BUSINESS OWNERSHIP IN NATURAL RESOURCE DEPENDENT INDUSTRIES IN NEW ZEALAND

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INTRODUCTION

Over the last 25 years the ownership of natural resource dependent industries in New Zealand has become dominated by a relatively few companies. Foreign control of some industries (e.g. energy, forestry) is much more entrenched than it was before the government began selling off state-owned enterprises some 15 years ago. Several factors have encouraged this concentration of ownership, including the sale and restructuring of state-owned assets; the deregulation of the New Zealand economy; falling commodity prices that have led some companies to reduce their costs of production by vertically integrating their operations; the adoption of more capital-intensive technologies; and the willingness of foreign owned companies to invest in resource industries in New Zealand.

This paper discusses changes in the ownership of businesses involved in the production and processing of natural resources across the sectors of forestry, agriculture, fishing, mining, energy, and tourism. The results summarised in the paper are based on a review of international and New Zealand literature, an analysis of business demographic statistics, and an examination of nineteen case studies of resource communities conducted earlier in the research programme[1]. Funded by the Foundation for Research, Science and Technology[2], the research programme seeks an improved understanding of the relationship between communities and their natural resource base. It has provided a substantial base of information about these types of communities and the change that has occurred in them. The information and understanding generated by the research will be useful for future impact assessments and local social and economic development strategies.

FINDINGS

Forestry

The following analysis of the forestry sector discusses the ownership of the forests and the processing facilities which add value to the timber harvested from the forests.

In some regions of the world, such as Scandinavia and the southern United States, there has been a decreased concentration of forest ownership with an increase in the number of small forest holdings owned by farmers and investment companies. This diversification has been driven by the planting of new land, and the sale of timberland by forest companies to release capital for the expansion of their processing facilities. In the United States, for instance, some of the holdings owned by the forest companies have been purchased by institutional investors who are more focussed on maximising the asset values of forests than on meeting the supply required by individual mills (Binkley *et al.*, 1996: 22, 27).

About half of New Zealand's plantation forests are now owned by major forest companies; with over 35 per cent of the planted area being owned or managed by Carter Holt Harvey and Fletcher Challenge Forests. Privately owned forests comprise 44 per cent of the planted area (Ministry of Agriculture and Forestry, 2000: 26). The legal entities included in this category of ownership are private companies, partnerships, individuals and trusts (including Maori trusts and incorporations).

Changes made by government to forest taxation schemes in New Zealand during the 1992-1993 year stimulated an afforestation boom, as increased numbers of farmers established forestry blocks on their properties either on their own behalf or in partnership with urban investors. Numerous newspaper

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[1] A fuller discussion of these results can be found in McClintock and Brown (2001), and McClintock (2002).

[2] FRST contracts TBA 601, TBA 801 and TBA X0001.

advertisements also publicised afforestation ventures as a long term investment option for the public. However, these ventures became less popular in the late 1990's as world timber prices declined.

Processing plants in the global forest industry have increased their use of residues and levels of conversion through the adoption of new technologies. They have also sought to restructure their operations by increasing economies of scale and the vertical integration of processing activities (e.g. by integrating a pulp mill with a paper mill). Some companies have maintained their profitability by converting logs into high-price products for sale in specialised markets.

Forest companies in New Zealand are following similar strategies. Fletcher Challenge Forests, for example, has established high value niche markets for its radiata products in the United States and Japan. This strategy is designed to increase the company's margins over those available from the selling of logs, and to reduce its exposure to fluctuating commodity prices (Fletcher Challenge Forests, 2000: 3-4). Major forest companies in New Zealand, like their North American counterparts, have vertically integrated their operations and centralised their management structure. Carter Holt Harvey, which is 50 per cent owned by the International Paper Company of the USA, has recently reversed this centralised approach to management, however, by reorganising its six business groups (i.e. Forests, Wood Products, Pulp Paper and Tissue, Packaging, Distribution, and Associated Companies) into 32 smaller business units (Carter Holt Harvey, 2001: 5).

The forestry sector in New Zealand consists of enterprises engaged in forestry and logging, and other firms with processing and manufacturing plants. Many of New Zealand's large-scale processing plants and forests are owned by overseas companies. The incidence of overseas ownership in the sector, as shown by Table 1, was lower than the average for all industries in 2000. It declined from 3.03 per cent to 1.06 per cent between 1994 and 2000. This low incidence of overseas ownership may be misleading however. A closer examination of manufacturing activities, for instance, reveals that the extent of overseas ownership is relatively high for enterprises engaged in pulp, paper and paperboard (33.0% - 1994, 40.0% - 2000), solid paperboard container (37.5% - 1994, 33% - 2000), corrugated paperboard container (40% - 1994, 33% - 2000), and paper product production (14.52% - 1994, 5.17% - 2000). By contrast the vast majority of enterprises engaged in other activities such as forestry and logging, sawmilling, and the manufacture of wood products, are locally owned.

Table 1: Forestry Sector - Proportion of Economically Significant Enterprises[3] with 25 per cent or more of ownership held by overseas persons or companies - 1994 and 2000.

Sector	**1994**		**2000**	
	Number of Economically Significant Enterprises	**Per cent of Enterprises with 25% or more of overseas ownership**	**Number of Economically Significant Enterprises**	**Per cent of Enterprises with 25% or more of overseas ownership**
Forestry and logging	2,092	2.92	4,934	0.69
Processing and manufacturing	1,796	3.17	2,213	1.9
Total forestry	3,888	3.03	7,147	1.06
All Industries	171,680	2.37	242,850	2.14

Source: Statistics New Zealand (2001).

3 An economically significant enterprise meets any one of the following criteria: (1) more than $30,000 annual GST expenses or sales; (2) more than two full-time equivalent paid employees; (3) in a GST exempt industry except the rent or lease of residential property; (4) part of a group of enterprises; (5) new GST registration that is compulsory, special or forced; and (6) registered for GST and is involved in agriculture or forestry. An enterprise is defined by Statistics New Zealand (nd) as a legal entity providing goods and/or services, or established with the intention of providing goods and/or services, that earns income and/or incurs expenses. Enterprises can range from self-employed lawn-mowing contractors to large corporations.

Forestry, logging, and services to forestry are activities characterised by small-scale units. Since 1994 the scale of these activities has been further reduced as the major forest companies have continued to contract out these previously core activities to independent operators. This strategy has more than doubled the number of geographic units[4] engaged in these activities between 1994 and 2000, while over the same period the number of people employed in them has only increased by 10 per cent. The three main business types in forest based activities are partnership, private company and individual ownership. Almost three-fifths of workers engaged in these activities in February 2000 were employed by geographic units owned by private companies.

Factory based activities in the processing and manufacturing of wood products typically employ more staff per geographic unit than activities in the forests. They had relatively high proportions of their geographic units which were operated by non corporate owners. In the processing sector, for example, 20 per cent of the units were owned by partnerships in 2000, while another 17 per cent were owned by individuals. About four-fifths of the workforces in both the processing and manufacturing of wood products, however, were employed by geographic units owned by private companies. An interesting feature of both forestry processing and manufacturing activities is that geographic units owned by private companies employ a far greater share of the workforce in 2000 than they did six years before. While over the same period the proportion of the workforce employed by geographic units owned by public companies has declined. The reasons for this change in business ownership is unclear, but one factor may be the reorganisation of major companies into smaller decentralised units.

Agriculture

This account of the agricultural sector examines the changing patterns of ownership of farms and the industries that transform farm produce into consumer commodities.

Helbling (1996) has analysed changes in the ownership structure of New Zealand farms since the withdrawal of state subsidies during the 1980's. 'Family farms'[5] dominated all agricultural industries both before the withdrawal of subsidies (1982) and after (1992). Therefore "the position of family farming vis-a-vis alternative organisational forms was stronger after eight years of farming without state support than prior to deregulation" (Helbling, 1996: 22). Other categories of ownership identified by Helbling are 'family managed farms', which he defines as the same as 'family farms' except that they have more than three labour units, and 'corporate farms'.

The share of output produced by family farms increased moderately between 1987 and 1992 for all commodities except for horticulture and crop products. In both of these years corporate farms contributed less than 18 percent of total output for all six commodities, and family-managed farms had a relatively higher share of the production than corporate farms for all the commodities (Helbling, 1996: 24). Outsider investors were active in buying land after 1984 when prices were depressed largely due to the removal of state support to agriculture. When prices recovered, however, they purchased less land as operating returns on capital in farm businesses were usually too low for corporate shareholders (*ibid:* 33).

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4 A geographic unit is a separate operating unit engaged in one, or predominately one, type of economic activity from a single physical location or base. It was called an activity unit until December 1996 (Statistics New Zealand, nd).

5 Helbling (1996: 12) defines a family farm as an enterprise which is at least half owned by the farmer or farm family, is managed by the farmer, and has a total labour input of no more than three labour units.

While farmers have changed their management labour practices on-farm, and sought alternative ways of increasing returns by changing their land use or establishing alternative enterprises on their properties, the companies involved in the large-scale commercial processing of farm commodities have also had to reorganise their operations in response to competitive pressures in the global market.

In New Zealand, a spate of mergers and plant closures occurred among major agribusiness companies during the late 1980's and early 1990's. Agribusiness companies responded to reduced farm expenditure by adopting cautious financial management policies, reducing labour costs, improving product quality, introducing new products, and changing their pricing and marketing policies (Wilson, 1995: 419-420). They also closed many of their facilities in smaller rural towns, and concentrated their operations in regional centres.

The ownership of sheep processing plants is now heavily concentrated, with three farmer cooperatives, AFFCO, Alliance and PPCS, accounting for about 70 per cent of the national kill of sheep and lambs between them. By contrast the ownership of beef plants is more dispersed as the typical company in that industry processes just five to seven per cent of the total number of cattle slaughtered (Maughan, 1998: 42).

The dairy industry in New Zealand is vertically integrated. The farmers own the cooperatives that operate the processing plants, while the cooperatives themselves own the New Zealand Dairy Board which markets the industry's products (Nixon, 1998: 88). Over the last century the ownership structure of the dairy processing industry has evolved from over 150 dairy companies to just three by December 2001.

The overall proportion of overseas owned enterprises in the agricultural processing and services sectors in 2000 was lower than that for all industrial sectors in New Zealand. Yet, as Table 2 reveals, the incidence of overseas ownership differs significantly between the processing and service industries. Agricultural processing, for instance, has a relatively high incidence of overseas ownership (8.76 per cent - 2000); particularly flour mill product manufacturing (14.28% - 1994, 20.0% - 2000), wool scouring (13.04% - 1994, 17.64% - 2000) and leather tanning and fur dressing (11.11% - 1994, 14.63% - 2000). Flour production is dominated by three Australian owned companies - Goodman Fielder, Defiance Food Industries Ltd and Allied Foods - that together generate about 85 per cent of the country's flour milling sales (Rosenberg, 1997: 45). The incidence of overseas ownership in agricultural processing has also risen slightly over the short term from 8.37 per cent in 1994 to 8.76 per cent in 2000. By comparison the degree of overseas ownership in agricultural services is very low (0.15 per cent - 2000).

Table 2: Agricultural Processing and Services sector - Proportion of Economically Significant Enterprises with 25 per cent or more of ownership held by overseas persons or companies - 1994 and 2000.

Sector	**1994**		**2000**	
	Number of Economically Significant Enterprises	**Per cent of Enterprises with 25% or more of overseas ownership**	**Number of Economically Significant Enterprises**	**Per cent of Enterprises with 25% or more of overseas ownership**
Agricultural processing	825	8.37	959	8.76
Agricultural services	2474	0.36	4032	0.15
Total agricultural processing & services	3299	2.36	4991	1.8
All Industries	171680	2.37	242850	2.14

Source: Statistics New Zealand (2001).

Private and public companies, and cooperatives are the major types of business ownership in the agricultural processing sector. Three-quarters of geographic units in this sector were owned by private companies in 2000, and they employed about 70 per cent of the workforce. Most of the remainder of the workforce was either employed by public companies (17 per cent) or cooperatives (9 per cent). Major cooperatives in the sector manufacture dairy products for overseas and domestic markets. The dominant forms of business ownership in the agricultural services sector, however, are individual ownership, partnership and private company. Geographic units in this sector generally employ much fewer people than those in the agricultural processing sector, and in February 2000 over half of the workers in the sector were either employed by partnerships (29 per cent) or by individual owners (23 per cent).

Fishing

This description of fishing examines the operation of quota management systems and the ownership structure of the New Zealand industry.

Governments in various parts of the world established quota management systems during the late 20th century to ensure fish stocks would be harvested on a sustainable basis, and to provide property rights to fishing operators. Since the introduction of the quota management system in New Zealand there has been a lot of trading of quota. Processing companies have purchased or leased quota, and then subleased it to other fishers who agree to supply the quota, and any other quota they may own, to the companies. Trading has separated the ownership of quota from harvesting rights, and reinforced the cultural barriers between the owners and leaseholders of quota. Processing companies also operate deep water fishing vessels which supply their factories. They derive financial returns from their ownership of quota and the processing of a particular species, while lease-dependent fishers only generate revenue from their harvesting activities (Baines and McClintock, 2000: 8-10). Large sums of capital are required to purchase vessels capable of harvesting deep water species at a low unit cost. The major fishing companies can also achieve economies of scale by distributing peak harvests among several processing plants at various locations around the country (Sharp, 1998: 70-72).

Thus there has been a concentration of ownership of quota, larger vessels capable of harvesting deep sea species, and processing facilities at the major ports, while there are fewer operators of smaller boats based at minor ports such as Riverton, Moeraki and Havelock (McClintock *et al.*, 2000: 2). Thirty companies owned 91 per cent of quota in December 1995, while the three largest groups of these companies - Sealord Products Ltd, Sanford Ltd and Amalgamated/Talleys - between them controlled 57 per cent of the total allowable commercial catch (New Zealand Fishing Industry Board, nd: 34-35). There has been a similar concentration of ownership in aquaculture, after many family operators in areas, such as the Marlborough Sounds, sold their farms to companies which employ contract workers to harvest shellfish (Baines *et al*, 2000: 6).

Although the overall incidence of overseas ownership among enterprises in the fishing, aquaculture and seafood processing sector is generally low when compared with the average for all New Zealand's industries, there is a relatively high degree of overseas ownership of firms engaged in processing activities (see Table 3). The degree of overseas ownership of enterprises in the sector declined from 1.19 per cent to 0.67 per cent between 1994 and 2000.

Table 3: Fishing, Aquaculture and Seafood Processing - Proportion of Economically Significant Enterprises with 25 per cent or more of ownership held by overseas persons or companies - 1994 and 2000.

Sector	1994		2000	
	Number of Economically Significant Enterprises	Per cent of Enterprises with 25% or more of overseas ownership	Number of Economically Significant Enterprises	Per cent of Enterprises with 25% or more of overseas ownership
Fishing	1,338	0.45	1,732	0.35
Aquaculture	299	2.01	366	0.82
Seafood processing	132	6.82	139	4.31
Total fishing, aquaculture and processing	1,769	1.19	2,237	0.67
All Industries	171,680	2.37	242,850	2.14

Source: Statistics New Zealand (2001).

Fishing is an activity that is dominated by small-scale units. Three-quarters of geographic units in the sector were owned by individuals or partnerships. Another quarter of geographic units were owned by private companies which employed 45 per cent of the fishing sector's workforce in 2000. Aquaculture is also an activity that is dominated by small-scale units. Fifty-two per cent of the geographic units engaged in this activity were owned by partnerships or individuals in February 2000, but they employed only 34 per cent of the workforce engaged in aquacultural activities. Private companies owned 43 per cent of the geographical units and provided jobs for 59 per cent of people employed in the sector. They have become the dominant type of business ownership in the sector since 1994. Seafood processing requires larger scale units than fishing and aquaculture. Almost all of the employment in processing is provided by private and public companies. Seventy-seven per cent of geographic units were owned by companies in 2000, and they employed 94 per cent of the sector's workforce.

Mining

Gold and coal mining have been important economic activities in New Zealand since the 19th century, and this section discusses recent changes in the ownership structure of these industries.

The government was the major operator in coal mining until the 1980's. At that time there were only 100 mines still operating - 16 belonged to the state and the remainder were small owner-operated enterprises. In 1987 the state-owned mines were transferred to the Coal Corporation (later renamed Solid Energy) which subsequently formed joint ventures with multinational companies to develop new mines. Since then many small private and cooperative mines have closed (Fitzgerald, 1997: 3-4). Nowadays, there are only three coal mines currently operating in the Ohai-Nightcaps district of Western Southland: the Wairaki mine owned by Solid Energy and two small private mines (Fitzgerald, 1998: 4). Solid Energy also owns eight large coal mines in other parts of New Zealand: three underground pits and two open cast operations on the West Coast, and two underground pits and an open cast operation in Waikato (Solid Energy, 2000: 4).

Two large open cast mines owned by multinational companies dominate the gold industry in New Zealand: Martha Hill at Waihi and Round Hill at Macraes Flat in North Otago. The Martha Hill mine is operated as a joint venture by Normandy Mining Ltd and Otter Gold Mines Ltd (Slight, 2001: 29), while the Round Hill mine is owned by GRD Macraes Ltd (Taylor *et al.*, 2000: 10).

The coal and gold mining sector has a relatively high proportion of enterprises with overseas ownership, when compared with the average for all of New Zealand's industrial enterprises (see Table 4). In 2000 there were only 83 firms in the sector, and they employed 970 people.

Table 4: Coal and Gold Mining - Proportion of Economically Significant Enterprises with 25 per cent or more of ownership held by overseas persons or companies - 1994 and 2000.

Sector	1994		2000	
	Number of Economically Significant Enterprises	Per cent of Enterprises with 25% or more of overseas ownership	Number of Economically Significant Enterprises	Per cent of Enterprises with 25% or more of overseas ownership
Coal Mining	45	13.33	27	11.11
Gold Ore Mining	46	6.52	56	5.36
Total coal and gold mining	91	9.89	83	7.23
All Industries	171,680	2.37	242,850	2.14

Source: Statistics New Zealand (2001).

State-owned enterprises and private companies are the dominant types of business ownership in the coal mining sector. Many of the smaller mines are operated by private companies, while most of the larger mines are operated by Solid Energy - a state-owned enterprise. Geographic units owned by private companies employed 28 per cent of the sector's workers in 2000, while those owned by the state employed 56 per cent of the workers. Employment in the coal mining sector declined by 29 per cent between 1994 and 2000.

Gold ore mining is an activity where the ownership of geographic units is dominated by private interests. Over three-quarters of geographic units in February 2000 were operated by private companies, and employed just under four-fifths of the sector's workforce. This type of business ownership was less dominant in 1994, when 43 per cent of the geographic units were owned by private companies, 32 per cent by individuals, and 19 per cent by partnerships.

Energy

The energy sector in New Zealand comprises the extraction, processing, and supply of natural gas and oil, and the generation and distribution of electricity. Although there are linkages between the gas and electricity industries in terms of generation and distribution, their ownership structure is examined separately here.

Nearly all of New Zealand's natural gas and oil is extracted from the Maui and Kapuni fields of Taranaki. All of the gas production from the Maui field is channelled through the government which sells it to the Natural Gas Corporation for on-sale to electricity generators and gas retailing, to Contact Energy for electricity generation and gas retailing, and to Methanex for the production of methanol. Contact Energy (51 per cent owned by Edison Mission Energy of the USA) and the Natural Gas Corporation (64 per cent owned by Australian Gas Light) are the major gas wholesalers in New Zealand, and the latter owns and operates the country's high pressure gas pipelines. Gas is reticulated from high pressure pipelines through low pressure networks, that are owned by distribution companies, to domestic and commercial consumers. Some gas retailers also sell electricity (Grant Samuel and Associates Ltd, 2001: 9-11).

The electricity industry in New Zealand is divided into three sub sectors: retail, distribution, and transmission. Retail companies generate electricity and/or sell electricity to consumers, distribution businesses own the local networks that deliver electricity from high voltage lines to end users, and Transpower, a state-owned enterprise, owns the high voltage lines that connect the generators to the national system (Grant Samuel and Associates Ltd, 2001: 5). The generation of electricity, formerly a government monopoly, is now controlled by three state-owned enterprises (Genesis Power, Meridian Energy and Mighty River Power) and Contact Energy. There are 31 distribution businesses operating under a range of ownership types including public companies and community owned trusts, and ten electricity retail companies (Energy Markets Policy Group, 2001: 2-3, 5).

The incidence of overseas ownership among enterprises in the natural gas and oil industry is very high compared with the average for all industries (see Table 5). Two activities within the natural gas and oil industry that have a particularly high degree of overseas ownership are oil and gas extraction (40.0% - 1994, 40.0% - 2000), and petroleum exploration services (46.88% - 1994, 36.36% - 2000). Although the data provided by Statistics New Zealand indicate that the enterprises which generate electricity are entirely locally owned, Contact Energy, a major generating and distribution company, became 51 per cent owned by Edision Mission Energy of the USA in June 2001 (Grant Samuel & Associates Ltd, 2001: 17).

Table 5: Energy sector - Proportion of Economically Significant Enterprises with 25 per cent or more of ownership held by overseas persons or companies - 1994 and 2000.

Sector	1994		2000	
	Number of Economically Significant Enterprises	Per cent of Enterprises with 25% or more of overseas ownership	Number of Economically Significant Enterprises	Per cent of Enterprises with 25% or more of overseas ownership
Oil, petroleum and gas	114	21.05	80	36.25
Electricity supply	70	-	85	-
Total energy sector	184	13.04	165	17.58
All Industries	171680	2.37	242850	2.14

Source: Statistics New Zealand (2001).

Employment in the energy sector declined dramatically during the 1990's following the rationalisation of oil and gas production and the reform of the electricity industry. Local government and state-owned enterprises, and private companies are the dominant types of business ownership in this sector, and together they employed some 94 per cent of its workforce in February 2000. The share of the sector's workforce employed by state and local government enterprises at just under 69 per cent in 2000 was very similar to the proportion of a much larger workforce that was employed by publicly owned enterprises six years before.

Tourism

The tourism industry in New Zealand comprises a mix of a large number of small enterprises and a handful of medium to large operators. Thus the industry has a dual nature as a few large operators influence the flow of international visitors into the country, where they integrate their operations with the activities of a large number of smaller tourism enterprises (McDermott, 1998: 335). Although over 20 international airlines bring visitors to New Zealand, the trans Tasman route is dominated by Air New Zealand (82 per cent owned by the NZ government) and Qantas (an Australian company), and the domestic routes by Air New Zealand. Tranz Rail which provides passenger services by rail and sea is controlled by an American railway company, but other major tour operators in the industry (e.g. Tourism Holdings Ltd, Shotover Jet Ltd) are mainly New Zealand owned.

There are several sub sectors of the industry: transportation, hospitality, attractions, activities, ancillary services and sales (Collier, 1999: 14). Hence many types of businesses provide services to tourists. Some enterprises which provide accommodation or attractions, for instance, are mainly oriented to the tourist market, whereas others, such as retailers and transport operators, sell their goods and services to a wider range of customers. Many firms in the tourism industry, particularly motels and souvenir/craft shops, are small, employing only two to five staff (Pearce, 1996: 193-194).

The hospitality sector is an important component of the tourism industry in New Zealand. It comprises accommodation, pubs, taverns, bars, cafes, restaurants and clubs.[6] Although the incidence of overseas ownership among enterprises in the hospitality sector is relatively low compared with the average for all industries (see Table 6), the majority of international class hotels in New Zealand are owned by overseas companies (Pearce, 1996: 194).

Table 6: Hospitality sector - Proportion of Economically Significant Enterprises with 25 per cent or more of ownership held by overseas persons or companies - 1994 and 2000.

Sector	1994		2000	
	Number of Economically Significant Enterprises	Per cent of Enterprises with 25% or more of overseas ownership	Number of Economically Significant Enterprises	Per cent of Enterprises with 25% or more of overseas ownership
Hospitality sector	7063	1.3	9737	0.99
All Industries	171680	2.37	242850	2.14

Source: Statistics New Zealand (2001).

The ownership of geographic units in the hospitality sector is dominated by partnerships and private companies. Most of the workforce in the sector (65 per cent in 2000) was employed by geographic units owned by private companies, while a sixth of the employees worked for those owned by partnerships. Total employment in the hospitality sector increased by about 35 per cent between 1994 and 2000, and probably reflects the strong growth in overseas visitors over this period.

DISCUSSION

It is noticeable from the review of the six sectors that many of the major companies in the agriculture, fishing and tourism industries remain New Zealand owned. The business demographic statistics for 1994 and 2000 reveal, however, that the incidence of overseas ownership within a particular sector often varies between the types of activities. In general there is a relatively low level of overseas ownership among economically significant enterprises engaged in primary production (i.e. those that directly access the natural resource), compared with a high incidence of overseas ownership among enterprises in some sectors that perform activities which add value to the natural resource. Those activities which have a low incidence of overseas ownership, for instance, include forestry and logging, agricultural services, electricity supply, fishing, and aquaculture. While there is a relatively high level of overseas ownership in seafood processing; certain agricultural processing activities (i.e. leather tanning and dressing, flour product manufacture, and wool scouring); several forest manufacturing activities (pulp, paper and paperboard, solid paperboard containers, corrugated paperboard containers, and paper products); the mining of coal and gold; and the production of natural gas and oil.

Those sectors which add value to natural resources through capital intensive production methods (i.e. agricultural processing; forestry processing and manufacturing; energy; and seafood processing) tend to have higher numbers of employees based at each geographic unit than those engaged in primary production (i.e agricultural services; forestry, logging and services to forestry; fishing; aquaculture, gold and coal mining). Geographic units performing primary production activities are often operated by non corporate owners such as individuals, or partnerships, although private companies have become an increasingly popular form of business ownership over the last few years. Those geographic units which add value to natural resources are more likely than primary producers to be owned by either a private or public company. The exceptions

6 ANZSIC numbers H571000 (Accommodation), H572000 (Pubs, Taverns and Bars), H573000 (Cafes and Restaurants) and H574000 (Clubs- Hospitality).

to this general pattern are the energy and mining sectors, where state-owned and local government enterprises have a significant role in the generation and supply of electricity and the production of coal, and the agricultural processing sector where cooperatives are a significant form of business ownership.

With the scale of New Zealand's natural resource dependent industries being comparatively small by international standards, the major companies in each sector have consolidated and expanded their operations by acquiring or merging with their rivals to maintain their competitive advantage. Meanwhile, many smaller operators have either left their particular industry (e.g. fishing, coal mining), or become more dependent on major companies (e.g. farming, tourism) for their revenue. Even in the agricultural sector, where much of the processing of farm produce is undertaken by cooperatives, farmers do not have the same degree of control over these operations that they had when production plants were more geographically dispersed.

CONCLUSION

These recent changes in the business ownership of natural resource dependent industries provide the context for better understanding the processes that shape the lives of people who reside in the resource communities of New Zealand. They also raise several significant issues for regional economic development. The increased number of geographic units operating in agricultural services, forestry, logging, fishing, and aquaculture, for instance, highlights the need for a business support strategy for small-scale producers who have less control over processing activities than they had formerly. The growing concentration of ownership in processing activities, and the high incidence of overseas ownership in some of them, has led to the centralising of processing plants such as timber mills and dairy factories. While industries have benefited from an improved access to overseas markets and technological innovation, this restructuring of production has had major social and economic consequences for communities where plants have been closed (Taylor *et al.*, 2001: 143-144). Even communities where plants remain open have experienced some employment losses from the reorganisation of work practices and the increased use of labour-saving technologies. Community leaders recognise that major companies operating in natural resource dependent industries are now less committed to particular geographical localities, and they are developing alternative economic activities to increase local employment (McClintock *et al.*, 2000: 7-8).

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