

# Making a Little Go Further: Capital and the New Zealand Entrepreneur

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*Using case analysis, this article examines the sources of start-up and development capital for 133 entrepreneurs who began commercial enterprises in New Zealand between 1880 and 1910. Though capital markets were immature, entrepreneurs overcame this limitation by employing capital economizing techniques to start firms, and then continued to exert managerial control by reinvesting profits rather than borrowing. The results of this investigation offer a comment on the prevailing firm structure in New Zealand, as well as providing a partial explanation for the capacity building noted by other economic historians during this recessionary period in New Zealand economic history.*

*Keywords: Capital; Entrepreneurship; New Ventures; New Zealand; Long Depression; Capital Economizing Techniques; Firm Structure*

## Introduction

How do entrepreneurs start firms in developing economies? Do remote and immature markets constrict economic activity? Where is capital obtained for expansion during times of economic stringency? The economy of New Zealand in the latter stages of the nineteenth century and early part of the twentieth century offers an opportunity to investigate these questions, and the answers provide both an insight into the nature of economic activity in this context, as well as the behaviour of the entrepreneur. Drawing on a sample of 133 entrepreneurs, this article examines their sources of start-up and developmental capital in New Zealand between 1880 and 1910. A number of capital economizing techniques are identified. The results demonstrate that there were numerous opportunities for entrepreneurs of limited means to establish new firms.

This article contributes to the literature in several ways. First, it extends our knowledge of New Zealand business history beyond the familiar British-based land

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companies, banks, and stock and station agencies towards the less familiar process of commercial and industrial capitalism.<sup>1</sup> This resonates with McAloon's recent work on the South Island business elite and the significance of urban wealth to economic development.<sup>2</sup> How this urban wealth was amassed, in what industries, by what means, and to what degree, are only now being uncovered. Excellent research has been done on individual cities, such as Stone's work on Auckland in the 1880s,<sup>3</sup> but a broader range of evidence is needed to observe the more general entrepreneurial processes operating in the colony. Secondly, in contrast to Chandler, who makes the case for growth through the agency of increasingly large and sophisticated firms,<sup>4</sup> it is argued that the model of capitalism forged in New Zealand, with its roots in British-style personal capitalism, did not hinder the colony's economic development. Small-scale firms, dominated by owner-managers, and funded by the founders, families and personal associates, proved the right vehicle for generalized growth in an economy that had relatively modest capital requirements. This confirms the observation made by Ville that some of Australia's most successful and innovative firms remained for long under founder control.<sup>5</sup> Finally, evidence is presented that contradicts the 'Long Depression' thesis presented by historians such as Sutch, Condliffe, Simkin, and Borrie.<sup>6</sup> These authors argue that commercial possibilities were eroded during the latter part of the nineteenth century. Rather, the evidence drawn from both case studies and official statistics supports the alternative thesis of Dowie, 'Studies in New Zealand Investment 1871–1900', PhD thesis; Rankin, "Manufacturing Output in New Zealand: 1870–1940"; Stone, *Makers of Fortune*; Hawke, *The Making of New Zealand*, who argue that in fact substantial capacity building occurred during the period. In particular, this article reveals the underlying dynamics of capacity building and the ways in which entrepreneurs overcame capital limitations to create sustainable commercial enterprises in difficult economic circumstances.

### **The Debate over New Zealand's Economic Development**

New Zealand was declared a British colony in 1840. Gradual settlement took place across both islands, spurred on by gold discoveries in Otago (1861) and Westland (1865), which caused the population to rise from 71,000 in 1859 to 164,000 in 1863. The value of trade increased fivefold over the same period from £2 million to £10 million. Following the exhaustion of alluvial gold supplies in the late 1860s, the Colonial Treasurer, Sir Julius Vogel, instituted in 1870 an ambitious programme of public works and infrastructure investment, similar to those in Latin America and Australia, which was supported by assisted immigration.<sup>7</sup>

Between 1870 and 1900, British investments overseas rose from £700 million to £2,000 million.<sup>8</sup> The United States, Canada, Argentina, South Africa, Chile, and the colonies of Australia and New Zealand were all recipients of British funds. In New Zealand, the majority of this investment was channelled through local and foreign banks into agriculture, land development, and infrastructure projects,

including the construction of harbours, ports, schools, hospitals, water treatment plants, roads, telegraph lines, and railways. Between 1870 and 1880, 1,800 miles of telegraph lines were constructed; land under cultivation increased from just over 1 million acres to 4.7 million acres; and the number of New Zealand registered vessels rose from 384 to 559. Letters received and despatched in the colony increased from 5 million annually in 1870 to over 22 million by 1880, generating a threefold increase in postal revenues. A total of £8 million was invested in railway construction, and track miles increased from less than 50 miles in 1870 to 1,288 miles by the end of the decade.<sup>9</sup>

By 1880, with vastly improved infrastructure, and a non-indigenous population of 500,000, the colony had reached the point of economic viability. However, many challenges remained and new ones emerged. After 1872, wool emerged as the main provider of export earnings, but falling commodity prices meant that farm incomes and land prices went into decline. The City of Glasgow Bank, which had ploughed money into the agricultural sector, collapsed in 1878 and helped trigger a depression that lasted until 1896.<sup>10</sup> In consequence, capital markets contracted, unemployment increased, shops closed, bankruptcy rates increased, emigration rates increased, and industry languished. Gardner, in the *Oxford History of New Zealand*, offers a typical view of the period:

The aftermath of the crisis of 1878–1879 was a severe downsizing which went on into 1880 without any sign of recovery. A long period of stagnation or near-stagnation followed in many parts of the economy, lasting until 1895. These years, known in the past as ‘the Long Depression’, were characterized by: low wages, unemployment, and poverty; low prices for primary exports which inhibited the progress and diversification of farming; the failure of secondary industries to keep pace with urban population growth; the heavy and unrelieved burden of debt-repayment which clogged both public and private development.<sup>11</sup>

Only after the land reforms of 1893–1894, the introduction of refrigeration, and a general upswing in prices, did the New Zealand economy recover to enjoy a long period of prosperity down to 1914.

Historians such as Condliffe, Sutch, Sinclair, and more recently Belich, have reinforced this picture of New Zealand’s economic progress.<sup>12</sup> However, it is neither complete and nor accepted without reservation. A missing element of the picture, for example, is an account of industry in the period and its importance for the colonial economy. There is little knowledge of the fortunes of retailers, wholesalers, manufacturers, and service providers. Belich, for example, concentrates almost exclusively on the development of the frozen meat industry in his history of New Zealand.<sup>13</sup> Undoubtedly, meat exports were important, and the capital and enthusiasm directed toward the trade were significant. But it was only one of several sizeable industries. For despite the fact that fixed capital in meat processing increased sevenfold between 1881 and 1901 from (£96,845 to £893,720), it was surpassed by the capital invested in gas works, and was less than half the £1.8 million that had been applied to fixed assets

in hydraulic gold mining, dredging, and crushing. It is important therefore not to lose sight of the industrial developments – in hydraulic gold mining, the timber trades, printing, brewing, gas recovery and distribution, coal mining, and the mercantile and retail industries.<sup>14</sup> Focusing on refrigeration and the meat trade, however important, leads to an incomplete account of New Zealand economic development.

Dowie, in his investigation of capital formation in New Zealand, recognizes this fact and identifies a consistent trend toward capacity building at odds with the bleak picture of the period painted by some historians.<sup>15</sup> Likewise, Hawke has shown that while land values and the price of some goods fell, real incomes remained intact, concluding that the word ‘depression’ is misleading.<sup>16</sup> In his survey of the Auckland economy, Stone, while observing periods of economic stringency, argues that the final decades of the nineteenth century witnessed significant infrastructure development, urban growth, and capital deepening.<sup>17</sup> In like fashion, Rankin suggests that there was ‘something of an industrial revolution’ between 1880 and 1885,<sup>18</sup> noting that factory output rose by 30 per cent notwithstanding a lack of growth in per capita incomes. Indeed, even a cursory look at the official statistics supports these claims. At every census period between 1881 and 1911 there was an increase in the total numbers of enterprises, capitalization, and industrial employment. The number of factories went up from around 1,700 to more than 5,000, while the value of fixed assets in factories swelled from £3.6 million to £19.1 million. Growth, not retrenchment, was the order of the day.

The question of causation follows naturally, and it is in this regard that entrepreneurs and their sources and application of capital become pivotal to the story. It is through studying individual entrepreneurs and the firms they created and sustained that the paradox of industrial capacity building at a time of economic difficulty can be explained. The English model of gentlemanly capitalism may have strongly influenced firm structure and economic development in Latin America, Africa, Canada, and other colonial outposts,<sup>19</sup> but the process of industrial and commercial development worked out very differently in New Zealand.<sup>20</sup> Hanham, for example, in his analysis of British-registered companies in New Zealand in the nineteenth century, could identify only 19 firms. Many of these had English or Scottish head offices, but they were run as if they were autonomous New Zealand subsidiaries. Those that were not were either controlled by Anglo-Australian interests or run by the London-based New Zealand entrepreneur, Thomas Russell.<sup>21</sup> Further, the bulk of their activities were in land development, trade finance, and banking. This tells us little about the processes of industrial or commercial advance in the rest of the New Zealand economy, where British firms were virtually absent. To understand the process of New Zealand economic advance we need to look further down the chain of economic actors, and a more careful investigation of the entrepreneurial community might yield more general insights into the nature and pattern of economic development in New Zealand at this time.

### *Sources and Sample Selection*

The findings reported here are based on sample of 133 entrepreneurs (125 men, eight women) active in New Zealand between 1880 and 1910. The sample was selected following an exhaustive search of biographical sources, company and industrial histories, and newspapers.<sup>22</sup> An initial list of over 500 candidates was reduced through the application of screening criteria. Using a strict Schumpeterian definition of the entrepreneur, two criteria were used to identify suitable candidates for the study.<sup>23</sup> Firstly, they had to be the proprietor of an enterprise; secondly, they had to have taken purposeful steps toward expanding their business beyond its immediate confines.<sup>24</sup> As such, they might be founders or acquirers of a growth-oriented enterprise. The sample was non-random as sufficient data was required to construct a set of reasonably detailed and comparable case studies. As many other historians have found, it was expedient to sacrifice randomness for depth of data.<sup>25</sup>

One of the main objectives in selecting cases was to have a spread of entrepreneurs (including those who were successful and those who were not) active across the period in different parts of the country, permitting the exploration of general trends and issues. So, for example, while Stone's work has been focused on Auckland and McAloon's on Otago, entrepreneurs in this sample came from across both islands and represented a broad range of industrial and commercial activities. As can be seen from Table 1, 23 per cent of the entrepreneurs resided in Auckland, 20 per cent in Dunedin, 11 per cent in Christchurch, and 8 per cent in Wellington. All other locations were below 5 per cent. Predictably, the entrepreneurs tended to be clustered in town and cities where they had the benefit of local services and from where they could serve other urban centres and the rural hinterland.

In Table 2, the entrepreneurs in the sample are classified by type of commercial activity. This, as many other studies have shown, is not a straightforward matter. Nineteenth-century industrial activities do not necessarily match contemporary industrial classifications and entrepreneurs may have established more than one venture, sometimes in more than one industry. The rule-of-thumb adopted was to classify by predominant activity – by the largest or most successful venture in which an entrepreneur was engaged. The largest group of entrepreneurs (24 per cent) consisted of traders, including retailers, stock and station agents supplying the farming community, departmental store owners, wholesalers and distributors. This result confirms the need for further research into the retail sector in nineteenth-century New Zealand. It is evident from Rankin's research that the colony experienced a manufacturing boom in the latter part of the nineteenth century, yet it may be that its economic contribution, measured by value added, was less than that of trading activities.

The second largest cluster of entrepreneurs was in manufacturing (15 per cent), closely followed newspapers, publishing and printing (13 per cent). The conspicuous showing of publishing is not as surprising as might appear at first sight. The isolation of many New Zealand communities meant that a small township needed its own

**Table 1**  
**Settlement Location of New Zealand Entrepreneurs**

Location	Entrepreneurs from sample		Population of urban centre in 1881	Entrepreneurs as proportion of total population
	No.	%	No.	%
Ashburton	2	1.5	1,526	0.3
Auckland	31	23.3	30,952	6.3
Balclutha	1	0.8	820	0.2
Bulls	1	0.8	642	0.1
Christchurch	14	10.5	30,715	6.3
Dunedin	27	20.3	42,794	8.7
Gisborne	1	0.8	1,737	0.4
Hamilton	4	3.0	1,361	0.3
Hastings	3	2.3	617	0.1
Hawera	2	1.5	943	0.2
Hokitika	2	1.5	2,600	0.5
Inglewood	1	0.8	395	0.1
Invercargill	5	3.8	6,976	1.4
Masterton	1	0.8	2,241	0.5
Napier	3	2.3	5,756	1.2
Nelson	6	4.5	6,764	1.4
New Plymouth	2	1.5	3,310	0.7
Otaki	1	0.8	248	0.1
Palmerston North	5	3.8	1,366	0.3
Picton	1	0.8	834	0.2
Thames	4	3.0	4,863	1.0
Wanganui	4	3.0	4,646	0.9
Wellington	11	8.3	20,563	4.2
Whangarei	1	0.8	495	0.1
Total	133	100.0	173,164	35.3

*Note:* New Zealand's population (excluding Maori) in 1881 was 489,933, as stated in the population census that year. Some entrepreneurs have been assigned to the closest centre of population, as the number resident in their home town was not given in census. For example, an entrepreneur in Te Mata was included in Thames figures.

*Sources:* New Zealand population figures from Results of a Census of the Colony of New Zealand, 1881. Data on entrepreneurs from case analyses of 133 New Zealand entrepreneurs.

newspaper and printing operation, granting local entrepreneurs a captive market, which might serve as a basis for expansion into other activities or regions. The services sector included activities such as auctioneering, advertising, and tourism and nine entrepreneurs (7 per cent) are included in the sample. Shipping activities accounted for a further 6 per cent of entrepreneurs, as did brewing. Meat and dairy processing and engineering each accounted for 4.5 per cent. The smallest categories were education, entertainment, and farming: one entrepreneur established a regional art school, and the primary activity of another was buying, running, and selling of farms on a serial basis.

**Table 2**  
**Commercial Activity of New Zealand Entrepreneurs**

Commercial activity	Entrepreneurs from sample	
	No.	%
Mercantile	32	24.1
Manufacturing	20	15.0
Newspapers/publishing	17	12.8
Services	9	6.8
Shipping	9	6.8
Brewing/winemaking	8	6.0
Meat/dairy processing	6	4.5
Engineering	6	4.5
Forestry/sawmilling	5	3.8
Transportation	4	3.0
Automobile production/distribution	3	2.3
Financial Services	3	2.3
Land development/construction	3	2.3
Mining/oil	3	2.3
Fishing	2	1.5
Education	1	0.8
Entertainment	1	0.8
Farm development	1	0.8
Total	133	100.0

*Source:* Case analyses of 133 New Zealand entrepreneurs.

### *Sources of Investment*

Six sources of finance are identified in Table 3 as instrumental in the funding of new ventures. The most common source of start-up capital was the individual savings of entrepreneurs (34 per cent). This can be attributed to two main factors. First, in several industries, the barriers to entry were low, such that opening a retail store, small factory, or printing works required no more than a few hundred pounds. Secondly, it was uncommon for individual entrepreneurs to risk all on a new venture. The preferred approach was to set out on a small scale with limited capital and then to expand as trade, cash flow, and experience permitted.

For those of limited means, trade credit provided one capital economizing strategy. Dunedin warehousemen Ross and Glendining, for example, turned to their London suppliers for credit and in turn used this to support wholesalers and retailers in New Zealand. The warehousemen thus acted as an important conduit for UK capital at a time when local funds were in short supply. Other warehousemen, such as Bing Harris and Sargoods, acted in like manner. Terms were similar as they were controlled by the Association of New Zealand Warehousemen: suppliers could draw on invoice at five months; 3.5 per cent discount within 30 days; 2.5 per cent discount within 60 days.<sup>26</sup> Similarly, entrepreneurs undertaking government road, rail, and

**Table 3**  
**Sources of Start-up Capital: New Zealand Entrepreneurs**

Sources of start-up capital	Entrepreneurs from sample	
	No.	%
Savings	49	36.8
All partners contributed funds	44	33.1
Family backed (inheritance, family wealth)	21	15.8
Capital from established partner	13	9.8
Money earned from other activities (e.g., mining, farming)	3	2.3
Borrowed funds	3	2.3
Total	133	100.0

*Source:* Case analyses of 133 New Zealand entrepreneurs.

construction contracts were able to use the contract price as a mechanism for expanding the scope of their enterprises, in effect using the surety of government payment as a way of extending capacity. One example was transport and haulage entrepreneur William Winstone, whose fledgling firm was significantly advantaged by winning government contracts for land reclamation around Auckland's waterfront in the late nineteenth century.<sup>27</sup>

The second most dominant source of capital – all partners contributing funds – was used by 44 entrepreneurs and applied in a third of the cases studied. Partnership in this sense can be read as any venture begun by a group of entrepreneurs rather than a sole proprietor, including family members. In half the cases, 50 per cent of the entrepreneurs commenced their first business venture as some form of partnership. Partnerships could have various types of funding. Complementary partnerships constituted several partners pooling funds and skills to establish a venture in which they had previous experience. The establishment of James Speight and Co. is a case in point. In 1876, William Dawson, James Speight and Charles Greenslade took over an old malt house to establish a brewery. The partners had complementary skills. Speight, the oldest in the group, had been a commercial traveller; Greenslade was a maltster; and Dawson an experienced brewer.

The new firm began with limited capital. Each of the three partners took an equity stake, and of the 500 £1 shares issued, Dawson and Greenslade took 200 each.<sup>28</sup> Just four people were employed in addition to the principals. Speight's historian, Donald Gordon, reports that the initial income from sales was so low that at times wages were not paid on time.<sup>29</sup> Yet the firm was able to differentiate its products and find favour with consumers because of Dawson's skill as a brewer. In 1879, just three years after its formation, the firm received a highly commended medal at the Sydney Exhibition. Sales increased sharply in consequence. At the Melbourne Exhibition of 1880, the firm won an assortment of gold and silver medals against international competition; a success repeated at the Christchurch Exhibition in 1882.<sup>30</sup> As its cash

flow increased, profits were ploughed back into the business. A new brew house was constructed and finished in 1880. Two years later a four-storey malt house and cellar building was erected adjoining the building. In 1887, only 11 years after starting production, Speight and Co. emerged as the leading brewery in Dunedin. The firm's capitalization did not change until 1895 when the firm became a limited liability company with a paid-up capital of £60,000 in 6,000 £10 shares: Greenslade held 2,491 shares, Dawson 2,496 shares and Speight 993. In short, Speight and Co. had the technical expertise and product quality to generate sufficient sales and free cash flow to fund growth.<sup>31</sup> By 1900, the firm was in a position to pay a 30 per cent dividend, allowing Dawson and Greenslade to draw down £7,500 each in addition to salaries in excess of £1,000.<sup>32</sup>

Scholefield documents similar developments in New Zealand engineering. Rather than import English agricultural implements, colonial engineers used imported bar and sheet iron to construct wool presses, ploughs, disc harrows, chaff cutters and seed cleaners, some of which were exported. The firms concerned were initially funded from personal savings and depended for their survival on the skill of the founding entrepreneur. Scholefield, writing early in the twentieth century, noted that 'most of the engineering firms had their origin in the savings or the modest imported capital of some practical engineer or journeyman 40 or 50 years ago. They have grown to their present proportions by the simple process of accretion during prosperity, by extensions out of revenue, by foreseeing want and providing for it before far distant engineers stepped in'.<sup>33</sup> A typical case is the firm founded by the brothers Alfred and George Price who had served apprenticeships in England before migrating to New Zealand in 1868. They began operations as manufacturing engineers in a small rented shed in Onehunga. The level of skill deployed is indicated in their design of products like a bench-mounted flax-dressing machine, and their erection of their own six-horsepower steam engine to drive their various lathes and machinery, thus minimizing their initial capital requirements.<sup>34</sup>

In their first 12 months of operations, the Price brothers sold 100 patent flax dressing machines. Within two years they employed 23 workers. It was their engineering skills, more than their financial resources, which enabled them to take advantage of a rapidly growing economy. They were able to supply all the equipment needed by other entrepreneurs to start a flax mill. For £180, the firm supplied three flax-dressing machines, a water wheel for driving the machines, shafts, pulleys, a press for packing fibre, and assorted equipment.<sup>35</sup> The brothers then exploited similar opportunities in the expanding gold-mining industry during the 1870s and 1880s. In 1871, the Price brothers relocated their factory from Auckland to Thames.<sup>36</sup> Gold had been discovered in Thames in 1867 and by 1871 and 256 gold companies had been floated to exploit this new opportunity. Over the next few years, they extended their product range to include water pumps, water wheels, ship engines, propellers, flax machines, and timber jacks. In 1881, the brothers entered shipbuilding, constructing the 22-ton cutter-rigged paddle steamer, *Patiki*. Then, as mining activities increased at nearby Waihi, the firm provided much of the necessary plant and equipment.

In 1891, for example, it outfitted a 20-head stamper battery for the Crown Mines Company at Karangahake. The firm remained under the direct control of the Price brothers until 1907, when it was reconstructed as a limited liability company following the death of Alfred Price, aged 70. The issued share capital was fixed at £60,000.<sup>37</sup>

Many other family partnerships were formed. Some were based on inherited capital, as in the case of mattress manufacturer Arthur Ellis, whose father was the flock mill entrepreneur Ephraim Ellis.<sup>38</sup> Ephraim had entered the flock business in 1877 with his brother-in-law William Nicholson with just a few hundred pounds.<sup>39</sup> Likewise draper Percy Sargood arrived in New Zealand in 1891 to manage the Dunedin and Christchurch stores owned by his father, taking full ownership in 1902. Other partnerships were formed when an entrepreneur lent support to an existing business. Often the established partner had the necessary plant, machinery, and cash, while the newcomer brought in commercial skills. On this basis, clothing manufacturer James Clark entered the family firm Archibald Clark and Company in 1857, while shipper Joseph Cock joined his brother John in 1880 to found the Anchor Steam Shipping Company, the assets of which came from Nathaniel Edwards and Company. Such partnerships account for 12.8 per cent of the entrepreneurs in the sample.

#### *Funding for Business Growth*

Funding for commercial expansion derived from six main sources, as shown in Table 4. The most prodigious was reinvested profits; the preferred source of funds of 60 per cent of all entrepreneurs studied. Innovative iron moulder Henry Shacklock, for example, was able to pay off the mortgage on his purpose-built foundry within 12 months of start-up.<sup>40</sup>

Other entrepreneurs traded their way up through a series of business ventures, following the start of an initial venture with limited capital derived from personal

**Table 4**  
**Sources of Expansion Capital: New Zealand Entrepreneurs**

Sources of expansion capital	Entrepreneurs from sample	
	No.	%
Traded-up, reinvested profits supported business expansion	79	59.4
Took in other parties with additional capital	37	27.8
Public float	8	6.0
Sold significant ownership stake in firm in order to expand	4	3.0
Developed and sold businesses	3	2.3
Borrowed funds	2	1.5
Total	133	100.0

*Source:* Data on entrepreneurs, see text (case analysis of 133 New Zealand entrepreneurs).

savings. Alfred Horton, for instance, came to New Zealand from England at the age of 18 in 1861, by which time he had already worked as a newspaper reporter. After working for three years as an apprentice printer at the *Christchurch Press*, he left and purchased a hand-operated printing press, founding a weekly newspaper, the *Timaru Herald*. Six years later, he sold this paper and went home to England. On his return to New Zealand, Horton purchased the *Thames Advertiser* with a partner, William Wilkinson. In 1876, the two partners went their separate ways and Horton, aged 33, moved to Auckland where he used the capital he had amassed to purchase the *Daily Southern Cross*. The newspaper merged later that year with the *New Zealand Herald*, the most successful undertaking of a distinguished career. Other serial entrepreneurs were engineer John Chambers, storeowner Byron Brown, transport entrepreneur Thomas Newman, winemaker Assid Corban, and baker Annie Millar. In each case, the entrepreneur commenced their first venture on a small scale with limited capital, and then traded their way up to larger undertakings either through branch expansion, as was the case with Byron Brown, or additional venture opportunities, as was the case with baker Annie Millar.

In the shipping industry, syndicates were a further method used by entrepreneurs to overcome capital limitations. Sailor Alexander McGregor, for example, migrated to New Zealand in 1859. With the assistance of another family member, the 31-year-old McGregor constructed a boat and began plying for trade around Auckland. Over the next six years, McGregor expanded his fleet to four ships. Realizing that steam rather than sail would prove more reliable in coastal waters, he sought to expand his fleet. Unable to furnish all the required capital himself, he formed a syndicate to build the first vessel. It proved so successful that he repeated this means of expansion using syndicates to finance the construction of another six steamers before forming the Northern Steam Ship Company Limited in 1881.<sup>41</sup>

A common trait amongst the entrepreneurial community was to expand at a modest rate through reinvesting profits rather than growing quickly through the injection of debt funding. Many ventures ceased within two years (the modal group for length of life being two years in contrast to a mean of 20 years), and there is a stark contrast between those that undertook multiple start-ups and those that held on to one venture for a lifetime.<sup>42</sup> The latter group consisted of 43 of the 133 entrepreneurs in the sample (32 per cent).<sup>43</sup> Sheer commitment allied to conservatism explains why reinvestment was such a favoured form of funding for expansion. These firms were, on balance, expanding at a modest pace, developing in line with the entrepreneur's own capacity to manage.

The next most common source of growth funds was other parties who joined forces with the founding entrepreneur (27.8 per cent). This sometimes involved starting a business in a fresh location or in a related trade. On other occasions, the new investor might simply provide the funds needed to open further branches or expand the productive capacity of the original enterprise. In contrast, raising funds through a public floatation of shares was a rare event, with just eight members of the case group having recourse to this form of finance.

It can be concluded that access to plentiful capital was not the main cause of later success in most of the cases studied. Entrepreneurs like Alfred Horton, William Winstone, Bendix Hallenstein, Alfred Buxton, and Robert Laidlaw started their first ventures with a few hundred pounds, and in each case, over the next decade or more, created a significant organization employing hundreds of workers. Access to capital was just one of the requirements for success, and it can plausibly be argued that other factors were of greater significance. Alfred Horton, for example, aggressively adopted new printing technology giving him advantage over his competitors. Likewise, Laidlaw's innovation in the systemization of managerial practices enabled the rapid expansion of his mail order operation. Winstone's pursuit of vertical integration proved critical in the expansion of his cartage and quarrying operations. For many of the colonial entrepreneurs, additional capital brought in during the life of the founder was often family capital or that of close associates. Equity financing, as opposed to debt financing, ensured outside interests did not unduly hamper the decision-making ability of the founder.

What do these examples tell us about capacity building during the period of the Long Depression? As shown, some firms, such as Price Brothers, expanded during this time, while others adopted a number of capital economizing measures to overcome their capital limitations. The evidence suggests the existence of a persistent and enterprising business community eager to develop new ventures. Of the 133 entrepreneurs analysed, 59 per cent either commenced their first business venture, or set up a subsequent venture, during the period of the Long Depression (1878–1896). Danish-born Carl Dahl, for example, commenced his Palmerston North-based specialist tent-manufacturing business in 1885. Irish-born Samuel Kirkpatrick opened his substantial Nelson cannery business in 1880 at the age of 27, but with a background in canning, tea, and food wholesaling. Robert Menzies purchased the aerated water business of his former employer in 1889, and began a steady programme of aggressive branch expansion through Menzies and Co.<sup>44</sup> John Aitken began the Wellington mercantile firm Aitken, Wilson and Co. in 1882. Marianne Smith started her Auckland drapery firm in 1880. Nine years later (when the recession in Auckland was at its worst), brothers John and George Court, arrived from England and started an enterprise that owned two department stores 13 years later. In 1884 in Otago, Bendix Hallenstein commenced his second major retail initiative, the Drapery Importing Company (DIC), with initial share issue oversubscribed. Entrepreneurs like the Chinese merchant Chew Chong and Henry Reynolds constructed butter factories in the 1880s and others entered the meat processing industry. In short, the view from the ground is inconsistent with the claims of Condliffe or Borrie that urban industry collapsed.<sup>45</sup> Furthermore, aside from the entrepreneur's own skill and tenacity, government statistics reinforce Rankin's assessment that a range of industries were expanding in number, capital investment, and employment during this period – offering new and existing entrepreneurs opportunities for market entry and expansion.

### *Capital Entry Costs*

Valuable evidence on the capital requirements of business ventures in New Zealand are to be found in the Factory and Industrial Statistics sections of successive *Census* documents. From the seven *Censuses* between 1881 and 1911 it is possible to determine levels of investment in land and buildings, plant and machinery for each class of industry, together with information on employment and numbers of firms. These data enable calculations to be made of mean capital entry costs for different types of enterprise. Both in terms of labour and capital employed, the small firm emerges as an important actor in colonial economic development. The 1881 *Census* lists 56 different classes of industrial activity and covers 1,643 firms engaged in activities as diverse as printing to stocking weaving. The most capital-intensive industry was gasworks with £2,618 invested per employee, and the least capital-intensive was clothing factories with £11 invested per employee. Workforce size per plant varied considerably. Those industries with the highest labour content included woollen mills, clothing factories, boot and shoe manufacturing, and iron and brass foundries. Those with ten staff or fewer included furniture makers, aerated water manufacturers, malt houses, grain mills, biscuit factories, and breweries – accounting for 61 per cent of all industrial firms.<sup>46</sup>

These statistics allow us to make inferences about possible entry points into various types of industrial activities for entrepreneurs of limited means. A simple measure such as the mean capital invested in land, buildings, plant and machinery in an industry, as an indicator of the fixed capital costs of exiting firms, may be used as a rough guide to capital entry costs for the industry.<sup>47</sup> Of course, this figure cannot suffice in all cases: those seeking to open an iron and brass foundry would most likely require purpose-built premises, while others, as in the brewing industry, might initially rent premises without incurring the cost of construction – a simple capital economizing technique.<sup>48</sup> In such cases, the entrepreneurs would have to cover the costs of plant and machinery and holding stocks, but capital requirements would be less than if they had to incur costs of construction. The same could be said for boot and shoe manufacturing, sawmill operations, printing works, agricultural implement manufacturing, biscuit making, and other activities. A wide range of industrial activities could therefore be undertaken in basic commercial buildings that were not purpose-built.

There were 16 industrial classes identified in 1881 with mean capital entry costs of £250 or less, and by 1890 this had broadened to 29 classes covering 1,364 enterprises, representing 32 per cent of all industrial firms that owned 12 per cent of the total capital employed in the industrial sector. In sum, there was a range of industries open to entrepreneurs and the number of possibilities was on the rise. Typical examples include clothing factories, cooperages, tinware factories, bone-cutting mills, saddleries, coach-building works, malt houses, furniture-making factories, cap and hat factories, and flock mills. Cycle manufacturing also figured in the list as an urban industry with a low cost of market entry that made a positive contribution to

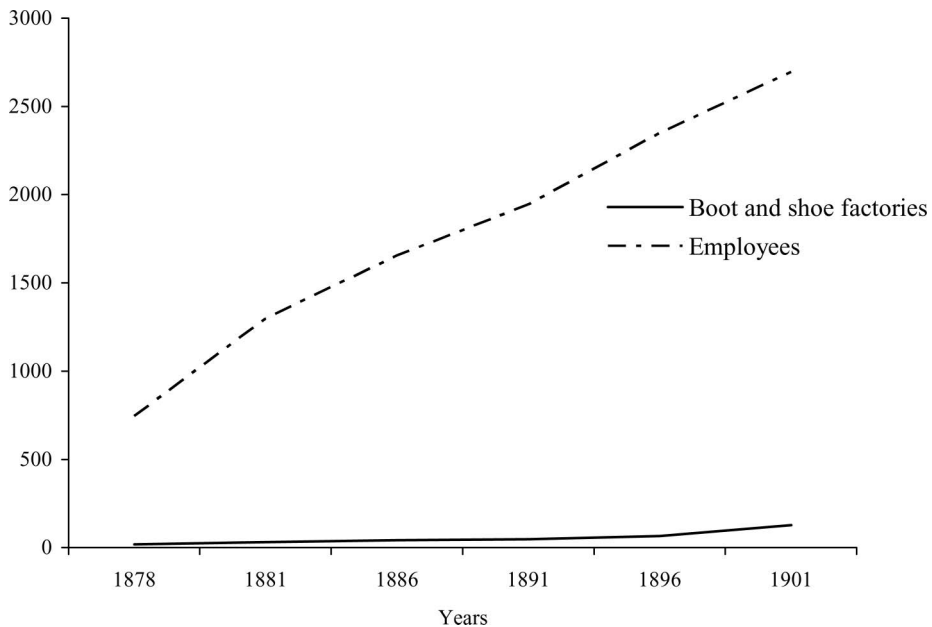
industrial capacity and job growth. Local manufacture was first undertaken by Thomas Boyd & Son in Christchurch in 1878, followed soon afterwards by Richard Kent, also of Christchurch, but it was not until after 1890 that the real boom in production and new venture formation occurred.

Between 1891 and 1896, numerous industries witnessed an increase in capital formation and industrial establishments. These included hydraulic gold mining, where investment in fixed capital increased 228 per cent, and saddle manufacturing which saw a 195 per cent growth. However, of all the industries recorded in the 1896 census, capital accumulation occurred fastest in the cycle industry. By 1896, the total number of establishments had risen by 12 and staff numbers had increased by 94. The Zealandia Cycle Works was opened in Christchurch in 1880 and by 1896 had 40 staff and branches in Napier and Ashburton. Cooke, Howlison & Co. opened for business in Dunedin in 1895 and within six years had expanded to cover three blocks producing the 'Record' and 'Jubilee' bicycle.<sup>49</sup> Another Otago promoter, Robert Murie, established his Invercargill cycle-manufacturing business in 1893, launching the 'Phoenix' brand cycle.<sup>50</sup>

Boot and shoe manufacturing likewise required but a modest start-up capital and in many ways typifies the industrial expansion of the 1880s and 1890s. Canterbury emerged as the centre for the boot and shoe industry and the largest firm was that of Alfred Tyree & Co. The firm was established as a partnership in 1873 but was purchased outright by Tyree in 1896. He employed more than 300 staff in several factories. But he did have competition in Christchurch. The Maine brothers, William and James, started a boot and shoe factory together in 1891 and by 1900 employed over 100 staff producing 8,000 pairs a month. Irishman, Michael O'Brien, whose brand name was to last a century, entered the market in 1884, and within 15 years was employing over 150 staff producing 2,000 pairs a week. The Suckling brothers, Nathaniel, Joseph and John, ran the oldest boot and shoe factory in Canterbury, founded in 1871, while Skelton, Frostick & Co employed 280 operatives. By 1890, there were 47 boot and shoe factories in the colony, employing 1,943 staff to produce 832,554 boots and shoes; compared to 16 factories and 987 staff in 1880. Growth continued steadily thereafter, as can be seen in Figure 1. By 1910, New Zealand had 74 factories, concentrated in Auckland and Christchurch, producing more than 1.5m pairs of boots, shoes and slippers.

### *Isolation and Population*

A number of structural explanations might be advanced for the expansion in New Zealand industry during the latter part of the nineteenth century. As the evidence of the boot and shoe industry suggests, there was an import-substitution effect following the arrival of skilled migrants with access to sufficient personal capital to enter the industry. Continued population growth and urbanization gave a further stimulus to demand, as Butlin has shown. In his work on the Australian economy in the late nineteenth century, he proposes that urbanization rather than trading



**Figure 1**  
**Boot and Shoe Factories, 1878–1901**

*Source:* Data obtained from Factory and Industrial Statistics section (respective years), Results of a Census of the Colony of New Zealand, 1878–1901.

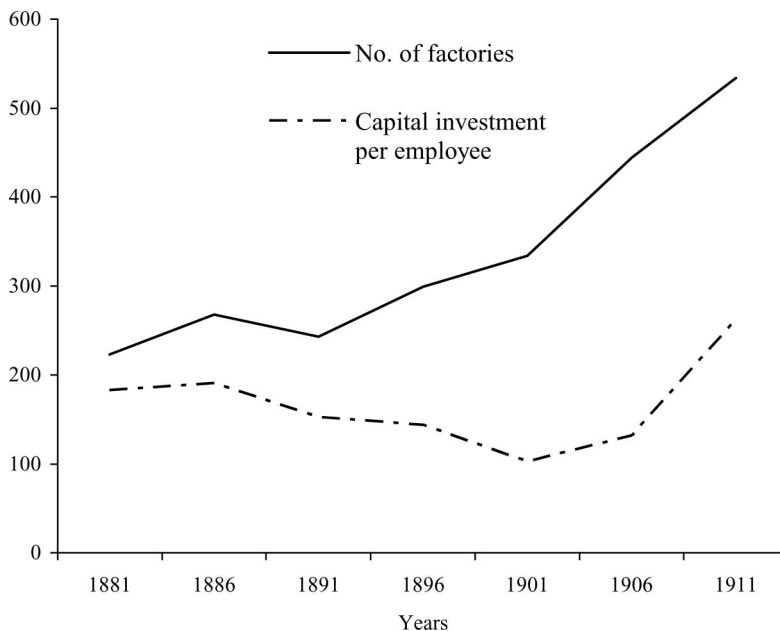
opportunities drove rapid economic expansion. He notes an average annual rate of population growth rate of 3 per cent between 1861 and 1901, causing Australia's population to increase by 219 per cent from 1,156,000 to 3,690,000. New Zealand's average compound population growth rate during this same period was 6 per cent per annum: double that of Australia.<sup>51</sup> The growth of towns was an important stimulus to both manufacturing and service industries.<sup>52</sup>

Aside from these factors, opportunities for early New Zealand entrepreneurs stemmed from the relative isolation of communities, as Jones and Paul demonstrate in their study of the New Zealand brewing industry in the nineteenth century.<sup>53</sup> Due to geographic and transportation barriers, a significant number of local breweries were constructed to serve local markets. Limited communication and transportation networks provided a barrier to entry for competitors, especially national competitors seeking to service local markets through co-ordinated distribution. It was not until the 1920s, with further improvements in transportation and infrastructure that this barrier was removed and a merger wave ensured to create national firms. Similar conditions prevailed in industries such as brick making, coach building, baking, aerated water production, flour milling, joinery manufacture, printing, newspaper production, cycle manufacture, boot and shoe manufacture and other industries. Isolated communities with growing populations demanded a range of products and

services, yet at the same time isolation provided a natural barrier to market entry by national and international competitors. This window of opportunity provided colonial entrepreneurs the chance to establish themselves in businesses that required limited capital to gain a foothold.

The sawmilling and joinery industry provides a further illustration of the forces at work. Prior to the consolidation in the industry early in the twentieth century, when timber plants became more capital-intensive and the transport infrastructure was much improved, isolation enabled the economy to support a larger number of enterprises than would otherwise have been feasible. While hardly featuring in previous accounts of economic development in New Zealand, sawmilling had attracted by 1880 the largest amount of capital of any industry in the colony, £773,628 spread over 223 sawmills, employing 4,238 people. In terms of fixed capital employed, sawmilling was 57 per cent bigger than its nearest industrial rival, the gas industry (Figure 2).

As the industry developed, concentration accompanied growth, with Auckland emerging at the heart of the timber trade in the colony. Concentration was even more pronounced by 1890. The province of Otago still had the most mills (51), but output was just a third that of Auckland's 47 mills. The average saw mill had an



**Figure 2**  
**Sawmills, Sash and Door Factories, 1881–1901**

*Source:* Data obtained from Factory and Industrial Statistics section (respective years), Results of a Census of the Colony of New Zealand, 1881–1911.

investment of £2,058 and 13 staff, while in Auckland the average investment was £3,802 and the number of operatives was 21. Between 1891 and 1896 the amount of fixed capital invested in sawmills increased by 17 per cent on average. In Wellington, 16 new entrepreneurs opened mills, while in Westland the number of mills increased from 13 to 25. Overall, the total number of entrepreneurs in the industry rose 23 per cent, taking the number of mills from 243 to 299, and lifting the number of jobs by a similar percentage.<sup>54</sup> The growth in saw milling continued at this heated pace. By 1900, the total number of sawmills and sash and door factories had risen to 334, employing 2,753 people. A further 200 mills and joinery factories were in operation by 1910. Of the total: 199 were owned by individuals; 211 were firms or limited partnership; and 123 were in the hands of either public or private registered companies.<sup>55</sup> Capital invested in saw mills had reached £1,806,628. As in other industries, a large majority of businesses lacked significant start-up capital, but they had the foresight, timing, commercial acuity and perseverance needed to survive. By reinvesting profits, some developed into large scale enterprises.

## Conclusion

It has been argued in this article that in the New Zealand economy of the later nineteenth and early twentieth centuries, entrepreneurs without significant capital overcame the resource constraints facing them to add significantly to economic activity in the colony. Between 1880 and 1910, the number of industrial enterprises almost tripled, along with industrial employment and the fixed capital invested in these activities, while the types of industrial activity undertaken doubled.

In building their firms, entrepreneurs drew upon a variety of sources of capital, including bank and investment company finance, share issues, syndicates, trade credit, funds from partners, and personal savings. Of these, the most important was personal savings. This was in part a reflection of the immaturity of local capital markets, but also of the process of entrepreneurship itself. As demonstrated, many types of industrial activity required modest investment. While capital was important for new ventures, equally important for commercial success were business skills, trade contacts, social networks, product innovation, and the persistence of the founder. These qualities could not guarantee against failure – one in three of those entrepreneurs in the sample investigated had a venture which failed at some point – but the typical response to difficulty was to regroup resources and enter new lines of business.<sup>56</sup>

Historians have also observed similar patterns in other economies. Crouzet, for example, observed that during the early stages of the industrial revolution in Britain, entrepreneurs used capital economizing techniques. Once established, these entrepreneurs traded their way up through the gradual reinvestment of profits.<sup>57</sup> Honeyman witnessed a similar pattern in her study of British entrepreneurs in lead mining, cotton spinning, and lace making in the late eighteenth and early nineteenth

centuries. Describing a pattern of internal upward mobility amongst the entrepreneurial community, Honeyman noted that limited capital was a normal feature of these industries, leading her to emphasize the importance of technical skills to social mobility. As in New Zealand, new entrepreneurs often emerged from the industries in which they had previously worked.<sup>58</sup>

This article has shown, moreover, that entrepreneurship was not a lone pursuit. Half of all those entrepreneurs studied commenced their business activities in some form of partnership. Not only did this expand the talents and capabilities of the group, it also provided another means of overcoming capital limitations while retaining ownership and decision-making within a tight group. As firms expanded, the revealed preference was to grow through reinvesting profits. This meant two things: firstly, decision-making and control was retained by the founders; secondly, ventures expanded at a gradual pace, in keeping with the management capabilities of the controlling entrepreneurial group.

Regardless of type of venture, entrepreneurs benefited from two structural characteristics of the New Zealand economy: the isolation of local markets and population growth. These features encouraged the spatial replication of industrial and commercial activities such as timber mills, brick works, joinery factories, breweries, coachbuilders. This phenomenon, it is proposed, offers a partial explanation of urban wealth creation in the period, as identified by McAloon. To be sure, the rural economy and commodity exporting were important to economic growth, but so too were industries reliant on internal markets and the expansion of towns and urban centres. This supports the arguments made by Ville in work on colonial Australia.<sup>59</sup>

Enough has been said to demonstrate that there was considerable potential for growth and entrepreneurial endeavours during the so-called Long Depression in New Zealand. Import substitution (as illustrated by the boot industry), the formation of new industrial units and additions to existing industries (as illustrated by the timber industry), and product innovation (as illustrated by the cycle industry), each threw up business opportunities for alert entrepreneurs who commenced enterprises, thereby creating industrial capacity, wealth, and jobs. These developments are consistent with Sinclair's suggestion that the years 1878 to 1896 might be identified with structural change, capacity building and economic turbulence rather than out-and-out depression.<sup>60</sup>

Finally, it can be concluded that Chandler's model of institutional change, which is closely identified with the rise of big business and managerialism, does not accord with the situational logic of business growth in New Zealand at this time. In this case, expansive growth and the proliferation of firms did not limit economic development. Greasley and Oxley, and Dowie have all observed that New Zealand and Australia enjoyed amongst the highest living standards in the world.<sup>61</sup> In New Zealand, at least in part, this result was achieved through the democratization of industry in a rapidly expanding economy. Large numbers of entrepreneurs, operating on a small scale and applying whatever limited capital they could afford, through their business acumen,

economizing ways, and personal steadfastness, carved out an alternative pathway to economic progress.

### Acknowledgements

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## Notes

- 1 See Hanham, “New Zealand Promoters and British Investors”; also Ville, *Rural Entrepreneurs*.
- 2 McAloon, *No Idle Rich*.
- 3 Stone, *Makers of Fortune*.
- 4 Chandler, *Scale and Scope*, 236–294.
- 5 Ville, “Business Development in Colonial Australia.”
- 6 See, for example, Sutch, *Poverty and Progress in New Zealand*, 89–90; Condliffe, *New Zealand in the Making*, 148–153; Simkin, *Instability of a Dependent Economy*, 191; Borrie, *Immigration to New Zealand*, 142.
- 7 For Latin America see Miller, *Britain and Latin America in the Nineteenth and Twentieth Centuries*; for Australia see Frost, “Government and the Colonial Economies.” For more on New Zealand early economic development see Hawke, *Making of New Zealand*.
- 8 Between 1870 and 1914, Britain provided two-fifths of the world’s exported capital. For a discussion of the rise of the United Kingdom capital market and overseas investment, see Cain and Hopkins, *British Imperialism*, 173–201.
- 9 Generally, railway receipts remained buoyant in the late nineteenth century. There was a falling off in per track mile receipts in 1884, when they fell to £560 per track mile, though they averaged £604 throughout the period.
- 10 Condliffe, *New Zealand in the Making*, 148–153.
- 11 Gardner, “A Colonial Economy,” 75. See too an earlier comment in the same chapter: ‘In the late 1870s government borrowing was used to stimulate the sagging economy, which could not support the load of debt unaided, especially in view of falling export prices. In attempting to get itself out of debt, the colony got further into debt’, p.71.
- 12 Condliffe, *New Zealand in the Making*, 148–153; Sutch, *Poverty and Progress in New Zealand*, 89–90; Sinclair, Sinclair, *A History of New Zealand*, 151–188; Belich, *Paradise Reforged*, 126–156.
- 13 Belich, *Paradise Reforged*, 126–156.
- 14 Hunter, thesis, 57–60.
- 15 See Dowie, “The Course and Character of Capital Formation in New Zealand,” 53. See also Dowie, thesis.
- 16 Hawke, *Making of New Zealand*, 76–83.
- 17 See, for instance, Stone, *Makers of Fortune*, 195.
- 18 See Rankin, “Manufacturing Output in New Zealand,” 9.
- 19 Cain and Hopkins, *British Imperialism*; Jones, *Evolution of International Business*.
- 20 McAloon has taken up this debate, see McAloon, *No Idle Rich*, 31, 66, 172; see also, Hunter, “Commodity Chains in Emerging Markets.”
- 21 See Hanham, “New Zealand Promoters,” 59–65.
- 22 See, for example, Sarachek, “American Entrepreneurs and the Horatio Alger Myth,” 441–442.
- 23 See Schumpeter, *Business Cycles*, 60–79.
- 24 Sarachek, “American Entrepreneurs and the Horatio Alger Myth,” 441–442; Knight, *Risk, Uncertainty and Profit*, 45; Hawley, “Enterprise and Profit,” 87–88; see also Hawley, “A Positive Theory of Economics.”
- 25 Honeyman, *Origins of Enterprise*, 12; See also, Crouzet, *The First Industrialists*, 56.

- 26 I am grateful to Steve Jones on this point and his unpublished research on the Dunedin warehousemen, Ross and Glendining. Jones notes that depositors both in Scotland and New Zealand also placed money at interest with the firm, preferring to use them than the local banks.
- 27 Simpson, *First Century*.
- 28 Speight took only 100 shares though he assumed a leadership role as managing director.
- 29 Gordon, *Speight's*, 13.
- 30 Likewise, at the Christchurch International Exhibition in 1882.
- 31 By 1889 Speight and Co. was brewing 3,000 hogsheads of beer a week and kept 10,000 hogshead in stock. *Otago Daily Times*, 23 Dec 1889. A hogshead is a 54-gallon cask of beer. A barrel is a 36-gallon cask.
- 32 Speight's historian, Donald Gordon, stated that the New Zealand average income at this time was £100. See *Speight's*, 55.
- 33 Scholefield, *New Zealand in Evolution*, 283.
- 34 Vennell, *Men of Metal*, 6–7.
- 35 Interestingly, this figure of £180 was not too far from the £231 for plant and machinery per mill suggested by *Census* statistics in 1886, the first year the flax industry returned figures for capital investment.
- 36 It appears that for three years the Price brothers kept both their Auckland works and the new Thames plant in operation as the Auckland market for flax machines was still quite buoyant. In addition, Price brothers used their Auckland plant to supply their first contract as railway engineers constructing carriages and wagons in 1873. See Vennell, *Men of Metal*, 8–9.
- 37 Both of the Price brother's sons continued in the firm. See Vennell, *Men of Metal*, 37.
- 38 See Kelly, *Mill in the Valley*, 16.
- 39 *Ibid.*, 14.
- 40 See Angus, *The Ironmasters*, 20–21.
- 41 Frankham, thesis.
- 42 Twenty-six entrepreneurs stayed in their first venture three years or less.
- 43 This did not preclude other types of ventures at other points in their lifetime.
- 44 Robson, *Aerated Water and Soft Drink Industry in New Zealand*, 55–57.
- 45 Condliffe, *New Zealand in the Making*, 153.
- 46 This is not to say that all firms in these classes had ten or fewer employees. Some were larger. This is an average figure.
- 47 This of course was only a rough measurement as it did not account for working capital that in some industries could be substantial where large amounts of work in progress was on hand, such as iron and brass foundries, or equally where the industry was highly labour-intensive such as the clothing industry requiring working capital to pay higher wage bills.
- 48 However, there were exceptions to the first category as even engineers Alfred and George Price rented their first premises in Auckland.
- 49 They in turn would spawn two further cycle entrepreneurs, Benjamin Stokes and William Errington started their own cycle works in 1903, having previously worked at Howlison & Co., and likewise Alfred Ferguson launched the Moa Cycle Works in 1902, also having trained at Howlison & Co. See *Cyclopedia of New Zealand*, vol. 4, 329–330.
- 50 See *Cyclopedia of New Zealand*, vol. 4, 846.
- 51 Butlin, *Investment in Australian Economic Development 1861–1900*, 13; for New Zealand data see, Hunter, thesis, 124–127.
- 52 Lionel Frost has highlighted the importance of the town in the Australian colonial economy. Frost noted: 'As towns prospered and grew larger there was an incentive for their inhabitants to engage in innovation and technological change to improve business practices and facilities for trade. The increasing division of labour brought about structural change in the economy,

which shifted resources from low- to high-productive areas.' See Frost, "The Contribution of the Urban Sector to Australian Economic Development," 69.

53 Jones and Paul, "Concentration and Regulation in the New Zealand Brewing Industry."

54 Indeed, what was interesting from these figures was that given the average mill size of 14 people, this increase in jobs was within 9 people of what any estimate might have suggested the effect of increased entrepreneurial activity would have produced (that is, 14 people multiplied by 56 additional mills equals 784 people). Taking the average capital per mill of £1,961, capital in the industry should have increased to £610,088. It was only 3 per cent less than this at £586,422.

55 There was also one co-operative.

56 For more on this see Hunter, "Risk, Persistence, and Focus."

57 Crouzet, "Capital Formation in Great Britain."

58 Honeyman, *Origins of Enterprise*, 164–165.

59 Ville, "Business Development in Colonial Australia," 30–32.

60 Sinclair, *A History of New Zealand*, 161; see also Sinclair's comments about the varied nature of economic difficulties and sectors enjoying buoyancy in Sinclair and Mandle, *Open Account*, 97–117, especially 99.

61 For a discussion on this see Dowie, "Century-old Estimate of the National Income of New Zealand"; see also Greasley and Oxley, "A Tale of Two Dominions."

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