Journal of Economic History*, Vol.18, Issue 4 (December 1958): 439- 450.

Brook, Anne-Marie Brook, Sean Collins, and Christie Smith. "The 1991-97 business cycle in review." *Reserve Bank of New Zealand Bulletin*, Vol.61, No.4 (1998): 269-290. Accessed December 2nd, 2016. <http://www.rbnz.govt.nz/-/media/ReserveBank/Files/Publications/Bulletins/1998/1998dec61-4brookcollinssmith.pdf>

Brown, Colin. "Financial Viability – a long term view." *New Zealand Grasslands Association*, Vol.58 (1996): 7-12. Accessed February 12<sup>th</sup>, 2017.

[http://www.grassland.org.nz/publications/nzgrassland\\_publication\\_648.pdf](http://www.grassland.org.nz/publications/nzgrassland_publication_648.pdf)

BurrIDGE, G.J. "The Location of Meat Freezing Works in New Zealand." *New Zealand Geographer*, Vol.20, No.1 (1964): 43-59.

Chavasse, C.G.R. "Forestry and the small grower: Diversification in forestry." *New Zealand Journal of Forestry*, Vol.30, No.1 (1985): 28-44.

Conforte, Daniel, Samuel Dunlop., and Elena Garnevska. "New Zealand Wool Inside: A Discussion Case Study." *International Food and Agribusiness Management Review (IFAMA)*, Vol.14, Issue 3 (2011): 147-178.

Contreras, Ricardo. "Competing Theories of Economic Development." *University of Iowa Center For International Finance and Development*: 1-13. Accessed May 12<sup>th</sup>, 2019, <https://ufl.instructure.com/courses/333527/files/29613906/download>

Cooper, J.F.S, J Chester and R.Y Cavana. "A Policy Making Framework for the New Zealand Wine Industry." *Paper presented to 12<sup>th</sup> International Conference of the Systems Dynamics Society – Stirling Scotland (1994)*: 23-33. Accessed June 30<sup>th</sup>, 2018. [https://www.systemdynamics.org/assets/conferences/1994/proceed/papers\\_vol\\_1/coope023.pdf](https://www.systemdynamics.org/assets/conferences/1994/proceed/papers_vol_1/coope023.pdf)

Coriolis, Ministry of Economic Development, MFAT, MAF, NZTE and MPI. Sector Stream - Meat. *Food & Beverage Information Project (2011)*: 1-67.

Coriolis, MBIE, NZTE and MPI. "The Investors Guide To The New Zealand Food & Beverage Industry." *Food & Beverage Information Project (2015)*: 1-128.

Coriolis, MBIE, NZTE and MPI. "The Investors Guide To The New Zealand Meat Industry." *Food & Beverage Information Project (2017)*: 1-93.

Coriolis Research. "An overview of the New Zealand wine industry." *Wine Industry Potential (May 2006)*: 1-219.

- Cumberland, Kenneth B. "The Agricultural Regions of New Zealand." *The Geographical Journal*, Vol.112, No.1/3 (July – September 1948): 43-63.
- Dalton, D.C and S Ball. "Performance of Romney and crossbred sheep on east coast hill country." *New Zealand Journal of Experimental Agriculture*, Vol. 4 (1976): 35-40.
- Davison, R. "Is there room to move? Sector performance and benchmarking." Canterbury Sheep Council Annual Meeting (2001). As cited by Parker, W. Accessed April 28<sup>th</sup>, 2017 [https://www.grassland.org.nz/publications/nzgrassland\\_publication\\_256.pdf](https://www.grassland.org.nz/publications/nzgrassland_publication_256.pdf)
- Dibden J, Potter C & Cocklin, C. "Contesting the neoliberal project for agriculture: Productivist and multifunctional trajectories in the European Union and Australia." *Journal of Rural Studies* No.25 (2009): 299-308.
- Deloitte. "Vintage 2011 New Zealand wine industry benchmarking survey." December 2011.
- Dowling, L.J. "Farming in Hawke's Bay." *New Zealand Grassland Association*, Vol.37 Hastings (1975): 233-239. Accessed June 30<sup>th</sup>, 2018. [https://www.grassland.org.nz/publications/nzgrassland\\_publication\\_522.pdf](https://www.grassland.org.nz/publications/nzgrassland_publication_522.pdf)
- Easton, Brian. "Income Distribution in New Zealand." *NZIER Research Paper No.28* (1983): 1-280.
- Easton, Brian. "What Happened to the Nation Building State in New Zealand." *Paper presented for the New Zealand and Australian Studies section of the Conference of the Western Social Sciences Association, Fort Worth, Texas, April 21<sup>st</sup>-24<sup>th</sup>, 1999.*
- Ehrensaft, P. and W. Armstrong. "Dominion Capitalism: A First Statement." *Australian and New Zealand Journal of Sociology*, Vol.14, No.3 (October 1978): 352-363.
- Ellis, L. McIntosh. "Afforestation." *Auckland Chamber of Commerce Journal*, Vol.1, No.1 (1925): 8-9.
- Endres, A. M. "The Political Economy of W.B Sutch: Towards a Critical Appreciation." *New Zealand Economic Papers*, Vol.20, Issue 1 (1986): 17-40.
- Evans, Lewis and Eli Grace-Webb. "Meat Industry Performance and Organisational Reform: A Commentary." *The New Zealand Institute for the Study of Competition and Regulation*

(November 2007): 1-78. Accessed April 12<sup>th</sup>, 2017.

[http://researcharchive.vuw.ac.nz/xmlui/bitstream/handle/10063/3979/Meat\\_Industry\\_Performance\\_and\\_Organisational\\_Form\\_Lew\\_Evans.pdf?sequence=1](http://researcharchive.vuw.ac.nz/xmlui/bitstream/handle/10063/3979/Meat_Industry_Performance_and_Organisational_Form_Lew_Evans.pdf?sequence=1)

Godley, Andrew C., and Bridget Williams. "The chicken, the factory farm and the supermarket: the emergence of the modern poultry industry in Britain." *University of Reading Discussion Paper in Management and Economics* (2007): 1-35.

Greasley, David and Les Oxley. "The Pastoral Boom, the Rural Land Market and Long Swings in New Zealand Economic Growth, 1873-1939." *The Economic History Review*, Vol.62, No.2 (May 2009): 324-349.

Gribble, Ian W. "Agricultural Productivity and Land Value." *The New Zealand Valuers' Journal*, Vol.27, No.1 (1986): 26-29.

Griffiths G.R and T.P Grundy. "The Supplementary Minimum Price Scheme: A Retrospective Analysis." *Agribusiness and Economics Research Unit, Lincoln College Research Report No. 191* (January 1988): 1-54. Accessed January 15<sup>th</sup>, 2017.

[https://researcharchive.lincoln.ac.nz/bitstream/handle/10182/191/aeru\\_rr\\_191.pdf;jsessionid=E3985017C56EAF52CB06D07F2C355CEF?sequence=1](https://researcharchive.lincoln.ac.nz/bitstream/handle/10182/191/aeru_rr_191.pdf;jsessionid=E3985017C56EAF52CB06D07F2C355CEF?sequence=1)

Hansen, L.W, R.L Knowles and M Halliday. "Growth And Profitability Of Radiata Pine Farm Forestry In Hawke's Bay and Wairarapa." *Forest And Farm Plantation Management Co-operative*, Report 89 (May 2004): 1-13.

Hauora, Rangahau Te Röpü and Eru Pömare, "MAURI TU: THE TOMOANA RESOURCE CENTRE – AN INTERVENTION FOLLOWING JOB LOSS." *Social Policy Journal of New Zealand*, Issue 15 (December 2000): 55-68.

"Hawke's Bay Property Market Report." *The New Zealand Valuers' Journal*, Vol.27, No.7/361 (December 1987): 361-363.

Holmes, Frank. "New Zealand in the World Economy 1938-56." *Institute of Policy Studies Paper 18* (2004): 1-22.

J. Wattie Canneries. "A Quarterly Bulletin." *Harvest*, Vol.1, No.10 (April 1960):1–15.

Jones, S.R.H. "Government Policy and Industry Structure in New Zealand, 1900-1970." *Australian Economic History Review*, Vol.39, Issue 3 (November 1999): 191-212.

Le Heron R.B and E.C.R Warr. "Corporate Organisation, Corporate Strategy and Agribusiness Development in New Zealand: An Introductory Study with Particular Reference to the Fruit and Vegetable Processing Industry." *New Zealand Geographer*, Vol.32, Issue 1 (April 1976): 1-16.

Littlewood, Adrian. "The History of Death and Gift Duty in New Zealand." *Journal of Taxation Law and Policy*, Vol.18 (March 2012): 66-103.

Mackintosh, William A. "Economic Factors in Canadian History." *Canadian Historical Review*, Vol. IV (March 1923): 12-25.

Maplesden, Frances. "Japanese Sawmilling Industry: Current Situation, Historic Trends, And A Comparison with the NZ Industry." *New Zealand Journal of Forestry Science*, Vol.23, No.2 (1993): 209-235.

McAloon, Jim. "Staples and the Writing of New Zealand's Economic History." *New Zealand Journal of History*, Vol.49, No.2 (2015): 3-22.

McCarty, J.W. "The Staple Approach in Australian Economic History." *Business Archives and History*, Vol.4.1 (1964): 1-22.

McKelvey, Peter. "The development of the concept of steepland protection forestry in New Zealand," *New Zealand Journal of Forestry*, May (1992): 20-24.

Morris, Stephen T. "Economics of Sheep Production." *Small Ruminant Research*, Vol.86, Issues 1-3 (October 2009): 59-62. Accessed March 2<sup>nd</sup>, 2017.

[https://www.researchgate.net/publication/240416869\\_Economics\\_of\\_sheep\\_production](https://www.researchgate.net/publication/240416869_Economics_of_sheep_production)

Morris, Stephen T. "Sheep and Beef Production Systems." *Sheep and Beef Cattle Production*, Institute Veterinary, Massey University (2013): 79-84. Accessed March 17<sup>th</sup>, 2017.

[https://www.landcareresearch.co.nz/\\_\\_data/assets/pdf\\_file/0020/77033/1\\_5\\_Morris.pdf](https://www.landcareresearch.co.nz/__data/assets/pdf_file/0020/77033/1_5_Morris.pdf)

- Neill, Robin. "In Defence of the Staple Thesis of Canadian Economic Development." *University of Prince Edward Island, Web Papers* (Dec 2006): 1-10. Accessed February 1<sup>st</sup>, 2016.  
[https://web.archive.org/web/20071218205629/http://www.upei.ca/~rneill/web\\_papers/staple\\_theo.html](https://web.archive.org/web/20071218205629/http://www.upei.ca/~rneill/web_papers/staple_theo.html)
- Neutze, G.M. "Provincial Income Estimates." *New Zealand Geographer*, Vol.17, Issue 2 (October 1961): 223-228.
- New Zealand Institute of Economic Research. "Tariffs in New Zealand." *NZIER Viewpoints, Working Paper 2010/1* (2010): 1-25. Accessed June 30<sup>th</sup>, 2018.  
[https://nzier.org.nz/static/media/filer\\_public/53/67/536738d3-47d5-4aee-b322-897fad0bc443/wp\\_2010-1\\_tariffs\\_in\\_new\\_zealand.pdf](https://nzier.org.nz/static/media/filer_public/53/67/536738d3-47d5-4aee-b322-897fad0bc443/wp_2010-1_tariffs_in_new_zealand.pdf)
- New Zealand Ministry of Agriculture & Fisheries (NZMAF). "Hawke's Bay Forest Industry and Wood Availability Forecast." *NZMAF* (2008): 1-46.
- New Zealand Ministry of Forestry. "Hawke's Bay." *New Zealand Ministry of Forestry Regional Studies* (February 1994): 1-39.
- New Zealand Ministry of Forestry. "Hawke's Bay Forestry Region." *Forestry Outlook* (1992): 49-57.
- Nurkse, Ragnar. "International investment today in the light of nineteenth-century experience." *The Economic Journal*, Vol.64, No.256 (1954): 744-758.
- Olssen, Alex, Wei Zhang, David Evison and Suzi Kerr. "A Forest-Profit Expectations Dataset for New Zealand, 1990-2008." *Motu Consulting WP 12-07* (June 2012): 1-25. Accessed November 12<sup>th</sup>, 2017 [http://motu-www.motu.org.nz/wpapers/12\\_07.pdf](http://motu-www.motu.org.nz/wpapers/12_07.pdf)
- Parker, W. "Future challenges for grassland farming." *Proceedings of the New Zealand Grassland Association*, No.63 (2001): 7-15.
- Peet, Richard. "Von Thunen Theory and the Dynamics of Agricultural Expansion." *Explorations in Economic History*, Vol.8, Issue 2 (1970): 181-201.

Philpott, Bryan P, Fletcher, G.A and Scott, W.G. "The structure of wool and wool textile production, trade, and consumption 1948-68." *Agricultural Economics Research Unit Publication No.55*, Lincoln College (1970): 1-48.

Rae, Alan. "An Evaluation of a New Zealand Marketing Board's Supply Diversion Strategies." *The Australian Journal of Agricultural Economics*, Vol.22, No.1 (April 1978): 1-21. Accessed August 16<sup>th</sup>, 2017. <http://onlinelibrary.wiley.com/doi/10.1111/j.1467-8489.1978.tb00341.x/pdf>

Robinson, Guy. "Spatial Changes in New Zealand's Food Processing Industry: 1973-1984." *New Zealand Geographer*, Vol.44, Issue 2 (October 1988): 69-79.

Sachs, Jeffrey D., and Andrew M Warner. "The Curse of Natural Resources." *European Economic Review*, Vol.45 (2001): 827-838.

Schedvin, C.B. "Staples and Regions of Pax Britannica." *Economic History Review*, Vol.43, No. 4 (Nov 1990): 533-559.

Scott, R.H. "Farming in Hawke's Bay." *New Zealand Grassland Association*, Vol.17, Napier (1955): 18-36. Accessed June 30<sup>th</sup>, 2018. [http://www.grassland.org.nz/publications/nzgrassland\\_publication\\_1887.pdf](http://www.grassland.org.nz/publications/nzgrassland_publication_1887.pdf)

Sheppard, Ron L. "New Zealand Agricultural Policy Change: Some Effects." *Agribusiness and Economics Research Unit Discussion Paper 35*, Lincoln University (July 1993): 1-23.

Sheppard, Ron L and J.M Biggs. "Supplementary minimum prices: a production incentive?" *Agricultural and Economics Research Unit Discussion Paper No.6*, Lincoln College (1982): 1-85. Accessed April 5<sup>th</sup>, 2017. <https://researcharchive.lincoln.ac.nz/handle/10182/690>

Steenkamp, Daan. "Structural adjustment in New Zealand since the commodity boom." *Reserve Bank of New Zealand - Analytical note series*, AN 2014/2 (April 2014): 1-28. Accessed November 15<sup>th</sup>, 2016. <http://www.rbnz.govt.nz/-/media/ReserveBank/Files/Publications/Analytical%20notes/2014/an2014-02.pdf>

Stokes, Evelyn. "Timber, Pulp and Paper: Production and Trade 1950-1964." *New Zealand Geographer*, Vol.22, Issue 1 (April 1966): 70-79.



Thompson, A.P and M.B Grainger. "Some bases for comparing the Relative Economics of Farming and Forestry in New Zealand." *New Zealand Journal of Forestry*, Vol.8, No.3 (1961): 440-455.

Thompson, Jane. "The Policy of Land Sales control: Sharing the Sacrifice." *New Zealand Journal of History*, Vol.25, No.1 (April 1991): 3-17. Accessed April 15<sup>th</sup>, 2016.  
[http://www.nzjh.auckland.ac.nz/docs/1991/NZJH\\_25\\_1\\_02.pdf](http://www.nzjh.auckland.ac.nz/docs/1991/NZJH_25_1_02.pdf)

Trotman, Ian G. "Species Siting in Hawke's Bay." *New Zealand Journal of Forestry*, Vol.14, No.2 (1969): 150-58.

Turland, John. "State Forest Sales." *New Zealand Forestry* Vol.35, No.3 (November 1990): 6.

Ville, Simon and Olav Wicken. "The dynamics of resource-based economic development: evidence from Australia and Norway." *Industrial and Corporate Change*, Vol. 22, No. 5 (October 2013): 1341-1371.

Watkins, Melville H. "A staple theory of economic growth." *Canadian Journal of Economic and Political Science*, Vol. 29, No. 2 (May, 1963): 141-58.

## **Theses**

Ballara, Angela. "The Origins of Ngāti Kahungunu." PhD diss., Victoria University of Wellington, 1991.

Hall, David. "Emerging From An Entrenched Colonial Economy – New Zealand Primary Production, Britain and the EEC, 1945-1975." PhD diss., Victoria University of Wellington, 2016.

Haywood, M.J. "Prime Ministerial Leadership in New Zealand During a Time of Change; 1984 - 2000; a Comparison of Leadership Styles." PhD diss., Victoria University of Wellington, 2004.

Curtis, Bruce McDonald. "Producers, Processors and Markets: A Study of the Export Meat Industry in New Zealand." PhD diss., University of Canterbury, 1996.

Keefe Ormsby, Vera. "Tihei Mauri Ora: The Human Stories of Whakatu." M.A thesis., University of Otago, 2005.

Ferretti, Donna Louise. "Restructuring in the New Zealand Textile Industry." M.A thesis., Massey University, 1981.

Manning, E.W. "The Changing Land Use of a Diversified Agricultural Region: The Heretaunga Plains of New Zealand." PhD diss., Victoria University of Wellington, 1972.

Yule, A.C. "An Historical Geography of a Hawke's Bay Region." M.A thesis., Canterbury University, January 1958.

Sutch, W.B. "Price Fixing in New Zealand." PhD diss., Columbia University, 1932.

## Websites.

AgFirst Consultants HB Ltd. "Orchard Establishment Costs Low Relative to US." Last modified January 2001. <http://www.agfirst.co.nz/wp-content/uploads/2017/06/Orchard-Establishment-Costs-Low-Relative-To-U.S.pdf>

Bennett, Neville. "Boom and Bust in the 1870's." Interest.com. Last modified September 26<sup>th</sup>, 2009. <http://www.interest.co.nz/news/41357/opinion-boom-and-bust-1870s>

Bostock New Zealand. "Buttercup Squash." Accessed September 20<sup>th</sup>, 2017. <http://www.bostock.nz/product/buttercup-squash/>

Bostock New Zealand. "Story." Accessed September 12<sup>th</sup>, 2017. <http://www.bostock.nz/about/story/>

Boyd, Mary. "Williams, James Nelson." Te Ara - The Encyclopedia of New Zealand. Last modified April 8<sup>th</sup>, 2014. <http://www.TeAra.govt.nz/en/biographies/2w22/williams-james-nelson>

Boyd, Mary. "Wattie, James." Dictionary of New Zealand Biography. Accessed November 8<sup>th</sup>, 2019. <https://teara.govt.nz/en/biographies/4w9/wattie-james>.

Brownrigg Agriculture. "A Great Partner." Accessed September 18<sup>th</sup>, 2017.

<http://www.brownrigg.co.nz/brownrigg/>

Brownrigg Agriculture. "Export Squash." Accessed September 20<sup>th</sup>, 2017.

<http://www.brownrigg.co.nz/cropping/export-squash/>

Business Hawke's Bay. "HB Business." Accessed July 20<sup>th</sup>, 2018.

<http://www.businesshawkesbay.co.nz/news/index.htm?articleId=52>

Carter Holt Harvey Ltd. "Carter Holt Harvey Ltd." Accessed April 28<sup>th</sup>, 2016.

<http://www.referenceforbusiness.com/history/Ca-Ch/Carter-Holt-Harvey-Ltd.html>

Carter Holt Harvey Ltd. "Proud to lead the trade since 1859." Trade Leader. Last modified November 2009. <http://www.carters.co.nz/UserFiles/Carters/file/tradeleader/Trade-Leader-Nov09.pdf>

Cavalier Corporation. "Cavalier Bremworth." Accessed June 3<sup>rd</sup>, 2017.

<https://www.cavbrem.co.nz/>

Cavalier Corporation. "Annual Report 2010/11: Managing Directors Review." Accessed May 14<sup>th</sup>, 2017.

<http://www.cavcorp.co.nz/files/7862112aa0309fcf7c880d06ec2aadcbn/49/cavcorp2011annualreportfinal.pdf>

Central Archives. "Hawke's Bay Catchment and Regional Water Board." Accessed May 15<sup>th</sup>, 2016. <http://archivescentral.org.nz/agencies/topics/show/128952-hawkes-bay-catchment-board-and-regional-water-board>

Cooper, Michael. "Regional Wine Profiles." Accessed December 7<sup>th</sup>, 2017.

[http://michaelcooper.co.nz/region-info/#\\_idAnchor-5](http://michaelcooper.co.nz/region-info/#_idAnchor-5)

Cowie, Dean. "Rangahaua Whanui District 11b." Hawke's Bay. Waitangi Tribunal Rangahaua Whanui Series (working paper: first release). Last modified September 1996.

<https://www.waitangitribunal.govt.nz/assets/Documents/Publications/WT-District-11-Hawkes-Bay.pdf>

Credit Suisse. "Global Investment Returns Yearbook, 2010." Last modified February 2010.  
<http://media.rtl.nl/media/financien/rtlz/2010/0813cs.pdf>

Daily Telegraph. "Hawke's Bay Timeline." Hawke's Bay Knowledge Bank. Accessed October 12<sup>th</sup>, 2017. <https://knowledgebank.org.nz/912/998/35618>

Dalley, Bronwyn. "Wine - Industry expansion, 1890s–1910s." Te Ara - The Encyclopedia of New Zealand. Last modified July 13<sup>th</sup>, 2012. <https://teara.govt.nz/en/wine/page-3>

Dalley, Bronwyn. "Wine – Industry in Flux, 1910s-1960s." Te Ara - The Encyclopedia of New Zealand. Last modified July 13<sup>th</sup>, 2012. <http://www.teara.govt.nz/en/wine/page-4>

Dalton, Clive (Dr). "Sheep Breeds in New Zealand." Last modified March 28<sup>th</sup>, 2010.  
<http://woolshed1.blogspot.co.nz/2010/03/sheep-breeds-in-new-zealand.html>

Delisted New Zealand. "UEB Industries." Accessed June 7<sup>th</sup>, 2017.  
<http://www.delisted.co.nz/company/ueb-industries-limited>

Department of Commerce. "Difference in Weight." Accessed July 19<sup>th</sup>, 2019.  
<http://nvlpubs.nist.gov/nistpubs/nbstechnologic/nbstechnologicpaperT57.pdf>

Elco Direct Wool Buyers. "About Us." Accessed May 23<sup>rd</sup>, 2017.  
<http://www.elcodirect.co.nz/about-us>

Envirohistory NZ. "The Grasslands Revolution." Last modified November 29<sup>th</sup>, 2009.  
<https://envirohistorynz.com/2009/11/29/the-grasslands-revolution/>

Fiber Economics Bureau. "The Man Made Fibers Market." Accessed June 16<sup>th</sup>, 2017.  
<http://www.technica.net/NF/NF1/efibrechimiche.htm>

Fletcher Trust Archives. "Fletcher Challenge." Accessed July 5<sup>th</sup>, 2018.  
<http://www.fletcherarchives.co.nz/companies.php>

Foster, Bernard John. "WINES OF NEW ZEALAND." An Encyclopaedia of New Zealand 1966, edited by McLintock, A. H. and originally published in 1966. Accessed November 22<sup>nd</sup>, 2016.  
<http://www.TeAra.govt.nz/en/1966/wines-of-new-zealand>

Funding Universe. "Goodman Fielder Ltd. History." Accessed September 20<sup>th</sup>, 2017.

<http://www.fundinguniverse.com/company-histories/goodman-fielder-ltd-history/>

General Foods (NZ) Ltd. "Archive for the General Foods (NZ) Corporation." Accessed October 14<sup>th</sup>, 2018. <https://longwhitekid.wordpress.com/category/general-foods-corporation-nz-ltd/>

Goldsmith, Paul. "Taxes: Gradual complication of the tax system – 1960 to 1984." Te Ara - The Encyclopedia of New Zealand. Last modified September 2<sup>nd</sup>, 2016.

<http://www.TeAra.govt.nz/en/taxes/page-6>

Hawke's Bay Business/Food Bevg. "Vegeez." Accessed July 5<sup>th</sup>, 2018.

<http://www.businesshawkesbay.co.nz/news/index.htm?articleId=52>

Hawke's Bay Fruitgrowers Association. "About the Hawke's Bay Fruitgrowers Association Inc." Accessed June 25<sup>th</sup>, 2016. <http://www.hbfruitgrowers.co.nz/>

Hawke's Bay Knowledge Bank. "Hawke's Bay Timeline." Accessed October 12<sup>th</sup>, 2017

<https://knowledgebank.org.nz/912/998/35618>

Hawke's Bay Regional Council. "Our Region." Accessed December 5<sup>th</sup>, 2015.

<https://www.hbrc.govt.nz/hawkes-bay/>

Hildreth Romney's. "Hill Country Romney Rams." Accessed October 17<sup>th</sup>, 2017.

<http://www.hildrethromneys.co.nz/>

Hippolite, Joy. "Rangahaua Whanui District 11b." Wairoa. Waitangi Tribunal Rangahaua Whanui Series (working paper: first release). Last modified November 1996.

<https://www.waitangitribunal.govt.nz/assets/Documents/Publications/WT-District-11-Wairoa.pdf>

Indexmundi. "Fine wool/coarse wool price ratio." Accessed May 23<sup>rd</sup>, 2017.

<http://www.indexmundi.com/commodities/?commodity=fine-wool&months=360&commodity=coarse-wool&indicator=price-ratio>

Indexmundi. "Fine Wool Monthly Price - New Zealand Dollar per Kilogramme." Accessed September 18<sup>th</sup>, 2017. <https://www.indexmundi.com/commodities/?commodity=fine-wool&months=240&currency=nzd>.

Indexmundi. "Price relationship between crude oil and coarse wool." Accessed September 29<sup>th</sup>, 2017. <http://www.indexmundi.com/commodities/?commodity=coarse-wool&months=360&commodity=crude-oil-west-texas-intermediate&indicator=price-ratio>

Integrated Foods. "Overview." I.F.L Group. Accessed April 7<sup>th</sup>, 2017. <https://www.iflgroup.co/our-story>

International Directory of Company Histories, Vol.7. "Watties Ltd – History." Accessed August 15<sup>th</sup>, 2016. <http://www.fundinguniverse.com/company-histories/wattie-s-ltd-history/>

James, Brian. "The rise and fall of the historic Stock agent." Landmarks Trust History Forum. Last modified August 14<sup>th</sup>, 2012. <http://hdclandmarkshistorygroup.blogspot.co.nz/2012/08/the-rise-and-fall-of-historic-stock.html>

James, Colin. "National Party - Shifting rightwards." Te Ara - The Encyclopedia of New Zealand. Last modified December 1<sup>st</sup>, 2016. <http://www.TeAra.govt.nz/en/photograph/33885/the-mother-of-all-budgets>

Lewis Tucker & Co. "Our Heritage." Accessed May 4<sup>th</sup>, 2017. <http://www.lewistucker.co.nz/our-heritage/>

Lewis, Walter S. "Difference In Weight Between Raw And Clean Wools." Last modified September 28<sup>th</sup>, 1915. <http://nvlpubs.nist.gov/nistpubs/nbstechnologic/nbstechnologicpaperT57.pdf>

Logan, Hamilton. "Richmond Meats." Landmarks Trust History Forum. Last modified March 17<sup>th</sup>, 2010. [http://hdclandmarkshistorygroup.blogspot.co.nz/2010/03/hamilton-logan-richmond-meats\\_16.html](http://hdclandmarkshistorygroup.blogspot.co.nz/2010/03/hamilton-logan-richmond-meats_16.html)

Mackay, David. "Colenso, William." Te Ara - The Encyclopedia of New Zealand. Last modified October 30<sup>th</sup>, 2012. <http://www.TeAra.govt.nz/en/biographies/1c23/colenso-william>

McCain Foods. "Humble Beginnings." Accessed August 10<sup>th</sup>, 2017. <https://mccainfoodservice.co.nz/about/our-history/>

Ward, Alan. "McLean, Donald." Dictionary of New Zealand Biography, Te Ara - the Encyclopedia of New Zealand. Accessed May 16<sup>th</sup>, 2019. <https://teara.govt.nz/en/biographies/1m38/mclean-donald>

Mitchell Dayesh and Pan Pac Forest Products. "Process Water Discharge - Resource Consent Application." Last modified 27<sup>th</sup> June 2017. <http://www.hbrc.govt.nz/assets/Document-Library/Consents/Notified-Consents/CD170262W-and-CL170267O-Pan-Pac-Application-AEE-FINAL-29-June-2017.pdf>

Moneychimp. "Return Rate (Discount Rate / CAGR) Calculator." Accessed July 5<sup>th</sup>, 2018. [http://www.moneychimp.com/calculator/discount\\_rate\\_calculator.htm](http://www.moneychimp.com/calculator/discount_rate_calculator.htm)

Mooney, Kay. "Tanner, Thomas." Te Ara - The Encyclopedia of New Zealand. Last modified October 30<sup>th</sup>, 2012. <http://www.TeAra.govt.nz/en/biographies/1t10/tanner-thomas>

New Zealand Business Hall of Fame. "Doig, Sir James Nimmo Crawford." Accessed September 17<sup>th</sup>, 2017. <http://www.businesshalloffame.co.nz/past-laureates/doig-james-nimmo-crawford/>

New Zealand Companies Office. "Weddel New Zealand Ltd." Accessed March 15<sup>th</sup>, 2017. <http://www.companiesnz.com/company/35469/weddel-new-zealand-limited>

New Zealand Company Directory. "Napier Wool Dumpers (2007) Ltd." Accessed May 7<sup>th</sup>, 2017. <https://nzcompany.org/co.php?id=873272>

New Zealand National Institute of Water and Atmospheric Research. "The Climate and Weather of Hawke's Bay." Accessed December 2<sup>nd</sup>, 2015. <https://www.niwa.co.nz/static/Hawkes%20Bay%20WEB.pdf>

New Zealand Stock Exchange. "Cavalier Corporation." Accessed April 12<sup>th</sup>, 2017.

<https://www.nzx.com/markets/NZSX/securities/CAV/analysis>

New Zealand Stock Exchange. "NZWSI AGM." Last modified 6<sup>th</sup> December 2011.

<https://www.nzx.com/files/attachments/150473.pdf>

New Zealand Wool Services International (NZWSI). "Key Milestones In Our History."

Accessed May 9<sup>th</sup>, 2017. <https://www.woolserv.co.nz/history/>

New Zealand Wool Services International. "Managing Directors Review." Accessed May 4<sup>th</sup>,

2017. [https://nzx.com/files/documents/companies/WSI/13\\_Annual\\_Report\\_2003.pdf](https://nzx.com/files/documents/companies/WSI/13_Annual_Report_2003.pdf)

New Zealand Wool Testing Authority. "Industry Contacts." Accessed May 12<sup>th</sup>, 2017.

<https://www.nzwta.co.nz/contacts/industry-contacts/>

NZButtercupsquash.com. "The New Zealand Growing Environment." Accessed September

20<sup>th</sup>, 2017. <http://www.nzbsc.com/growing.php>

Paki-iti. "Romney-Suffolk-Suftex." Last modified 2009. [http://www.paki-](http://www.paki-iti.co.nz/uploads/4/2/5/4/4254901/2009_focus.pdf)

[iti.co.nz/uploads/4/2/5/4/4254901/2009\\_focus.pdf](http://www.paki-iti.co.nz/uploads/4/2/5/4/4254901/2009_focus.pdf)

Perendale Sheep Society of New Zealand. "About Us." Accessed October 18<sup>th</sup>, 2018.

<http://www.perendalenz.com/about-us.html>

Pollock, Kerryn. "Hawke's Bay region – Horticulture." Te Ara - The Encyclopedia of New

Zealand. Last modified July 1<sup>st</sup>, 2015. [http://www.TeAra.govt.nz/en/hawkes-bay-](http://www.TeAra.govt.nz/en/hawkes-bay-region/page-8)

[region/page-8](http://www.TeAra.govt.nz/en/hawkes-bay-region/page-8)

Pollock, Kerryn. "Hawke's Bay region - Māori settlement and occupation." Te Ara - the

Encyclopedia of New Zealand. Last modified July 2<sup>nd</sup>, 2015.

<https://teara.govt.nz/en/hawkes-bay-region/page-4>

Radio New Zealand. "Silver Fern Farms pulls out of merino meat project." Last modified 23<sup>rd</sup>

September 2016. [http://www.radionz.co.nz/news/country/314021/silver-fern-farms-pulls-](http://www.radionz.co.nz/news/country/314021/silver-fern-farms-pulls-out-of-merino-meat-project)

[out-of-merino-meat-project](http://www.radionz.co.nz/news/country/314021/silver-fern-farms-pulls-out-of-merino-meat-project)



Reserve Bank of New Zealand. "Inflation Calculator." Accessed February 27<sup>th</sup>, 2017.

<http://www.rbnz.govt.nz/monetary-policy/inflation-calculator>

Roche, Michael. "Holt, Robert," Te Ara - The Encyclopedia of New Zealand. Last modified October 30<sup>th</sup> 2012. <http://www.TeAra.govt.nz/en/biographies/2h47/holt-robert>

Sheppard, Greg. "Sheppard Agriculture." Accessed October 31<sup>st</sup>, 2010.

<http://www.sheppardagriculture.co.nz/home>

Stanford Graduate School of Business. "New Zealand Merino - the industry." Last modified 22<sup>nd</sup> September 2010. <http://www.nzmerino.co.nz/casestudy/industry.php>

Stringleman, Hugh and Robert Peden. "Sheep farming: The Merino – the earliest breed." Te Ara - The Encyclopedia of New Zealand. Last modified March 3<sup>rd</sup>, 2015.

<http://www.TeAra.govt.nz/en/sheep-farming/page-3>

Tara Cooney Art & Design. "Napier Wool Exchange Building – 1962." Accessed June 7<sup>th</sup>, 2017. <https://taracooney.wordpress.com/2013/10/29/napier-a-good-yarn-wool-exchange-building-1962/>

Tech History NZ. "Cleaning the Wool Clip." Accessed October 12<sup>th</sup>, 2017.

<http://www.techhistory.co.nz/OntheLand/Woolscouring3.htm>

Telford. "Kowhai Farm." Accessed July 9<sup>th</sup>, 2018.

<http://www.telford.ac.nz/Documents/2008-2010-Investment-Plan.pdf>

Trading Economics. "New Zealand Terms of Trade 1957-2016." Accessed March 17<sup>th</sup>, 2016.

<http://www.tradingeconomics.com/new-zealand/terms-of-trade>

UK Overseas Development Institute. "Commodifying carbon." Last modified November 2010. <https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/6307.pdf>

Vegeez. "Vegeez'." Accessed July 5<sup>th</sup>, 2018. <http://www.vegeez.co.nz/>

Waitangi Tribunal. "The Mohaka ki Ahuriri Report, 2004." Last modified May 11<sup>th</sup>, 2004.

[https://forms.justice.govt.nz/search/Documents/WT/wt\\_DOC\\_68598011/Wai201.pdf](https://forms.justice.govt.nz/search/Documents/WT/wt_DOC_68598011/Wai201.pdf)

Wattie's Foods. "History." Accessed August 10<sup>th</sup>, 2017. <http://www.watties.co.nz/Our-History>

Westpac New Zealand. "Agribiz – Sheep and Beef Outlook." Last modified January 2013. [https://www.westpac.co.nz/assets/Business/Economic-Updates/2013/Bulletins-2013/Agribiz\\_Jan201301.pdf](https://www.westpac.co.nz/assets/Business/Economic-Updates/2013/Bulletins-2013/Agribiz_Jan201301.pdf)

Wright, Matthew. "Tucker, Richard." Te Ara - The Encyclopedia of New Zealand. Accessed May 31st, 2017. <http://www.TeAra.govt.nz/en/biographies/2t50/tucker-richard>

## **Departmental briefings, regulatory authority rulings and submissions.**

New Zealand Treasury. Briefing to Incoming Government (1990), <https://treasury.govt.nz/publications/bim/briefing-incoming-government-1990>

Reserve Bank of New Zealand - Analytical note series, AN 2014/2 (April 2014), Daan Steenkamp, accessed November 15<sup>th</sup>, 2016, <http://www.rbnz.govt.nz/-/media/ReserveBank/Files/Publications/Analytical%20notes/2014/an2014-02.pdf>

Reserve Bank of New Zealand Bulletin Vol.61, No.4, The 1991-97 business cycle in review, Anne-Marie Brook, Sean Collins, and Christie Smith, <http://www.rbnz.govt.nz/-/media/ReserveBank/Files/Publications/Bulletins/1998/1998dec61-4brookcollinssmith.pdf>

Reserve Bank of New Zealand. New Zealand Economic Chronology (1984), <http://www.rbnz.govt.nz/-/media/ReserveBank/Files/Publications/Bulletins/1985/1985jan48-1nzeconomicchronology1984.pdf>

Reserve Bank of New Zealand. Meat industry Review 1981/82 (June 1982), <https://www.rbnz.govt.nz/-/media/ReserveBank/Files/Publications/Bulletins/1982/1982june451980-81meatindustryreview.pdf>.

Reserve Bank of New Zealand. Meat industry Review 1982/83 (April 1984),  
[http://www.rbnz.govt.nz/-  
/media/ReserveBank/Files/Publications/Bulletins/1984/1984april47-31982-  
83meatindustryreview.pdf](http://www.rbnz.govt.nz/-/media/ReserveBank/Files/Publications/Bulletins/1984/1984april47-31982-83meatindustryreview.pdf)

Reserve Bank of New Zealand. Wool Industry Review (June 1981),  
[http://www.rbnz.govt.nz/-  
/media/ReserveBank/Files/Publications/Bulletins/1981/1981june44-  
5woolindustryreview.pdf](http://www.rbnz.govt.nz/-/media/ReserveBank/Files/Publications/Bulletins/1981/1981june44-5woolindustryreview.pdf)

Reserve Bank of New Zealand. Demand and Supply for Wool (July 1982),  
[https://www.rbnz.govt.nz/-  
/media/ReserveBank/Files/Publications/Bulletins/1982/1982july45-  
6demandandsupplyforwool.pdf](https://www.rbnz.govt.nz/-/media/ReserveBank/Files/Publications/Bulletins/1982/1982july45-6demandandsupplyforwool.pdf)

Reserve Bank of New Zealand. New Zealand economic & financial chronology 2014-1982,  
<http://www.rbnz.govt.nz/about-us/nz-economic-and-financial-chronology>

New Zealand Commerce Commission, Decision No.316, February 11th, 1998.

New Zealand Commerce Commission, Decision No.587, August 31<sup>st</sup>, 2006.

New Zealand Commerce Commission, Decision No.666, March 6<sup>th</sup>, 2009.

New Zealand Commerce Commission, Decision No.725, September 28<sup>th</sup>, 2011.

New Zealand Companies Office, Receivers Final Report: Weddel New Zealand Limited,  
August 7<sup>th</sup>, 2001.

Borland, Andrew (CEO Mr Apple). Evidence to EPA,  
[https://www.epa.govt.nz/assets/FileAPI/proposal/NSP000028/Hearings-Week-03/10-  
Andrew-Borland-concise-summary-of-evidence.pdf](https://www.epa.govt.nz/assets/FileAPI/proposal/NSP000028/Hearings-Week-03/10-Andrew-Borland-concise-summary-of-evidence.pdf)

Cavalier Wool Holdings, Submission on Draft NZCC Determination (April 21<sup>st</sup>, 2015),  
[http://www.comcom.govt.nz/business-competition/mergers-and-  
acquisitions/authorisations/merger-authorisation-register/cavalier-and-new-zealand-wool/](http://www.comcom.govt.nz/business-competition/mergers-and-acquisitions/authorisations/merger-authorisation-register/cavalier-and-new-zealand-wool/)

Direct Capital. Commerce Commission Draft Determination Authorising Merger, October 1<sup>st</sup>, 2015, <https://www.directcapital.co.nz/news/2017/8/25/commerce-commission-draft-determination-authorising-merger>