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**INTERNATIONALISATION OF THE ROTORUA ECONOMY AND CHANGING LOCAL -  
GLOBAL LINKS : THE RESTRUCTURING OF MANUFACTURING, WHOLESALE AND  
STATE SECTOR ACTIVITY BETWEEN 1985 - 1991**

This thesis is presented in partial fulfilment of the requirements for the  
Degree of Master of Arts in Geography

By

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## ABSTRACT

This thesis focuses on changes which have occurred in selected manufacturing, wholesale and state sector services within Rotorua since the mid 1980s, particularly between 1987 and 1990. The period between 1987 and 1990 witnessed considerable and far reaching restructuring of both private and state sector activity within both the Rotorua and New Zealand economy. The year 1987 is of significance for two reasons. Firstly, the state sector restructuring commenced in April and secondly, the stock market crashed in October. The fallout from these two events contribute in part to the ongoing character of the restructuring process in Rotorua and New Zealand.

This thesis emphasises that the current restructuring of activity rests on particular organisational and technological processes which are international in perspective and which alter the direct and indirect (often unrecognised) links activity in Rotorua has to the wider national and international economy. This thesis also argues that the current restructuring of activity comprising the Rotorua economy, through technological and organisational changes, are in fact the local response to a global phenomenon - the continuing internationalisation of production and consumption.

# CHAPTER ONE

## WHAT'S WRONG TOM<sup>1</sup>

### INTRODUCTION

Rotorua<sup>2</sup> since World War II and until the late 1970s was one of the fastest growing provincial towns in New Zealand. As the population increased there appeared to be prosperity and employment opportunities for its citizens and migrants. Since the mid 1980s, however, Rotorua has suffered a disproportionate increase in unemployment. The national unemployment rate is around 14 - 15% whilst in the Rotorua Urban Area it is 22.5% (New Zealand Herald, January 1992). Somehow the industries on which the prosperity was based, assumed to be forestry, farming and tourism, were not performing well enough to retain their employees, let alone provide an expanding number of jobs for new entrants into the workforce. Functions performed by the State Sector in Rotorua and other manufacturing non-related to farming, forestry, or tourism, have also undergone changes that have failed to provide an increasing stream of job opportunities. What factors have caused these trends?

This thesis, in seeking to answer some of the questions related to recent trends, focuses on the restructuring of selected private (manufacturing and

1: "What's Wrong Tom?" is the title of a children's picture story book written by Paul and Emma Rogers and illustrated by Colin Robinson. In the story Tom, a two year old boy, finds himself in a variety of situations in which he experiences frustration at trying to find a solution to particular problems. Tom never quite gets it right. There always seems to be a missing element that is vital to the successful resolution of the problem. Like Tom, we too are aware that solutions are required for problems evident in Rotorua. Like Tom, we too are frustrated at our attempts at problem solving. Have we perhaps also missed some vital ingredient(s)? Refer to Appendix 1 for details of some of Tom's frustrating situations.

2: "Rotorua" means the Rotorua Urban Area as shown on Figure 1.1

wholesale) and State Sector (Government Departments) activities which in aggregate comprise a significant proportion of the Rotorua economy. The underlying theme inherent in the restructuring argument is that much change (restructuring) observable in activity in Rotorua is the local expression of a global phenomenon - the global phenomenon being a new phase in the internationalisation of production. The argument is that Rotorua has always been and once again is subject to international forces which impact either directly or indirectly onto local activity. The result is that the restructuring of activity in Rotorua is in fact an expression of the activities' responses (uneven and differentiated) to their new "international" role.

In this chapter, physical (vacant buildings) and social (changes in employment) indicators of change, are discussed. These changes represent to a large degree the effects of the internationalisation of Rotorua's economy. This chapter establishes a partial theoretical framework by drawing attention to the production system in which activity in Rotorua is encapsulated and inherent instability of this production system (capitalism - business cycles, booms and recessions). Chapter One outlines the empirical methodology used for data collection and briefly comments on the theoretical framework used to interpret this data. The chapter concludes with an outline of material discussed in subsequent chapters.

#### VACANT FLOORSPACE AS AN INDICATOR OF LOCAL ECONOMIC CHANGE

It is evident from the continually rising proportion of vacant floorspace in both the Central Business District (CBD) and various industrial zones that activities in the Rotorua Urban area are experiencing profound economic change. Some of Rotorua's higher order speciality comparison shopping, covering items such as ladies fashion clothes, (Silvana Models, Casual Corner and Natural Dash) and specialist/quality furniture (Danske Mobler) have

disappeared with the closure and withdrawal of a number of businesses from Rotorua over the last two or three years. The decision to close or withdraw from Rotorua was in each case made by the parent company's head office located outside Rotorua. The last two or three years have also witnessed other local closures as a result of the demise of national retailing chains such as Arthur Barnett, Smith City/Brinkley's, Woollie Weaver and Toy Force. Some of the vacated CBD space has been re-tenanted and is now occupied by lower order "cheaper goods" retailers such as Dress for Less. Another change affecting CBD retailing and contributing indirectly to vacant floorspace levels has been the recent trend of warehouse retailing (down marketing) by chains such as The Warehouse and Briscoes. Occasionally some of the vacant shops have been used by "raider traders" for a period varying from a couple of days to several months. Examples in the last mentioned category include the Toy Warehouse and The Light Shop. In the grocery trade the aggressive marketing of Pak & Save has captured a significant proportion of the Rotorua grocery market and legislative changes enabling supermarkets to retail wine, has contributed to the closure of downtown wine shops.

Change is also observable in the office functions of the Rotorua Urban Area and is in a large part a reflection of changes which have and are continuing to occur in Government Departments. In 1991, for instance some Government Departments were no longer operating in Rotorua, others had downsized their offices; the functions lost to other centres. The Government Block in Central Rotorua accounted for a significant proportion of vacant space in the CBD. The building occupied by the Maori Land Court had one vacant floor. The building previously occupied by Government Life and the Forestry Service was 80% tenanted. The old Social Welfare/MOWD building now houses on the first two floors the recently opened (late 1991) District Library. The two vacant floors of the Library building have only recently (September 1992) been let

to Waiariki Polytechnic "School of Business Management". The Probation office was also vacant. Government buildings outside the Government Block had further vacant space. The Post Office that once housed Postbank, NZ Post and Telecom under the old Post Office structure had one vacant floor. Also evident in Rotorua was the non-tenanting of new office accommodation, much of which was commenced before the 1987 Stock Market crash. Table 1.1 depicts floorspace changes per various CBD land use categories between 1982 and 1991. One of the most significant changes has been the increase in vacant floorspace from 2209m<sup>2</sup> (1982) to 41,363m<sup>2</sup> (1991).

TABLE 1.1 GROSS FLOORSACE PER LAND USE CATEGORY IN CBD 1982, 1989 AND 1991

ACTIVITY	1982		1989		1991	
	m <sup>2</sup>	%	m <sup>2</sup>	%	m <sup>2</sup>	%
Office Space	76,859	33.2	110,617	37.7	106,046	35.4
Retail Space	72,069	31.2	79,178	27.0	80,298	26.8
Transport Associated Activities (incl Parking Building)	11,262	4.9	11,664	4.0	11,904	4.0
Tourist Accommodation	15,232	6.6	14,765	5.0	16,743	5.6
Private Residential	14,927	6.5	14,377	4.9	13,641	4.5
Entertainment & Clubs	11,946	5.2	12,760	4.4	6,956	2.3
Restaurants & Taverns	9,558	4.1	8,398	2.9	14,519	4.8
Wholesale Space	5,792	2.5	3,217	1.1	1,436	0.5
Miscellaneous	10,982	4.8	9,983	3.4	6,786	2.3
Vacant Space	2,209	1.0	28,180	9.6	41,363	13.8
<b>TOTAL</b>	<b>230,836</b>	<b>100.0</b>	<b>293,139</b>	<b>100.0</b>	<b>299,692</b>	<b>100.0</b>

Source: CBD Land Use Surveys - Planning Department, Rotorua District Council

In the industrial zones of the Urban Area there has also been an increasing number of buildings becoming vacant; buildings that were once the home of reasonably successful businesses. The present economic environment has contributed to the decline of enterprises and has affected a diverse range of activities such as clothing factories, engineering shops and various car

service and repair enterprises. Mergers of national companies, with Head Offices outside Rotorua, has resulted in the rationalisation of the Rotorua portion of the new organisation and this has resulted in vacant sites and buildings. For example, Fletcher Challenge Ltd's (FCL) takeover of Winstones resulted in the latter's site and buildings being vacant for approximately three years. Recently Firth's operations were transferred to the Placemaker site (also FCL) and this has resulted in a 2½ hectare site being vacant; awaiting a buyer or tenant. Similarly the sale of Thurston's Timber Mills to New Zealand Forest Products (NZFP) in the mid 1980s resulted in a 2½ hectare site becoming vacant. Part of this site is now used to store machinery by local companies; Lakeland Steel, Ian Patchell Engineering and Ronayne Construction.

In 1991 the total industrial floorspace in the Rotorua Urban Area excluding the Waipa Sawmill (Forestry Corporation of New Zealand, FCNZ) was 456,484 square metres. In 1989, 25,156m<sup>2</sup> or 5.6% of the total stock of industrial buildings was vacant. A high percentage of the stock of vacant industrial buildings is of a good standard and is not vacant because of a bad state of repair.

Table 1.2 shows that 51 industrial buildings were vacant in the Rotorua Urban Area in 1989 ranging in size from approximately 100m<sup>2</sup> to over 1000m<sup>2</sup>.

Table 1.2 VACANT INDUSTRIAL BUILDINGS 1989

VACANT INDUSTRIAL BUILDINGS 1989						
Industrial Area	100 m <sup>2</sup>	101-200 m <sup>2</sup>	201-500 m <sup>2</sup>	501-1000 m <sup>2</sup>	1000+ m <sup>2</sup>	total
Te Ngae Rd/Ti St	-	-	2	3	-	5
Marguerita/White Sts	1	1	2	-	-	4
Fairy Springs Road	-	1	2	3	1	7
Old Taupo Road	5	5	11	8	1	30
Ngapuna	1	-	-	-	3	4
Ngongotaha	-	1	-	-	-	1
<b>TOTAL</b>	<b>7</b>	<b>8</b>	<b>17</b>	<b>14</b>	<b>5</b>	<b>51</b>

## INDUSTRIAL MIX OF THE ROTORUA ECONOMY

While vacant floorspace provides an instant indication that the local economy's production and consumption activities in aggregate may not be performing well, this development needs further description. An examination of Business Statistic Data related to Major Industrial Divisions can uncover significant trends that are taking place within the local economy, and within particular industrial divisions. Employment statistics of each major industrial division within the Rotorua Urban area are shown in Table 1.3.

Table 1.3 STATISTICAL DESCRIPTION OF THE ROTORUA ECONOMY

MAJOR INDUSTRIAL DIVISION	NUMBERS EMPLOYED				% CHANGE between 1987 - 1990
	1987	%	1990	%	
1) Agriculture, Hunting, Forestry and Fishing	265	1.87	299	2.37	+ 12.83
2) Mining and Quarrying	-	-	13	.10	-
3) Manufacturing	3007	21.23	1875	14.85	- 37.65
4) Electricity, Gas and Water	108	.76	125	1.00	+ 15.74
5) Construction	838	5.92	636	5.04	- 24.10
6) Wholesale and Retail Trade and Restaurants and Hotels	2869	20.25	2810	22.27	- 2.06
7) Transport, Storage and Communication	1130	7.98	848	6.72	- 24.95
8) Business and Financial Services	1776	12.54	1349	10.69	- 24.04
9) Community, Social and Personal Services	4172	29.45	4665	36.96	+ 11.82
<b>TOTAL</b>	<b>14165</b>	<b>100.00</b>	<b>12619</b>	<b>100.00</b>	<b>- 10.91</b>

Source: Compiled from Business Statistics Data - Department of Statistics 1987 and 1990  
Based on Activity units employing 10 or more persons per Major Division (New Zealand Standard Industrial Classification) within the Rotorua Urban Area 1987 and 1990.

From the above table it can be seen that employment within the Rotorua Urban Area decreased from 14165 in 1987 to 12619 in 1990, a reduction of 1546 or an almost 11% negative change. The largest numerical decrease was recorded in

the manufacturing sector. This sector's employment decreased by 1132 which represented 73% of the total decrease of employment for the Rotorua Urban Area over the period. Manufacturing's employment contribution to the local economy declined from 21% to 14%. There were also significant decreases in the Business and Financial Services, Construction and the Transport, Storage and Communication major industrial divisions. However, in the Community, Social and Personal Services major division, employment increased by 493, but this increase was insufficient to offset declines in other major industrial divisions experiencing employment reductions. Community, Social and Personal Services now account for almost 37% of the Urban Area workforce in 1990 compared with 29% in 1987.

#### Analysis of change within Manufacturing

As noted in Table 1.3, the industrial division that accounted for the largest numerical decrease in employment was manufacturing. Table 1.4 examines changes within manufacturing in greater detail. The largest decrease was recorded in the Wood Processing and Wood Products manufacturing industries. The 767 decrease in employment accounted for 67% of the decline within the manufacturing sector and almost 50% for the total employment decline experienced in all the major industrial divisions. Other significant decreases were recorded in the Textile, Apparel and Leather industries, 16% of the change within the manufacturing division, which represented almost 12% of the total employment decline within the Rotorua Urban Area, and manufacturing of fabricated metal products, machinery and equipment, 13% of change within the manufacturing division which accounted for 10% of the total employment decline within the Rotorua Urban Area.

TABLE 1.4. CHANGES WITHIN MANUFACTURING ACTIVITY IN ROTORUA 1987 - 1990

Analysis of change within selected Major Industrial Divisions (NZSIC) of Activity Units employing 10 or more persons within the Rotorua Urban Area 1987 - 1990

INDUSTRY DIVISION MANUFACTURING	NUMBERS EMPLOYED				MEASURES OF CHANGE					
	i	ii	iii	iv	1		2		3	4
	1987	%	1990	%	Number + -	% + -	% Major Division	% Total Empl		
Food, Beverage & Tobacco	247	8.21	209	11.15	- 38	- 15.38	- 3.35	- 2.46		
Textile, Apparel & Leather Goods	398	13.24	213	11.36	- 185	- 46.48	- 16.34	- 11.97		
Wood Processing & Wood Products Manufacture	1339	44.53	572	30.50	- 767	- 57.28	- 67.76	- 49.61		
Manufacture of Paper & Paper Products Printing & Publishing	191	6.35	175	9.33	- 16	- 8.38	- 1.41	- 1.03		
Manufacture of Chemicals & of Chemical Petroleum, Coal, Rubber & Plastic Products	34	1.13	16	.85	- 18	- 52.94	- 1.59	- 1.16		
Concrete, Clay, Glass, Plaster, Masonry, Asbestos & Related Mineral Manufacture Product	68	2.26	30	1.60	- 38	- 55.88	- 3.35	- 2.46		
Basic Metal Industries	-	-	-	-	-	-	-	-		
Manufacture of Fabricated Metal Products, Machinery & Equipment	667	22.18	509	27.16	- 158	- 23.69	- 13.96	- 10.21		
Other Manufacturing Industries	63	2.10	151	8.05	+ 88	+ 140.68	+ 7.77	+ 5.69		
TOTAL MAJOR DIVISION 3	3007	100.00	1875	100.00	- 1132	- 37.65	--	- 73.22		

Source: Compiled from Business Statistics Data - Department of Statistics 1987 - 1990

1. Numerical Change +, -
2. % Change within Industry -(comparison of columns i & iii)
3. % change of major division %
4. % of total Employment Change within the Rotorua Urban Area

Comparison of Rotorua and New Zealand Changes

Although the above statistics demonstrate that manufacturing employment in Rotorua has declined, the question must be addressed whether this decline is consistent with or contrary to New Zealand trends. Table 1.5 below shows that the numerical change in manufacturing nationally was -81100 or an almost 27% decline. Rotorua's decline was higher than the national average percentage change at -37%.

TABLE 1.5 COMPARISON OF CHANGE - ROTORUA AND NEW ZEALAND MANUFACTURING INDUSTRIES

	No. of fulltime jobs <sup>1</sup>		Numerical Change <sup>1</sup>	% Change between 1986-91 <sup>1</sup>	% of Major Division (National) <sup>1</sup>	Rotorua % change <sup>2</sup>	Rotorua % of Major Division <sup>2</sup>
	June 1986	June 1991					
Food, beverages, tobacco	72,500	56,300	- 16200	- 22.34%	- 19.97	- 15.38	- 3.35
Textiles, clothing, footwear, etc	42,500	27,000	- 15500	- 36.47%	- 19.11	- 46.48	- 16.34
Wood products, furniture	19,500	19,600	+ 100	+ 0.51%	+ .12	- 57.28	- 67.76
Paper, printing, publishing	36,300	30,600	- 5700	- 15.70%	- 7.03	- 8.38	- 1.41
Chemicals, rubber, plastics	27,300	17,600	- 9700	- 35.53%	- 11.96	- 52.94	- 1.59
Non-metallic mineral products	9,700	5,700	- 4000	- 41.23%	- 4.93	- 55.88	- 3.35
Basic metals	8,800	7,000	- 1800	- 20.45%	- 2.22	-----	-----
Machinery, fabricated metal goods	80,700	54,000	- 26700	- 33.08%	- 32.92	- 23.69	- 13.96
Other manufacturing	5,000	3,400	- 1600	- 32.00%	- 1.97	-140.68	+ 7.77
TOTAL MANUFACTURING	302,300	221,200	- 81100	- 26.83%	-	- 37.65	

Sources 1: Department of Statistics "Household Labour Force Survey (full time jobs)"

2: Business Statistics for Activity Units employing 10 or more 1987 - 1990

Nationally, the declining employment in various manufacturing industries, has shown parallel trends in Rotorua. However, Rotorua's significant decline in the

wood product and furniture industries has contrasted with a slight increase nationally. The loss of employment in the textile, clothing and footwear was also higher in Rotorua than nationally. Other categories such as "other manufacturing" decreased nationally but increased significantly in Rotorua. However, the base figure in Rotorua was very small and causes a "distortion" of results.

The analysis and comparison of each particular industry's share of the major divisions employment decline for both New Zealand and Rotorua highlights the significant decline of Rotorua's forest processing industries. In all the other industrial categories the Rotorua employment decline was below the National rate. In the other manufacturing category Rotorua experienced positive growth while nationally there was a decline. Although Table 1.5 provides evidence that the decline of manufacturing employment is not a localised but a national phenomenon, the above results must be taken with some degree of caution due to the two different sources used to demonstrate the parallel patterns and the small size of base figures for some of Rotorua's industrial categories.

## CAPITALISM AND CRISES - A PERSPECTIVE ON RESTRUCTURING IN

### NEW ZEALAND

While it is difficult to draw statistical comparisons between New Zealand and world trends, the many newspapers and magazines published both within New Zealand and overseas provide evidence that the economic problems experienced in Rotorua and New Zealand are not unique. Various countries of the "North and South" are experiencing a range of economic problems such as increasing levels of unemployment, regional stagnation and increasing levels of overseas

indebtedness. Why in the 1990s is the world economy experiencing these adverse changes?

Any attempt to explain the "why now" of contemporary economic phenomena evident at the local, national and global levels, must first identify the type of production which operates within the local area and which links the local economy to the wider national and international economy. The dominant global production system is capitalism which operates at a local and national level, linking Rotorua to the wider national and international capitalist economic system.

What is meant by the term capitalism? The Chambers Dictionary defines capitalism as firstly a "condition of possessing capital" and secondly as an "economic system which generates and gives power to capitalists". The Oxford Dictionary states that capitalism is "the organisation of production by Capitalists for their own profit". Johnson (1984,475) states that the "capitalist mode of production involves the buying and selling of labour power and commodities. Such transactions will only take place when those who make the decisions to buy and to set labour to work believe that they will get a financial reward from that decision". Roweiss (1981) claims that the type of production that will occur is for exchange and not essentially to meet social needs. Massey and Meegan (1985,134), in reference to capitalist accumulation describe capitalist production as a "process for profit" rather than a "process for the production of physical goods" for need. They argue that it is the former (profit) which will determine the level of or product mix of the latter.

The "why now" can be explained within the economic system produced by capitalism. Capitalist development over time is not linear but episodic and punctuated periodically by crises which require readjustment and

restructuring of activity in order to restore conditions permitting another phase of accumulation, in particular the renewed growth and profitability of enterprise. The relationship of important elements of the production equation are "reviewed". The current established and operational norms such as capital-labour relations via the labour-process (people-machine technology), organisational and spatial aspects of production, the financial environment and infrastructure, and state-capital relations are challenged and must be restructured for conditions favourable to accumulation to recommence. A widely held view within the literature suggests that capitalism is characterised by short and long waves of development - the short waves often inserted within the long waves. A crisis at the end of a long wave of development, which has had an underlying tonality favourable to accumulation, requires radical structural changes to "all the variables affecting production and constraining accumulation" or as Mandel (1972) asserts "all endogenous and exogenous economic forces". The short wave cycles inserted into the long waves are characterised by incremental changes which do not alter the structure to any significant degree. Cycles can vary in length from the 50 year Kondratieff, 18 year Kuznet, 10 year Juglar to 3-5 day inventory cycles. Some cycles affect certain sectors at a time while others affect all sectors of the economic system simultaneously. Some industrial cycles are seasonal due to agricultural or climatic links, others are influenced by class conflict involving strikes or work to rule activities (Bradbury 1984). There are numerous theories attempting to explain the turning points of cycles (overproduction, under-consumption, entrepreneurial innovation and the pace of diffusion) and the linking of impulses throughout the economy (Forrester's Systems Dynamic Model, the innovation and diffusion of linked technology) and the role of exogenous and endogenous factors (Mandel 1972).

Marshall's (1987) view is that each particular phase of accumulation can only be understood within its particular historical period. Aglietta (1979) has termed the current crisis as a crisis of Fordist/Taylorist production processes. Impulses of change are transmitted through the level of profit (tendency for the rate of profit to fall) to linked activities. The more linked the world economy becomes, the more spatially widespread are the economic and subsequent restructuring effects felt.

### POST WORLD WAR II BOOM AND CRISIS

The post World War II reconstruction and subsequent long economic boom was based on Fordist mass production techniques and a mass consumption ethic that was supported by most governments in the Western World, including New Zealand, with the adoption of Keynesian economic policies of demand stimulation, monetary and fiscal controls, state directed investment and social welfare programs (Soja, Morales and Wolff, 1983). It was also a period of accelerated suburbanisation and home ownership which stimulated the construction of highways and utilities, shopping centres, home construction and provided impetus for the automobile and major household appliance industries such as washing machines, refrigerators and television industries.

In the 1970s the world economy entered into a prolonged period of economic crisis that has affected, unevenly, all capitalist countries and shattered visions of unending economic expansion. The economies of the industrial market countries dipped into recession first in 1973 - 74 (the first World oil shock) and again in 1979 - 80 (the second World oil shock). However, Thrift (1986) suggests that although the oil shocks were important in triggering a

period of crisis and sustaining it, it seems likely that the crisis would have happened anyway. In the late 1960s the rate of profit in many firms and sectors in the industrialised market economies began to fall and the symptoms of prolonged depression such as relatively low levels of industrial output, periodic business and state financial crises, mass unemployment, business failure and continuing inflationary pressure, have all become evident throughout the capitalist world. The reappearance of a depressive period marks the end of the relative post war stability of Western Capitalism based on the Keynesian demand management philosophy. The recognition by contemporary economists of a crisis, termed by Itoh as "the inflation crisis in World Capitalism" (Marshall, 1987,97), has prompted speculation "that either the present economic order may be swept away or that the present crisis is a forerunner to an even deeper international slump" Marshall (1987,97). In other words, is the present economic world crisis decisive, as the crises of 1890s and 1930s were, in ushering in a new world economic order?

#### RESEARCH METHODOLOGY

The boundary of this study (refer to figure 1.1) has been drawn to incorporate the entire Rotorua Urban Area, as defined by the Department of Statistics for the 1986 Census of Population and Dwellings and an adjacent area to the south-east which includes the Waipa Basin. The Waipa Basin is the location of one of New Zealand's largest stand alone sawmills which is a major employer of urban area labour and its inclusion is therefore justified in any analysis of change. This "extended" areal unit is referred to in this study as the "Rotorua Urban Area". The research method follows an approach recommended by Sayer and Morgan (in Politics and Method) for analyzing and understanding complex change. This approach achieves explanation by combining statistical analysis of sectors to demonstrate general trends, with

Figure 1.1 BOUNDARIES OF STUDY AREA - ROTORUA URBAN AREA



Source: Department of Statistics, 1986 Census of Population and Dwellings.

survey information, highlighting specific outcomes, collated through interviews. This information is incorporated in a theoretically informed discussion, which enables global and local interactions to be examined. Interviews in this study were restricted to Managers of the activity units. The information collated does not therefore reflect employee views of change between 1983 to 1991.

#### A Theoretical Framework

A theoretical framework, drawn from literature on internationalisation and restructuring, emphasises the overlapping and combining nature of influences and forces operating at local, national and global spatial scales within specific and evolving technological and organisational contexts. The framework provides an approach to organising and interpreting data which enables local-global (and vice versa) connections to be examined in the restructuring of activity in Rotorua.

#### B Selection of Statistical Data

Business Statistics Data for the Rotorua Urban Area as defined above, based on activity units employing 10 or more, was provided by the Department of Statistics. It was estimated that activity units employing 10 or more would provide a 75% sample of total employment within the Rotorua Urban Area. Analysis of results of an Industrial Survey conducted in 1983 provided evidence that activity units employing less than 10 persons accounted for 25% of the Urban Area's industrial labour force. It was also assumed that the greater than 10 employee variable would account for an equal if not higher sample percentage of employees within the Urban Area's State Sector (Government Departments).

The employment data provided by the Department of Statistics did not contain either fulltime/part-time or gender breakdowns. This thesis is therefore unable to provide gender specific outcomes of the restructuring of activity that has occurred within the Urban Area. It has also not been possible to analyze trends in part-time/fulltime employment either. The employment data provided has been termed "total employment" and this has been assumed to refer to either fulltime or fulltime equivalent employment. Despite these limitations, Business Statistic data provided useful information on trends occurring between 1987 and 1990, a period of considerable and far-reaching restructuring of both private and public activity within the New Zealand economy. 1987 is a significant year for two reasons. Firstly, in April 1987, the first phase (shake up) of an ongoing process of state sector restructuring occurred involving several major Government Departments. In October of the same year the Stock Market crash, affecting predominantly private sector activity, seemed to signal the beginning of a new commercial era in New Zealand with "fallout" from the crash still manifesting itself in 1992.

### C Selection of Survey Sample

A full survey of all Government Departments and Agencies, as listed in the First and Second Schedules of the State Sector Act 1988, regardless of size in employment terms, was attempted. A principal reason for this was that the restructuring process, as it affected government departments, divided large multi-functional organisations into often several smaller units, in terms of a specific function or group of functions according to commercial, non-commercial, policy and/or regulatory criteria. Government Departments in this study also include State "privatised organisations" such as Postbank and Telecom. The privatised organisations are included as they were part of State Sector organisations before restructuring. Their inclusion therefore facilitates

a more complete appraisal of the impacts of State Sector restructuring which has occurred within the Rotorua Urban Area since the mid 1980s. However, Government Commercial companies such as Air New Zealand (Air NZ) and the Bank of New Zealand (BNZ) were not included or surveyed.

The survey sample of industrial activities operating in Rotorua were selected according to employment data derived from a 1983 Industrial Study and the 1987 and 1990 Business Statistics data. Generally activities surveyed were also the largest employers of the Urban Area's industrial labour force. As full a coverage as possible of all types of manufacturing industries was the aim of the selection of the survey sample. All food processing activities, clothing manufacturers, timber milling and timber using activities operating in Rotorua in 1991 were surveyed. A paper products manufacturer, several activities included within the "fabricated metal products, machinery and equipment" industrial category were also surveyed. In total, activities in six of the nine manufacturing sub-categories were surveyed. The remaining three manufacturing categories were insignificant in employment terms (46 in 1990).

Employment data derived from the 1983 Industrial Survey provided a pre-restructuring picture and where possible, comparison with employment data from the 1987 and 1990 Business Statistics was made. Conclusions drawn from this comparison, while useful, must be interpreted with some degree of caution due to possible differences in method of compiling the sets of data.

#### D Questionnaires

Two questionnaires were developed - one for the State Sector and the other for Private Sector activities. "Pilot" interviews were conducted to test both questionnaires. The questionnaires were then "refined" to include the main

themes of the "pilot questionnaires". Reasons for changing the format of the questionnaires were as follows:-

- 1 State Sector restructuring between 1985 and 1991 was complex. Several Managers of State sector organisations were unfamiliar with the pre-restructured Rotorua Department because they were either, employed by the same department in another centre, or employed in another department, or employed in the Private Sector.

It was therefore difficult to obtain gender and fulltime/part-time employment breakdowns and in some cases, the specific nature of the early restructuring of the Rotorua component of the Department was unknown. General changes to the organisation nationally were therefore of necessity applied to the Rotorua portion of the Department until the time period when specific Rotorua outcomes became clear. Questions relating to gender and full time/part-time breakdowns were discontinued in later interviews, because adequate information could not be obtained easily.

2. The first Private Sector questionnaire requested detailed input/output data in an attempt to establish the intensity of a range of linkages at local, national and international levels. Some Managers considered this to be commercially sensitive information. Questions relating to this were abandoned in the later questionnaire. Similarly questions relating to gender and fulltime/part-time employment were also abandoned because of vagueness and unreliability of "1985" figures, particularly when managers commenced their employment later than 1985.

## **E Form of Interviews**

The form of interview changed when the questionnaire changed. The approach followed in the pilot questionnaire was to structure interviews in a formal standardised way. The rationale underlying this approach is that each respondent is asked the same questions under formal (controlled) conditions. Through this approach interviewer and interviewee bias is minimised, facilitating "equal" comparison. However, change in both private and public sector activities between 1985 and 1991 were complex, differentiated and uneven and often interviews were unable to maintain the "controlled approach". A free-flow method of interviewing inherent in the "theme questionnaire" permitted conscious interaction and digression to maximise information flows.

A total of 75 interviews, using both the pilot and theme questionnaires, were conducted between May and October 1991. Forty-four State Sector and 31 Private Sector organisations were surveyed. The average length of each interview was 80 minutes. For detail relating to the questionnaires refer to Appendices 4 - 7.

## **THESIS ORGANISATION**

Rotorua is not the only place in New Zealand, neither is New Zealand the only country in the World, currently experiencing rapid and dramatic economic changes. The restructuring of activity within the Rotorua economy, must be set within a wider national and international context. In Chapter 2, Core-Periphery, uneven development and circuits of capital theory, provides a framework from which to examine how activity in Rotorua is inserted into the wider national and international orders. The role of the State in providing the New Zealand and the Rotorua connection to the international economic order is also discussed.

In Chapter 3, attention focuses on two interlinked processes - organisational and technological change. These have implication for the character and behaviour of activity and are very powerful mechanisms for the restructuring of activity at any spatial scale. Organisational change and technological change are significant in that they create, through competition continuing pressures for further change. Both processes singly and in combination thus have implications for changing the relationship of activities in Rotorua with the rest of the nation and global economy.

Chapter 4 provides a link between the theory of Chapters 2 and 3 and sets the context from which to examine specific changes that have occurred within the Rotorua economy. The development of dualistic tendencies of the New Zealand economy - an internationally orientated and domestic sector - under the influence of the British Connection and the "restructuring" of trading relationships as a result of Britain's entry into the EEC in 1970 is briefly sketched. A conclusion is that internationalisation tendencies of the New Zealand economy have had historic roots. Internationalisation during the history of New Zealand's development has also been 'selective'.

Other events in the global economic environment such as the oil shocks of the 1970s, the rise of Newly Industrialised Countries (NICs), the breakdown of the Bretton Woods system governing international finance have created an operating environment for New Zealand business and public organisations that is radically different in the 1990s compared with the 1950s. The internal economic climate and its connection with the "external" global economy, emphasises the State's role since 1984 to dismantle "fortress New Zealand" and replace this with the "level playing field", which has favoured some economic agents while disadvantaging others. The State Sector since 1984 has also been reformed. Portions of ex-Government Departments have been privatised. Reform of the State Sector has been accompanied by a new national spatial

operational and service delivery structures. Restructuring of both private and public activity is ongoing and subject to the rigours of the market.

Chapter 5, examining changes within Rotorua's private sector, focuses predominantly on industrial activities. Changes within Rotorua's food processing, clothing, timber and timber using industries, paper products, printing and publishing, and fabricated metal products, machinery and equipment industries are analyzed. Changes within wholesaling (consumption) operations are also examined. A variety of restructuring influences are uncovered and the relationship of activity in Rotorua to other places exposed.

Chapter 6 focuses on the restructuring of Rotorua's State Sector services. Rotorua in 1984 was an important regional centre for a large number of Government Departments. Functions have been lost to other centres, particularly Hamilton, and the regional significance of Rotorua as a government centre has been severely eroded. Rotorua's district offices have been "scaled down" in both employment and "functional" terms and a trend towards "shop-front agencies" to service the local market is developing. There are, however, some counter tendencies for smaller State activities centralising to Rotorua. The latest round of government restructuring in Rotorua, beginning mid 1992, is involving the "new" Crown Research Institutes.

In Chapter 7 links between the theory and the Rotorua research findings are explored. In addition differences and similarities in private and state sector restructuring and spatial (re)organisation is examined. This spatial reorganisation and restructuring of activity within Rotorua essentially changes how Rotorua as a place relates to wider national and international economic environments. In Chapter 8 some policy implications and concluding comments are made.

## CHAPTER TWO

### ROTORUA'S GLOBAL - LOCAL LINKS. FUNCTIONAL RELATIONSHIP OF ACTIVITY IN ROTORUA WITHIN THE NATIONAL AND INTERNATIONAL ECONOMIES: A THEORETICAL APPROACH

#### INTRODUCTION

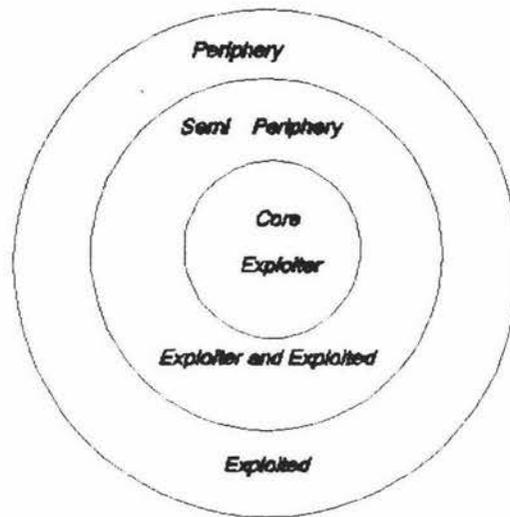
This chapter presents and comments on a range of ideas drawn from the literature on internationalisation, that are useful in providing a theoretical framework from which to interpret recent change in the Rotorua economy. Three particular "models" that seem to have particular relevance are discussed. These are core-periphery, uneven development and circuits of capital. These theories set the wider economic context in which Rotorua's activities operate and from which to evaluate change and this context is a global one. The global context is important because technological and organisational changes that are (have been) responsible for the restructuring of activity in Rotorua, are international in perspective. The development potential (profile) and the various possible connections activities in Rotorua can have to the global economy, are also presented.

#### CORE-PERIPHERY MODEL

Taylor (1981,24) states that understanding the nature of capitalism must begin with the assumption that "capitalism from its beginning presupposed a world market". Bryan (1987,254) claims that "the nation state is not the 'natural' space for the circulation and reproduction of capital". Johnston (1984,483) argues that "the present system of states is in part a residual feature of pre-capitalist modes of production under which space was a major impediment to travel and communications and all social formations operated within very

restricted territories". What is obvious from the above is that a world map of capitalism and the development of capitalist forces is unlikely to correspond with the current political world map. A conclusion following from this is, that in a context where all barriers that constrain capitalist forces are removed, so that these forces are able to develop to their fullest extent by utilising the most advanced technologies, quite unexpected organisational forms of production are likely to emerge that shape production on a global scale in a way suggest by Wallerstein (Figure 2.1).

Figure 2.1 CAPITALIST WORLD ORDER



The Wallerstein (1975) Core-periphery model is an attempt to establish an area's functional relationship to wider national and international economic environments. He argues that all regions of the World can be located into one of the three functional regions. In his argument New Zealand and Rotorua therefore, have particular roles in the functioning of the global economy at any time.

Wallerstein has incorporated the ideas of a single world market and a fragmented political structure "underlying the world market" in his model

which describes how capitalism (the capital accumulation process) has structured the world into three functionally ordered areas which he termed the core, the semi-periphery and the periphery. The semi-periphery and the periphery are dominated and exploited by the core. Wallerstein claims that the three tier division has a stabilising effect on the world economic structure that is beneficial to capital. This is because the core does not face a united opposition from both the periphery and semi-periphery as the latter, whilst being exploited by the core, is also exploiting the periphery. Wallerstein asserts that the exploitive process, whilst operating at three distinct levels, is actually a single manifestation of the capitalist accumulation process in which each of the three 'scales' is functionally important. Bryne and Parsons (1982) argue that capital cannot function without peripheral production at anytime and that 'peripheralisation' and 'reserve space' are both aspects of capitalist accumulation. The three tier world capitalist order is hierarchical in structure - the periphery and semi-periphery being subordinate to the core.

For the three tiers to be functionally linked presupposes an ensemble of characteristics in each tier facilitative to capitalist production. Friedmann and Wolff (1982) make the observation that urban areas situated in any of the three world regions, will have significant features in common. The Wallerstein model therefore has some validity in understanding "subprocesses of capitalism" likely to be occurring in particular nations, regions, and urban areas by locating them in one of the three world regions. The core contains the older industrialised and possibly post-industrialising regions of the world which contain the vast majority of corporate headquarters and functions also as major markets for world production. Core countries contain a 'generalised concentration' of research facilities and act as financiers in 'lubricating' the global accumulation process. The core regions have been identified as North-

Western Europe, North America and Japan. The semi-peripheral areas are currently characterised by their rapidly industrialising economies. These regions are still dependent on the core region for capital and technological knowledge. Countries included in the world semi-periphery include Mexico, Brazil, Spain, Egypt, Taiwan, Singapore, Hong Kong and the Republic of Korea. The world periphery is defined as the remainder.

The Wallerstein model, with reference to specific geographic components, is not static but dynamic. Functions, strength of relationships and dominance can change. The assignment of particular countries and regions to each of the three tiers can change over time. This temporal dimension recognises that any spatial area, country or region can "move" from core to semi-periphery and vice versa. Friedmann and Wolff (1982) provide some examples of this at an international level:

- the United Kingdom has moved from functioning as the core and part of a core to functioning within the world semi-periphery;
- Japan has moved from its previous semi-peripheral role to function as part of the core;
- several newly industrialised countries such as Taiwan, Singapore, Republic of Korea and Brazil have moved from functioning as part of the world periphery to functioning as part of the world semi-periphery.

Restructuring at its most general level requires "national" re-adjustment to international changes in core-periphery relationships. Subnational change may reflect or magnify trends occurring at a national level. It can be argued that the New Zealand restructuring of the 1980s and 1990s can be related to the way the New Zealand economy relates to the core, reflecting the demise of the

United Kingdom and the ascendancy of Japan. The core-periphery idea stresses the imbalance and asymmetry of areas. Some areas that are peripheral parts of the global economy do not fare well.

The Wallerstein model also has applicability at a less than global scale creating a system of nested hierarchies within particular areas of the globe (the Pacific Basin, Australasia) and within particular countries (Rotorua within New Zealand). In the New Zealand economy it could be argued for example that the "economic core" is spatially divided between Wellington (State Sector) and Auckland (Private Sector)<sup>1</sup>. The semi-peripheral portions of the New Zealand economy include Hamilton, Palmerston North and Christchurch, whilst the spatial remainder of the economy could be considered as peripheral. The New Zealand "model" therefore has implications on how activity in Rotorua relates to the wider New Zealand (and also international) economy. These however, are generalised aggregate tendencies. At an "enterprise" level there are counter tendencies where some activities have their core located in "peripheral areas" (Le Heron and Warr, 1976). The core-periphery model has applicability at an enterprise level in their definition of core and peripheral functions and where these are spatially located to maximise perceived profit and other objectives.

### UNEVEN DEVELOPMENT

While the Wallerstein model describes capitalism's organisation in a global framework, theories relating to the law of uneven development "begins to focus the microscope" towards the internal mechanisms of capitalist

1. Rudiments of the core/periphery argument were discussed in the 1970s in Johnston R J 1973 "Urbanisation in New Zealand", and Le Heron (1977,59) in "Patterns of Company Control and Regional Development". The Ministry of Works and Development (1987) also used the core/periphery idea to classify the New Zealand economy into four distinct "regions" in Changing Places in New Zealand: A Geography of Restructuring (Britton, Le Heron and Pawson, 1992,241)

accumulation and spatial use values. Massey (1979,234) states that "at any point in time there is a given uneven geographic distribution of conditions necessary for profitable and competitive production". This will have major implications on the establishment, growth, decline, or disestablishment of activity in Rotorua, especially in critical periods such as recessions when resources in numerous comparable and competing areas are under or undeveloped.

Uneven development is a result of spatial differentiation, capital mobility, spatial concentration and successive waves of accumulation over space (Walker 1978). The law of 'uneven development' advocates that capital accumulates in some sites as opposed to others through the generation of value in the production region and its successful realisation (sale at a profit) in the consumption region (which can also be the region of production). Value is created and accumulated in the process of investment and production as it flows from one region to another (or within a region).

Walker (1978,29) claims that the process of uneven development occurs not only because of the flows of surplus value in the accumulation process, but to the structuring of places as use value of capital. "Capital must create or appropriate effective space as a condition of its own production and reproduction (and) ..... places contain a specific ensemble of the materials of nature, built environment, labour power, members of other classes and various commodities". As capital flows from place to place "its components are altered in keeping with the changing character of accumulation. Places can at one moment be employed by capital and at another be in surplus with respect to the need of accumulation and so too are the workers and resources located there" (Walker 1978,32). Walker (1978,33) also states that workers and resources in seemingly under-developed areas are "not confronted by a

problem of development but of their functional role in the internal ordering of people and places of capitals' own inequalities showing up as a hierarchy of places".

Bradbury (1985) considers that the process of uneven development is a necessary pre-requisite to accumulation and Morgan and Sayer (1981,17) argue that the problems of uneven spatial development are "inherent structural consequences of capitalist development. Individual fragments of the capitalist system are not going to develop fully or equally and development will therefore be partial and unequal". Truncated spatial development is thus the result of uneven capitalist accumulation in which "none of the parts may be said to be truly autonomous or under-developed" (Walker 1978,34).

Activity in Rotorua has developed partially and unequally as a result of how it's activities relate to those in other places. Furthermore the uneven development theory suggests that future development will also be uneven, constrained but not pre-determined by past development. Activity in Rotorua will therefore exhibit a distinctive development profile that is based on its connections to other places with implications for the use or non-use of resources, including human resources - both the employed and unemployed. Furthermore, continuing capitalist forces, through technological and organisational change, will continue to affect activity in Rotorua with further change, restructuring, and reshaping of links occurring. Through this restructuring it can be anticipated that new forms of unevenness will emerge which will reflect the ideas and ideals of decision makers outside Rotorua. Some of these decisions may include local input in that they may be modified through the local political process. What is evident is that the "transition period" being experienced by Rotorua activity at present, is going to produce

very different links with activity to other places. These links will rest upon new and evolving technological and organisational features.

### CIRCUITS OF CAPITAL

While the capitalist accumulation process is enhanced by the use-value of specific places and has historically structured the world into three functional tiers, this does not account for the accumulative behaviour of the multitude of individual enterprises comprising the capitalist whole. Nor does it explain the spatial scale of that behaviour, or how the individual enterprises are inserted into the global accumulation process. For individual enterprises, value may be produced, realised and reproduced over a small or large spatial area. The circuits of capital theory, describes three circuits through which capital must pass in order to complete the accumulation process. These are the circuits of production, realisation (consumption) and reproduction (re-investment). The Capital moves from money to production to commodities (circuits of production). Through the sale at a profit of the commodities produced, the commodities are realised as money capital (circuit of realisation) which is reinvested in expanded production (in the circuit of reproduction).

Bryan (1987) identifies two main types of capital - global and national - and their respective variants - market constrained and investment constrained - within a nation state (Refer to Appendix 2A for details). These factions of capital are defined in terms of how each fraction functions in each of the three circuits of capital accumulation and the spatial extent of those circuits. The purpose of Bryan's division of capital within the national-state is to "illuminate the ways in which different factions of capital are inserted into global accumulation through specific geographies of production, realisation and reproduction" Fagan and Le Heron (1991,10). In other words there are

different ways in which activities in Rotorua are linked to the global accumulation process and this will be reflected in specific geographies of production, realisation (consumption) and reproduction (reinvestment) for each activity.

National fractions are defined where movement within the three circuits of capital is largely confined to particular nation states. Firms within this fraction produce nationally for sale primarily in the national market and allocate profit and nationally sourced money capital to extend production facilities within the nation. The investment constrained fraction is a variant of the national fraction containing firms which produce and reinvest money capital nationally but which sell a significant proportion of output (realisation of profit) on world markets.

The global fraction is defined where movement within all three circuits of capital is internationalised. Local production commonly takes place within a global network of transnational corporation branch plants, realisation of profit is dependent on world markets and money capital is obtained and reinvested in increased production facilities (reproduction) at a global scale. The market constrained fraction is a variant of the global fraction containing those firms which market principally locally but whose circuit of reproduction is internationalised. Financial capital could be obtained from outside the nation state but in addition money capital generated domestically could be invested globally. The market constrained category contains overseas owned branch plants serving a national market which may be protected by tariff barriers and also formerly national firms absorbed by transnational corporations as a result of takeovers/mergers but are not yet integrated into the international circuits of production or commodity transfer.

The above divisions of capital into the four major categories "are not absolute divisions but rather tendencies identified in relation to the international circuits of capital" and that "different combinations of circuits produce different arrays of possible links with the global economy" Fagan and Le Heron (1991,12). Britton (1991) has further refined Bryan's framework. (For details refer to Appendix 2B)

What is evident from the circuits of capital theory, is that activity in Rotorua can have a variety of direct and indirect links to the global economy. Even those activities that may not be linked to the global economy are influenced by those activities which are. The circuits of capital theory also includes the notion that the nation state is important for (re)defining connections any activity can have to the global economy and that the range of entities that can take advantage of global connections (through this (re)definition) vary from era to era. One unexplored dimension of the "circuits of capital theory" is the non-incorporation of public sector activities within the internationalisation framework. It would seem that the theory was developed using private sector examples thereby ignoring public sector activity. The question then arises how different is the behaviour (competitive/profit orientation) of public sector activities from private sector activities? Could it be argued that if public sector entities are liberated from constraining influences governing their behaviour, that they too will behave in a similar fashion to private sector activities thereby being able to be incorporated in the "circuits" theory?

### THE ROLE OF THE STATE

The argument developed so far proposes a single world model that is structured into three functional zones that are hierarchically ordered.

Capitalist accumulation operating through the use value of places requires three circuits, production, realisation and reproduction, to complete the accumulation process. Individual units of capital can accumulate through the circuit at a variety of geographic scales, including the nation state, that may be linked into the global accumulation process.

The argument has been developed by ignoring the political subdivision of the world in order to focus on the dynamics of the capitalist accumulation process and other objectives. However, the political subdivision of the world into nation states and the role of nation states in the accumulation process, cannot be ignored but must be included in an explanatory framework because state actions can have powerful direct and indirect geographic impacts. State action can be facilitative to some fractions of capital while at the same time blocking others. New Zealand, and by implication Rotorua, is linked into the global economy by a specific policy mix which governs the relations of production internal to New Zealand and connections the country has to the global economy.

The importance of the state-capital connection has been theorised by Lipietz (1986) through the interlinked construct of "a regime of accumulation and a mode of regulation". The regime of accumulation focuses on the "machine-labour relationship" which requires a distinctive mode of regulation in order to function successfully. The mode of regulation (or deregulation) includes state policies governing fiscal and monetary management, taxation, labour regulations, wage fixing systems, commercial practices and the regulation of a state's external links.

Restructuring of the New Zealand economy, affecting both private and public sector activities, has been the result of deliberate actions taken by the

government (Fourth Labour Government and the present National Government). Restructuring of the economy was politically justified by the Fourth Labour Government as necessary to correct New Zealand's poor economic performance in comparison to other advanced capitalist countries. Originally presented as a once-only process, restructuring has become a continuing and ongoing process involving the emergence of a new regulatory order as the old is being progressively dismantled. While details relating to the new emerging mode have yet to manifest itself, it is likely that the new mode of regulation will have international dimensions.

During the various stages of capitalist development from competitive to monopoly to global a succession of regimes of accumulation and modes of regulation have been observed. "Since the early 1970s the global submode has been emerging accompanied by struggles with the pre-existing dominant submode (monopoly capital) and vestiges of the earlier competitive submodes of production. Various submodes do not simply displace each other at particular times and places but new articulations between the emergent mode and existing modes are forged" and within the global setting the "geography of accumulation is a mosaic produced at a series of interacting scales" Fagan and Le Heron (1991,6). What this means for activity in Rotorua, dynamically connected to the global economy through New Zealand's emerging mode of regulation, is that a wide variety of behaviour at a variety of "overlapping spatial action fields" ranging from the local to the global and vice versa, will be discernable. It will also mean that some activity may be integrating into the new emerging global order while other activity will be marginalised. Some of the marginalised activity may represent surviving activity (in organisational and technological terms) from previous eras of capitalist development of Rotorua's economy.

## CONCLUSION

The present phase of restructuring is linking activity in Rotorua, either directly or indirectly, in radically different ways to the global economy. The global economy has witnessed changes in the Core, which has had significant repercussions for activities comprising the New Zealand economy, requiring readjustment to new international realities. Changes occurring within Rotorua cannot be completely separated or isolated from change occurring at a national level.

A distinctive geography of accumulation through the three circuits of capital - production, realisation and reproduction - will be evident and will link enterprises located in Rotorua into the global environment. This geography has been influenced by direct and indirect state action through a particular combination of a regime of accumulation and mode of regulation.

The construction of Rotorua's links at both the international and the national level, is not static but dynamic and subject to change over time. Two particular processes that are likely to influence the direction and quality of change within the Rotorua Urban Area are the concentration, centralisation and globalisation tendencies inherent in capitalist organisations and the changing technological environment as it influences transport and communication, new product development and the internal technologies of production. New external links both nationally and internationally are likely to be forged by enterprises and activity units in Rotorua.

## CHAPTER THREE

### ORGANISATIONAL AND TECHNOLOGICAL CHANGES: DYNAMIC PROCESSES CONTRIBUTING TO RESTRUCTURING OF ACTIVITY AND RE-EVALUATION OF PLACE

#### INTRODUCTION

Two interlinking processes - the concentration and centralisation and internationalisation of capital contributing to organisational changes, and technological changes of production internal to industries and services, are contributing to production becoming more integrated both nationally and internationally and have implications for changes occurring within New Zealand and Rotorua and how these "spatial components" are articulated within the more globally integrated world economy. They influence the redefinition of core/peripheral functions of an organisation that have implications for the future development profile, of the local parts of multi-locational and conglomerate organisations. Organisational changes and the adoption of imported technology in its improved version from overseas forms a background to the present restructuring occurring in the Rotorua economy. Both organisational and technological change are necessary in order to combat in activity units at the local level the "anarchaic tendencies" inherent in capitalism as a result of competition. Sayer and Morgan (1985,157) make the following points on the nature of competition on individual firms.

"In capitalist economies, firms do not prosper or fail in isolation but in terms of how they compare with their competitors. There are therefore relations of interdependence between firms in different

sorts of health. Firms and hence local economies or regions can only succeed in becoming more competitive if others become less competitive. Only in usually short lived cases where markets are expanding extremely rapidly and/or are highly segmented is interfirm competition in product markets relaxed and even then it is latent by virtue of the fact of separately run units of production and freedom of buyers to choose suppliers. Firms also compete for investor money even if they have their own market niches. In investment markets they compete with a much wider range of firms than they do in a product market."

#### CONCENTRATION AND CENTRALISATION OF CAPITAL

The term concentration describes a process whereby firms grow by continually ploughing back profits into their businesses, cut costs, obtain economies of scale or scope and thereby attempt to increase their market share. In other words operations returning profits are essential to the continuing viability of activity in Rotorua. Concentration is accompanied by the centralisation of capital, a term describing a process of growth achieved via amalgamations, mergers, acquisitions and neutralising and wiping out competitors. Massey (1984) argues that centralisation, in relation to competition involving vertical and horizontal integration, represents a progressive transfer of parts of production whose relation was previously unplanned competition of the market, to real control and co-ordination 'under a single ownership'. The process of concentration and centralisation is extended through subcontracting relations so that the degree of centralisation is greater than ownership would suggest (Holmes 1982) and involves capital-capital relations of dominance and dependency. "Complete dominance does not necessarily lead to monopoly firms taking over dependent firms despite advantages of vertical integration.

Monopoly firms may reap the same benefits without formal integration. Seemingly 'independent' firms are increasingly subject to management control by giant customer firms. The true extent of economic concentration is thereby even greater" (Suzman and Schultz 1983, 167). What is evident therefore is that accompanying change in concentration and centralisation are new firm-firm and intra-firm linkages. In the literature subcontracting relationships are explained but there could be an immense variety of relationship possibilities that may not be adequately discussed within the subcontracting framework.

Holmes identifies three main categories of subcontracting relationships. The first category is termed capacity subcontracting which involves the "farming out of overflow work" that could be done inhouse except that there are excess orders in relation to installed capacity. This type of subcontracting could be termed "temporary" and is dependent on fluctuations in demand - the dominant firm divides production into stable and unstable components, the unstable production directed to the subcontracted firm. The second category is termed specialisation subcontracting or vertical quasi-integration which occurs where the part is produced by the subcontractor especially for the "parent". The third category is termed supplier subcontracting and refers to a situation where the subcontractor is an independent supplier, but is willing to enter into a subcontracting agreement to supply a dedicated or proprietary part to the "parent firm" at an ongoing basis. Holmes also states that subcontracting tends to increase in times when economic conditions deteriorate as "parent firms" are unable or unwilling to absorb "some degree of internal wage drift", ie. parent firms use subcontracting to reduce their wage costs. While there are many reasons why firms enter into subcontracting agreements - the structure and temporal stability of the product market, fixed capital requirements of the production process and the nature of the production technology, and the structure and nature of the

labour supply conditions especially relating to cost minimisation - the primary benefits accrue to parent firms and the relationship between the parent and the subcontractor is characterised by unequal economic power in favour of the parent.

Suzman and Schultz (1983) detail several ways in which seemingly 'independent firms' are dominated and subordinate to monopoly firms. Dominant firms, the authors claim, are in a position to manage effective competition among even a few suppliers and can invest in a particular supplier to play off various suppliers firms. Dominant firms may offer start up capital for new entrants or may arrange finance for its supplier(s). What appears as unnecessary transaction costs for the dominant firm actually allows it to realize external economies inaccessible to its supplier(s) and at the same time assures financial dependence. Dominant firms may provide unnecessary costs of managerial and technical expertise to a supplier which contributes to greater returns for the dominant firm. Dominance can also be achieved through quality control mechanisms (Telarc Registration) and supervision. In the dominant/dependence relationship the monopsonist firm "actually captures real income from its supplier(s) by paying lower prices for products and purchasing smaller quantities than would be the case if the buyers side of the market was competitive" Suzman and Schultz (1983,166). Many seemingly 'independent' firms are actually appendages of 'monopoly' dominant firms.

The above discussion which emphasises the variety of new and evolving firm-firm and intra-firm relationships, based on dominance tendencies, appears to have been derived from and focuses heavily on material (physical inputs) links within private sector manufacturing activities. A range of possible links in both private and public service industries, and service activities within manufacturing industries, have not been specifically mentioned. What is also

absent in the literature is possible public-private sector interdependencies. While it is possible to substitute (where appropriate whether explicitly stated or implied) the notions of "physical inputs" with "service inputs" to overcome perceived theoretical deficiencies, this approach may not contribute to satisfactory conclusions. Theoretical scrutiny will be required to confirm (or otherwise) whether service industries exhibit parallel or different relationships from that exhibited in firm-firm manufacturing industries. One criticism related to the literature is that theories have been developed based on overseas examples. Evidence of specific New Zealand restructuring experience during the 1980s therefore requires theoretical evaluation. However, despite these present deficiencies in the literature, what will be evident within the national economy is a tremendous range of responses by organisations to the circumstances they find themselves in. Activities in Rotorua will be no exception.

### GLOBAL CAPITALISM

Global capitalism has evolved through the various stages of capitalism's earlier development - competitive, monopoly and advanced monopoly - through the processes of concentration and centralisation, to feature huge corporations and conglomerates combining industrial and financial capital and operating in many sectors and locations around the world. Friedman and Wolff (1982) claim that the main actors and dominant form of global capital are multi-national conglomerates. Johnston (1984) argues that until the development of the transnational corporation, most activities were confined within the territories of their respective states. However, the transnational corporations and financial institutions have replaced older monopoly firms (confined primarily to the geographic territory of their respective states) as the main agents in

World economic integration. Competition globally is taking place increasingly among a shrinking number of firms.

Several important characteristics of global capitalism, in the transnational corporation form, have implications on the geography of production and location for activity in Rotorua. "Large corporations are able to pursue locational searches in an increasingly rational way including specialised technical and computerised decision making and the careful weighing of relative profits of subsidiary units" Storper and Walker (1984,21). Increasingly internationalisation allows companies to compare production costs at different locations around the globe and to develop comparative performance that can lead to closure threats, redundancies, and pressures to change work practices in plants that don't perform in comparison with their competitive sister plants (Lloyd and Shutt,1985). A NZ study of the internationalisation of FCL and CHH was made by Le Heron (1988). This study confirms that these forestry companies exhibit the same behaviour as noted by Lloyd and Shutt. This study presented some local-global effects of this behaviour such as FCL's delay in commissioning the fourth newsprint machine for Tasman Pulp and Paper in Kawerau after the company purchased Crown Zellerbach Canada Ltd. Le Heron (1988,508) states that for FCL (in New Zealand) "labour shedding followed the purchase of overseas mills".

"Decision making is increasingly abstract and far removed from the line of production. Sometimes production is sacrificed in the interests of financial strategy" Friedman and Wolff (1982,314). Transnational Capital is able to exploit global commodity, financial, consumer and labour markets and is becoming increasingly mobile and footloose (geographically). "Global capitalism separates the production process over space. As internationalisation of production proceeds, broader parts of the world's regional mosaic are

perceived as viable sites for manufacture. Production becomes a spatially dispersed system of production where firms are vertically integrated across (nation-state) boundaries. Global choice brings newer and older industrial regions in competition with each other." (Ross 1983,145,153.) Thrift (1984) argues that multi-national Corporations from all countries are becoming more multi-national and the number of such corporations are growing rapidly. The question that arises then is "how is Rotorua and its resources perceived as a place of production within an increasingly global frame of reference?"

The internationalisation of capital is not only the domain of the transnational corporations. Ross (1983,153) states "that the internationalisation of productive investment is not restricted to giant multi-national corporations" and quotes an OECD report "that medium and even smaller firms have begun to invest across boundaries." Massey (1985) argues that while the multi-national corporations are the main movers in the international scheme, they also influence the behaviour of (non multi-national?) firms who will be emulating their behaviour at an international (two countries?), national or regional level. This echoes Suzman and Schultz (1983,161) who state that "as global competition intensifies the new giants respond as old monopolies couldn't. For older monopolies to survive in an age of global capitalism, they must adopt new practices". These new practices involve internationalisation of production and "financial manipulation" (Becker, 1985). "The latest stage of internationalisation of capital is taking place under circumstances where leading foreign transnational companies are also engaged in a renewed drive to develop integrated production systems. Such strategies produce not only capital reorganisation within a major firm itself, it also forces competitors to reorganise their own operation to remain viable. For those who are unable to rival the size of the largest transnational but which operate in the same market, collaborative ventures are becoming an increasingly important option

in an attempt to achieve survival" Lloyd and Shutt (1985,42). In an age of global capitalism, "the successful large scale expansion of the firm can no longer be accomplished within a single region or state" Bradbury (1985,39). If firms are unable to expand beyond their establishment region, then the extent of their integration into the global economy is limited. Internationalisation therefore is more than what firms do as it is also directly related to the nature of competition and new ways of operation.

Thrift (1986) describes three types of internationalisation of production and their geographic impact occurring within the contemporary world economy. Firstly, capital export (foreign investment) aimed at obtaining and securing raw materials. This capital export typifies a "colonial core-periphery" dominance with mining and agriculture being the sectors developed. The second category involves capital export directed to the penetration of markets of countries that cannot be effectively penetrated by exports due to tariff barriers. This type of internationalisation is orientated towards the manufacturing sector and usually creates production facilities which are likely to be replicated in several countries. The third type of capital export has become important since the late 1960s and has been directed to the exploitation of cheap labour, usually in NICs, to produce goods for re-export to home countries or a third market which includes not only other countries but also other plants within the Corporation. This capital export strategy has contributed to the creation of integrated hierarchical production organisation which cuts across national boundaries and is referred to in recent geographic literature as the "internationalisation of production". While the above seems to imply that new investment will automatically take the form of new production facilities, this need not necessarily occur as capital export may also take the form of the purchase of existing production facilities. To the above can be added a further type of internationalisation: a firm's desire to gain

access to a particular new technology it considers is relevant to long term survival, may require investment to take the form of a takeover/merger or joint venture arrangement. While the above comprise the main forms of capital export, in reality it is sometimes difficult to separate one category from another.

### TECHNOLOGICAL DEVELOPMENTS

Parallel to the changes that are occurring in the organisational nature of capital (concentration, centralisation and internationalisation of capital) has been a series of technological breakthroughs that enable worldwide (re)organisation of economic activity to become a possibility. Technological improvements can be divided into two broad categories. Firstly, those that have improved transport and communication thus contributing to "an annihilation of space and distance" by changing the spatial economic surface, and therefore having the potential to link places and activities more intimately and secondly, those that have altered the internal production systems of firms permitting increasing levels of automation and geographical separation of stages in the production of goods and services based on computer technologies. Technological developments in the first category, those contributing to an improvement "in the circulation of capital" include jet travel, inter-modal containerisation, satellite telecommunications, fax machines, computers and EFTPOS. Telecommunications, and computers are also continuing to have implications for internal production processes of manufacturing and service enterprises.

Technological developments in production technology have been documented by Blackburn, Coombs and Green (1985) who detail the evolution of technological production processes in relation to the mechanisation of transformation

(primary technology), transfer mechanisation (secondary technology) and control mechanisation (tertiary technology) through the various "factory production phases" such as manufacture, machinofacture and the two phases of mechanisation. It is also claimed that since World War II, two distinct trends in production technology have been occurring simultaneously. The first trend has been the mature phase of the diffusion of transfer mechanisation and the second trend has been the early stage of the diffusion of control mechanisation. These two phases have been overlapping since the mid 1960s.

The increasing focus on control or tertiary mechanisation has been partly the result of bottlenecks, inflexibilities and, with increased competition between firms, the limitation to the exploitation of economies of scale encountered and associated with Fordist production and, attempts to resolve these problems. The period since 1970 has been a transition period characterised by the co-existence of Fordist and neo-Fordist production technologies. Fordist production in developed countries (Core Regions) increasingly incorporates new computer based control technologies to intensify present Fordist production processes while "older" Fordist production processes are being spatially replanted in the world periphery. New computer control technology is being utilised to extend the principles of mass production to areas of production previously outside the ambit of such techniques, for example, attempts to automate small and medium-batch engineering and the utilisation of information technology to automate clerical and service industries. Neo-Fordism however, is characterised by:

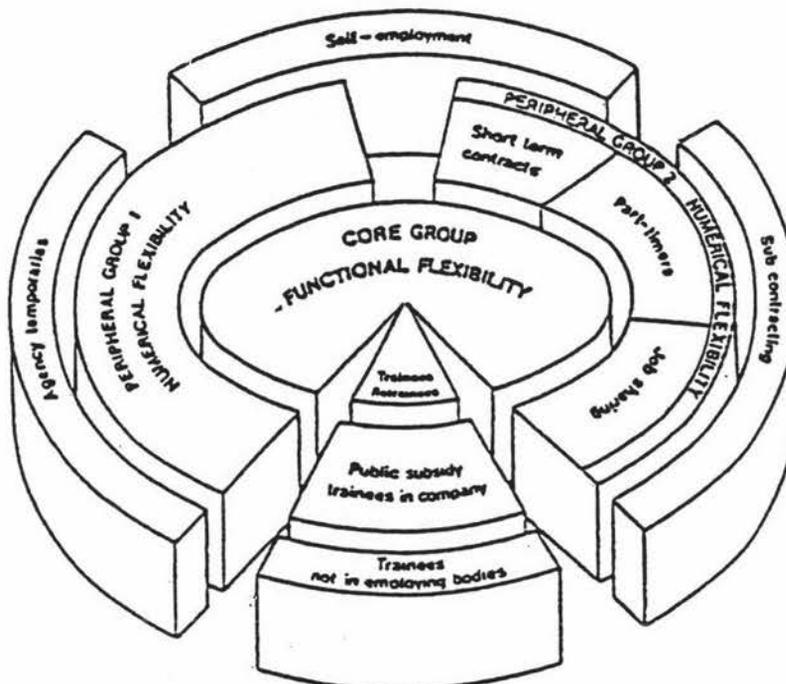
- "Technical developments in control mechanisms which weaken the link between mechanisation and scale. This flexible form of

mechanisation permits increased variability in products and processes to be accommodated at higher levels of mechanisation.

- Informational infrastructures which integrate different productive sub-units (such as semi-autonomous groups, machining centres or different inter-dependent geographically separated production units) with control of material flow, stock control and production planning.
- Organisational changes in the non-technical parts of production such as the adoption of work roles, rather than individual repetitive tasks on a hierarchical basis for example a semi-autonomous group of workers" Blackburn, Coombs and Green (1985,104,105).

The above changes are impacting on the internal structure of an organisation and are partly responsible for the creation of the "flexible firm" in both manufacturing and service activities in a form suggested below (Figure 3.1) by Callister (1989,5)

Figure 3.1 THE FLEXIBLE FIRM



Morales (1986) describes the concept of industry organisation as a trend towards the increasing integration of production based on flexible specialisation, JIT inventory control and labour management work teams that combine elements of mass and craft traditions, as characteristics of the emerging Neo-Fordist regime. What is becoming clear is that new technological developments in control mechanisation fixed into new manufacturing processes, new products and new modes of delivery of products and services are involved in important changes taking place which will have profound spatial impacts on the future location and relocation of production.

### Tertiary Mechanisation In Manufacturing

The use of robots and the computerisation of manufacturing processes will have a profound and far reaching repercussion on the internal production technologies of a wide range of manufacturing activities. The use of robots is likely to be used in increasing numbers for routine handling and assembling activities especially in labour intensive mass production industries, as well as for the packaging of awkward shaped objects. They are likely to be used increasingly for spot and arc welding, injection mouldings, and painting, along with inspection duties. They are also likely to perform tasks with elements of danger to humans.

The growing sophistication of computers means that they will be increasingly incorporated into industrial processes and individual machines. In highly mechanised industries there is considerable scope for computerisation. Computerised process control systems contribute to increasing machine speeds and the quality of the products are likely to be improved by more rapid and accurate inspection and correction of deviations in particular processes. Since

micro-electronic control equipment is also likely to be very reliable, significant productivity increases in even highly automated machinery can be expected. In industries with continuous flow processes the incorporation of computers in new processing technology is likely to transform steel, foodprocessing and printing industries into capital intensive industries. Where it may not be possible to develop fully integrated computer-controlled processes because of the nature of the product being manufactured, there is still scope for the introduction of computer control componentry into individual machines.

The introduction of computer control systems into individual machines in small and medium batch engineering is likely to be of economic significance. The small and medium batch engineering sector is of importance because of its position in the production of capital goods. Transformation in technology within this sector, with a resulting cheapening of its products, are likely to have widespread implications throughout many sectors which use capital goods. Computer-numerical-control (CNC) tools have the potential to transform complex non routine small batch engineering into a sophisticated process type industry. Associated with the CNC tools has been the development of powerful software which reduces the time taken to construct and prove programs as well as enabling modifications to existing programs. CNC machines are particularly significant in small and medium-batch engineering for the modification and manipulation of existing designs, rather than for the designing of new products. A CAM system (computer-aided-manufacturing) can be linked to the CAD system (CAD/CAM) where the output of the CAD system includes the instruction for the manufacture of a designed product or component. CNC tools linked this way permits the "reintegration" of conception and execution facilitating both editing and programming of the machines.

### Tertiary Mechanisation Of Service Industries

Service industries provide many of the pre-requisites for the functioning and growth of modern economies. Many are concerned with the distribution of goods and raw materials, circulation of money capital and the provision of information and expertise. Office machinery such as word processors, fax machines and computers, along with the telecommunications infrastructure including telephone lines, data transmission cables, satellites and micro-wave transmitters and the associated software required to operate these elements and link them together, have become known as information technology. The installing and utilisation of information technology over the last 5 years in New Zealand has revolutionised labour intensive service industries into tertiary mechanised industries. Recent Annual Reports of both public and private organisations clearly detail the commitment of the organisations concerned to an ongoing program of upgrading their technological systems. The scale of this upgrade is impressive, the Department of Social Welfare's upgrade being one example<sup>1</sup>. Equally impressive has been the financial resources committed to technological upgrading<sup>2</sup>. Voice transcription devices have implications for the future demand for typists by various organisations, if there is to be a generalised utilisation of such devices. Offices are likely to become less paper based and more electronic-machine based, as the manipulation of a text or letter, its permanent storage, retrieval and transfer (electronic office or fax) becomes more mechanically integrated. The greatest impact of information technology on service industries has been experienced

1. The Department of Social Welfare's (DSW) interactive online computer system dubbed "Swift" (Social Welfare Information for Tomorrow Today) involved the initial installation of 4998 terminals, 1555 mini computers and 800 printers at 120 locations. Since November (1991) the system processed on a single data base all benefits, except National Superannuation, War Veterans and Overseas Pensions. These were scheduled to be added by July 1992. The system has also been recently extended to handle Community Service Cards (Department of Social Welfare, Annual Report 1992,11)
2. Telecom has spent \$3.3 billion on infrastructural upgrading since Corporatisation in 1987. Telecom installed approximately 1200kms of optical fibre cable throughout New Zealand in 1991/92 (costing \$666 million) greatly increasing the network's capacity to carry voice, data and image transmissions at extremely high volumes and speed (Telecom Corporation of New Zealand Limited, 1992 Annual Report,11).

in those types of clerical work where standardisation of clerical product is easiest, such as the processing of various forms (including orders/receipts/cheques) as seen in banking, insurance, mail order businesses, service components of industry and Government Departments.

#### SPATIAL IMPLICATIONS OF TECHNOLOGICAL CHANGE FOR ACTIVITY IN ROTORUA

Transport improvements have succeeded in breaking down local markets, reducing spatial monopolies and thereby resulting in intensified competition at a local level. Massey (1979,234) states that "changes in the requirements of production are a result not of neutral technical advance but of the imperative of the overall accumulation process". Lloyd and Shutt (1985,23) state that "replacement investment is being called into use not simply by virtue of its intrinsic merit but by the technical imperatives of competitive survival in a world of deep recession". The new forms of technology are facilitating effective management and control from spatially centralised Head Quarters and this is having a powerful influence on the nature of job "generation and degeneration" Lloyd and Shutt (1985,47) in a process Scott (1986) describes as "the spatial switching and reswitching of technique". A wide range of options based on control technology including decentralisation and recentralisation are available for the present restructuring of activity. Massey (1979,240) claims that transport and communication improvements "changing spatial surfaces and changes in production processes of industry have been mutually reinforcing".

The changing use of space and the emergence of spatial divisions of labour hierarchically ordered in which there is a separation of conception and execution functions, must be seen within the whole economic context, such as the current slackening of growth of industrial output. "In such a situation, while new investment in capacity embodying new technology may continue in

response to competitive pressure to reduce costs, it will be compensated for (more than in a period of fast economic growth) by the scrapping of the least profitable capacity. Technological production change therefore has a double spatial effect" - new technology, which competes from birth with old technology, "may enable and require a changed location while production in the old is lost" Massey (1979,240). Lloyd and Shutt (1985,47) emphasise the fast pace of contemporary technological change or "transiency". To them the condition of transiency adds a "substantial measure of volatility and uncertainty as the 'half-life' of new rounds of investment may be shorter in key sectors, promoting frequent re-evaluation of investment options as older equipment is written off in favour of new". Lloyd and Shutt (1985,23) state that the "replacement of capital by those who exert control over this process is conceived in world terms and the relative position of the nation or region is only interpretable against the global reference frame. Replacement investment at a time of volatile change both in corporate organisation and in new technology will rarely be in a capital good of identical character". Townsend and Peck (1985,76) state that "successive rounds of investment may impose low levels of productivity on certain plants. Older plants are susceptible to closure but modernity is no guarantee of survival either. Some new plants close because of teething problems associated with the new technology, work practices or labour relations".

While it is obvious from the above discussion that technological change (embodied in modernised plant and equipment) has far-reaching implications for manufacturing activity, influencing locational choice (or relocation options), the same arguments equally apply to service activities. In fact it could be argued that the application of new technologies to service activities has been more far reaching than in manufacturing activities because the location of service activities are not constrained by the processing of bulk physical inputs that influence locational choice of many manufacturing activities.

Britton (Britton, Le Heron and Pawson 1992,143) argues that developments in information technology as they have been applied, "have resulted in huge labour productivity increases in industries involved with finance, insurance, credit and communication services". Accompanying the utilisation of information technology in service activities is a changing pattern involving "enhanced (re)locational choice".

### ORGANISATIONAL STRUCTURES OF CAPITALIST ENTERPRISES

Improvements in transport and communication, and technological changes in production processes internal to enterprises, are likely to have profound implications on the location and functional structure of manufacturing and services within the space economy. The increasing "real cost" of new technologies, especially in manufacturing, has significance in that only the largest enterprises will be able to consider a reinvestment option. The technological elements have further significant two-way feedback linkages influencing and being influenced by the concentration and centralisation, and subsequent internationalisation process and have contributed to a variety of spatial organisations of production being established. The three major organisational structures and their spatial implications are set out diagrammatically in Figure 3.2 (p53).

The simplest spatial structure is the autonomous single region firm. All the processes of the production of a commodity are concentrated within a single geographic area. This spatial structure is likely to characterise companies which are small not just in geographical terms but also in employment and financial terms. There is unlikely to be a developed technical division of labour within the production process and this also implies a lack of major economies of scale, which is often an enabling condition for the survival and continued entry of small companies into a local economy (Massey, 1984).

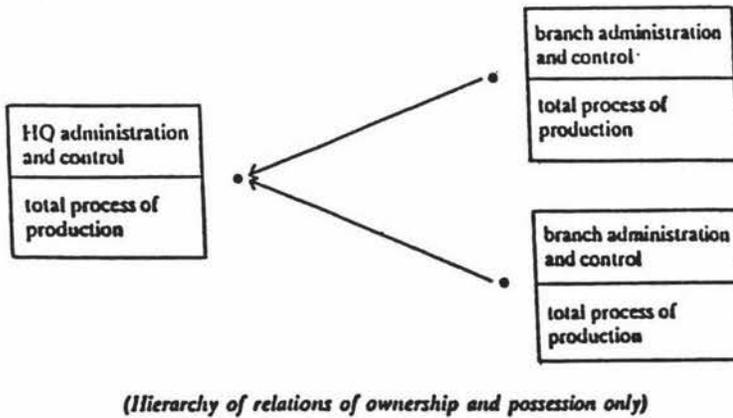
The second type of spatial structure involves a Head Quarters and branch plant structure in which the whole process of production takes place at each site. The only difference between the plants is that one of them functions as the Head Office with responsibilities for total co-ordination, control and marketing of production. Production within this category is geographically undifferentiated and this structure Massey (1984) refers to as "cloning".

Figure 3.2 SPATIAL STRUCTURES OF ENTERPRISE

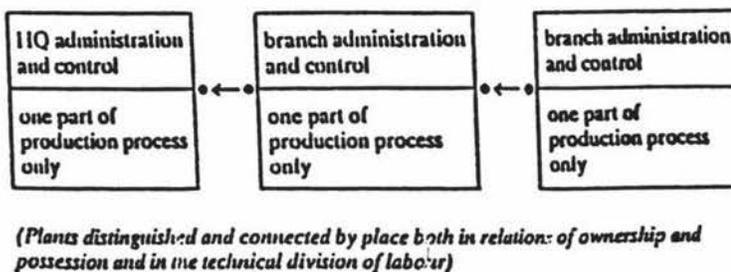
1. *The locationally-concentrated spatial structure*



2. *The cloning branch-plant spatial structure*



3. *The part-process spatial structure*



The third type of spatial structure is the part process structure. There is a hierarchy in which research and development and the most important co-ordination, control and policy functions are centralised into the Head Office. Branch plant manufacture is partial. Complex components in one (or more) branch plant(s) are produced, which are then transported to (another plant for further processing or) a plant for final assembly. There is an acute division of labour between conception and execution.

All of the above potentially represent different structures of the relations of production over space (Massey, 1984). Massey also makes the point that within the three broad firms there can be a great variation in which each part of the production is organised spatially such as various kinds of managerial and technical divisions of labour organised into geographic hierarchies. In other words each production segment whether the organisation be spatially concentrated, consisting of cloned plants or a part process structure has the ability to be further "re-organised" into core peripheral sub-segments as suggested by the "flexible firm" model. There may also be "product cycle structures" in which the financial and scientific control of production is relaxed as products mature permitting a geographic dispersal of the production process into cloning or part process structures.

#### TECHNOLOGY AND RESTRUCTURING: GEOGRAPHIC IMPACTS AT AN ENTERPRISE LEVEL

Restructuring of activity at an enterprise level is vital to restoring profitability and ensuring its ultimate survival. While "restructuring is a continuous process in which firms respond to the fluctuating behaviour of capitalist business cycles" (Bradbury 1985,39), "restructuring does not happen in each sector simultaneously nor continuously in any one sector. The timing,

form and place taken by restructuring cannot be known in advance because it is affected by contingency related conditions such as labour organisation, political intervention and the development of technology" Lloyd and Shutt (1985,23).

Massey and Meegan (1985) argue that there are a number of options available during and after the crisis and shakedown effect of restructuring. These have been categorised into three different types that may exist simultaneously or separately within different industrial sectors. The three types are as follows:

1. rationalisation of production by reducing capacity in order to cope with a decline in consumption. This often involves the weeding out of inefficient plants to cut capacity;
2. intensification of an activity within an existing production process or more output for less cost;
3. investment in technological change in new machinery and/or plant in either existing or new sites, to produce output gains from a lower cost base. This usually involves the internal reorganisation of the division of labour.

Massey and Meegan (1985) assert that it would be very rare for only one type of production reorganisation to appear in a sector. It is possible to identify the important one but the others are taking place at the same time and the different forms of re-organisation would therefore interlock and affect each other. Massey and Meegan also point out that each of the restructuring options in their pure form has a potentially different spatial impact.

The impact of the restructuring option of intensification of an activity is confined to the existing geographic distribution of production of the activity concerned. There are no plant closures, no significant new investment and likely to be no expansion or contraction of employment at the individual sites. Rationalisation in its pure form does not involve new investment either and employment changes are confined to the existing geography of plants. Rationalisation frequently requires complete closure of some plants where the reorganisation involves the concentration of capacity at a small number of 'sites'. At some locations therefore, jobs will be lost. Rationalisation in a nation or region by a particular corporation must increasingly be "located" within the particular corporation's world wide reorganisation of production.

The third restructuring option involves technological change in new productive capacity. The new investment site could be either on the existing site or a "new green field" site. The investment in new production technology often necessitates some cut backs or closures elsewhere. Massey and Meegan (1985,122) state that "there are therefore two aspects of the technological change option - where to put the new capacity and where to close the old. Both may occur on the same site or involve different locations". The technological change option therefore has a double spatial effect and "connectivity of events at a variety of spatial scales both within and between sectors must not be overlooked" Lloyd and Shutt (1985,33).

## CONCLUSION

Theories explaining the restructuring of activity since the mid 1980s suggest that both organisational and technological factors singly or in combination, have (or are) increasingly drawn (drawing) local surviving activity into global production/consumption networks. The question arises as to how and to what

degree activity in Rotorua is being drawn or integrating into the global economy? Is participation in the global economy direct or indirect? Are there differences in public and private sector activities? Is activity in Rotorua being marginalised or in other words being increasingly forced to operate outside the capitalist main stream economy? These questions need answers because they impact on future development "options" for activity, both public and private.

It is likely that the restructuring outcomes of activities in Rotorua, and their participation within wider national and global economies, will be "uneven and novel". It will reflect in part the distinctive character of New Zealand's restructuring experience since the mid 1980s in relation to total global changes. The distinctiveness of Rotorua's restructuring experience, however, rests on technological and organisational possibilities inherent in global capitalism as it has currently developed.

## CHAPTER FOUR

### THE INTERNATIONAL AND NATIONAL CONTEXT OF ROTORUA'S RESTRUCTURING

#### INTRODUCTION

An explanation of the restructuring of activity occurring in Rotorua must be set within the wider international and national contexts. Several significant international events of a "political character" in the late 1960s and during the 1970s form a background to change to which the New Zealand economy was forced to respond either immediately or delayed till the latter half of the 1980s. Some of these events in a "filtered form" have affected and still are effecting activity in Rotorua. National changes such as the current "open economy" and State Sector restructuring have and are changing the pattern of activity in Rotorua. However, while giving a wider setting to the present restructuring of the Rotorua economy, it is also essential to understand how the New Zealand economy developed historically and Rotorua's role within that economy. The activities of the State over the history of capitalist development within New Zealand cannot be ignored either. The State has both directly and indirectly influenced the development of the internal spatial expression of production and the linking or non-linking of this production to the international economy. As the philosophical and ideological position of the State changed over the history of capitalist production in New Zealand, so too has this had ramifications on the internal spatial structure of production and its linking to the global economy.

## HISTORICAL DEVELOPMENT OF DUALISTIC TENDENCIES IN NEW ZEALAND'S ECONOMY

Historically, New Zealand has been linked to the Core (Britain in the 1800s) as a colony and industrial development has been characterised by a strong dependency relationship to British capital (Sutch 1966, Armstrong 1978, Franklin 1978). New Zealand almost from its earliest history developed a dual economy - a sector that was internationally orientated (mainly to Britain) and a sector that provided for the needs of the domestic market, "to supply locally the immediate needs of small scattered communities with food, clothing, building materials and home furnishing and to provide shipping with ropes, spars and repairs" Department of Statistics (1983,482). Transportation within New Zealand was primitive and each community had an ensemble of activities that functioned as monopolies in the communities they were located in.

New Zealand developed as a pastoral economy (the internationally orientated sector) after the 1860 land wars but take-off occurred in the 1890s after the successful refrigeration of meat from Dunedin (1882) to England. New Zealand required heavy foreign investment, commenced under the Vogel administration, to develop the internal communications infrastructure (road and rail), and support land settlement that further facilitated the development of the pastoral economy (international sector). During this period the internal economy was also developing rapidly (a larger domestic market) and was protected from overseas competition by the friction of distance - high freight costs to land goods in New Zealand. The pattern of development, focusing of resources to develop the agricultural base and industrialisation to provide for an ever increasing variety of immediate goods and needs, also "relied" on the British Preferential System to provide the "consumer" with the more sophisticated items. (Department of Statistics, 1983 and 1986-87.)

Rotorua's "place" within New Zealand, in relation to the developing pastoral economy, was very peripheral until the discovery of a cobalt deficiency of the volcanic soils. The correction of this deficiency plus the coming on stream of Depression planted exotic forests provided a considerable stimulus for sustained economic development from 1950 until well into the 1970s.

#### INTERNATIONAL CHANGES SINCE THE 1970s

The New Zealand developmental model, industrialisation financed by export earnings from the agricultural base, began to show signs of stress in the form of sectoral and more general crises in the mid to late 1960s when export receipts failed to realise targets. Attempts such as incentives for agricultural production were introduced to stimulate output which would translate into increased overseas exchange earnings which could be used to further industrial development. Other measures taken in the 1960s and 1970s to overcome sectoral and general crisis conditions included additional forest planting, agricultural diversification, large scale irrigation projects, major energy projects, the "Think Big" projects and CER all of which required a range of government measures ranging from incentives to active involvement. Rotorua was not a major recipient of the foregoing types of investment during the 1960s and 1970s.

During the 1970s there were several international events such as the Oil shocks of 1973 and 1979 and the British entry into the European Economic Community that exposed the very severe weaknesses of the New Zealand economy. British entry into the EEC affected the delicate link between exports and the import substitution manufacture. Both National and Labour Governments, as a high national priority, began to diversify New Zealand's international links, especially for agricultural products. British entry into the

EEC meant that a progressively reduced volume of New Zealand's pastoral based products could be exported to the United Kingdom. A progressively greater volume would therefore need to be sold elsewhere. New Zealand developed a set of "stable" and "unstable" international links to overcome this problem. Dependence on Britain as the "main stable market" was transferred to Japan, USA and Australia. Unstable links were established with countries of the Middle East, Eastern Europe and the "Soviet Union". The 1970s and 1980s were also a period in which there was the call to diversify the content of exports and this diversification required the manufacturing sector to make a greater contribution to foreign exchange earnings. The manufacturing sector was offered export incentives and progressively assumed a greater proportion of New Zealand's internationally traded commodities.

Another change of importance occurring in the international economy was the rise of Newly Industrialised Countries (NICs) such as Taiwan, Hong Kong, China, The Republic of Korea and Brazil. These nation's enterprises began to compete with New Zealand's enterprises on first the export market, and in the 1980s the domestic market, affecting industries such as clothing and footwear. Some of New Zealand's industries found it progressively harder to compete with the low-wage labour which provided the foundation for the comparative advantage of the NICs. The heightened international competition is also being experienced in other sectors of the economy at present, for example Chile's forestry industry competes with New Zealand's particularly on the Japanese market.

The world financial environment experienced profound changes with the demise of the Bretton Woods system in the 1970s and the rise of Eurocurrencies. The Bretton Woods formula which was based on fixed exchange rates with the \$US serving as a convertible medium of currency (having a fixed relationship in

terms of price, to gold) had two weaknesses. Firstly, the system was unable to create sufficient international reserves to match the growth of world trade in the 1960s and secondly, it was unable to accommodate the relative decline of the USA. Developments in the 1970s and 1980s marked the internationalisation of capital markets with the growth of a vast, mobile and volatile system that linked nations through uneven and volatile exchange rates. The development of this capital market was facilitated by the lowering of institutional and technological barriers among nations. New Zealand in 1984, with the removal of fixed exchange rates and permitting the two way unimpeded flow of money capital, became more open to the international influences of this market. The 1987 Stock Market crash is an example of signals being transmitted internationally affecting New Zealand.

A further development accompanying the internationalisation of the money market has been the expanded role of the IMF to act as an international Central Bank. The IMF not only provides support for the world's monetary market but also plays an important secondary role of applying conditions for aid and intervention, a role which will be of significance for the future of national and regional development programs. "In giving aid to debt ridden nations, the IMF has laid down conditions which effectively structured the economic development of individual nations..... The IMF austerity programs for Mexico included budget cuts, reduced spending on major programs, new and higher taxes, price increases, tight credit, increased interest rates, freezing of wages for government workers and relaxation of foreign exchange controls" Daly (1983,1019). The implications for a "debt ridden New Zealand" should a debt default occur, would have far reaching significant economic and spatial consequences.

STATE ACTION SINCE 1984

The economic climate created by the State and within which New Zealand's enterprises operated until 1984 required an "external connection defined by foreign exchange rates (with occasional devaluations) minimal foreign investment (except in selected national development projects) restricted currency transfers (which confined the spatial scale of operation of New Zealand capital) and import controls and tariffs. The external link was also sustained by closely controlling banking procedures, interest rates, regulation of the transport sector and near complete State subsidy of scientific, industrial and agricultural research" Le Heron (1988,278). "There was also a near consensus view that government deficit spending (internal) maintained demand within New Zealand and that demand was prevented from spilling into an adverse Balance of Payments situation by import controls. New Zealand achieved full employment at the expense of inflation and misallocation of resources which continued to reproduce relatively low growth rates" Clarke and Sinclair (1986,91). Hawke (1982,54) states "that only in the 1970s did the budget begin to feed internal demand and only in 1975 did the deficit become substantial. Before the mid 1970s, fiscal policy did not usually make a direct injection to demand in New Zealand and its main effect was indirect".

The economy in the early to mid 1980s, both industry and agriculture, domestic and international, was a very protected one in which "market signals were distorted" and consequently adaptive decisions and policies were not adopted. Ironically the protective environment was necessary for enterprise to develop both organisationally and technologically because of the very recent history of industrialisation in New Zealand. (The competitive, monopoly and global stages of capital were compressed into virtually a 50 year period). It is also ironical that the protective environment began to harm New Zealand

enterprises in the 1980s. Change was not permitted to permeate through the protective barrier and New Zealand became classified as a "fortress economy". It is also ironical that the protective environment was sustaining low-wage industries (Lang 1989).

The action of the Fourth Labour Government, elected in 1984 and re-elected in 1987, represented a watershed in the State's response to the continuing deteriorating economic performance. "The new Government perceived that the limits of the prevailing mode of regulation had been reached and proceeded to eliminate domestic institutional rigidities as well as exposing the economy to forces emanating from the global economy" Britton and Le Heron (1987;278). The exchange rate was floated, tariff barriers drastically reduced and quotas abolished. Supplementary minimum prices, forestry planting incentives and export incentives for manufacturing have also been progressively abolished. The State has refused "to pick and back winners". The unique character of the economic reforms was that all productive sectors were effected simultaneously and were permitted to "sink or swim" by their own efforts. The economic reforms have not been a one-off change but a commitment to a continuing process of change. Evison (1990,22) States that the policies of the Labour Government were "implemented to improve adaptability and flexibility of the New Zealand economy by adopting measures to ensure that market signals reach economic agents with as little distortion as possible". This ideological position has not been reversed by the National Government since assuming office in 1990.

New Zealand now has an economic operating environment which is exposed to market signals and is considered to have the attributes of a "level playing field". However, the Canberra Workshop Group (1988,29) believe that there is no such thing as a level playing field and argue that the current deregulated

policy environment is in fact a "form of State intervention advantaging certain social groups and capital such as large scale individual capitalists and multi-national corporations. Those disadvantaged included import substitution activities such as footwear, clothing, auto-assembly and consumer electronic assembly industries. By promoting industrial competitiveness and higher rates of national accumulation as the "national interest", the State acts to restore appropriate conditions of accumulation of capital in general, but at the same time provides opportunities for large scale and internationalised capitals at the expense of other economic agents and segments of society."

#### INTERNATIONALISATION OF NEW ZEALAND CAPITAL

The economic changes ushered in by the Fourth Labour Government in 1984 have provided an operating climate that is conducive to New Zealand business interests with a global reach. Le Heron (1988,284) claims that the current restructuring of New Zealand business within the new operating environment is an "attempt to chart new connections between production and consumption principally on a global scale". The growth of corporations were constrained in many sectors under the pre 1984 operating climate. Once domestic markets were saturated, the only direction for growth was through exporting, through diversification into "non-core" goods and services, or through "approved" mergers.

The New Zealand economy is characterised by a small number of organisations - both public and private - that account for 60% of New Zealand's exports (Le Heron, Roche, Anderson 1989,403) and include NZ Dairy Board (NZDB), NZ Apple & Pear Marketing Board (NZAPMB), NZ Wool Board (NZWB), NZ Meat Board (NZMB), Fletcher-Challenge Limited (FCL), Carter Holt Harvey (CHH), Comalco, Kiwi Fruit Marketing Authority (KFMA), NZ Steel and Goodman Fielder Wattie

(GFW). These organisations co-ordinate and control the production of forward and backward linked activities not only in New Zealand but also in several overseas countries. Some of the above organisations will also affect activities in Rotorua either directly (operating production/consumption facilities) or indirectly (through production/consumption subcontracts or other firm/firm arrangements). The above enterprises have been and continue to experience organisational and technological changes as they adapt to the more intensely competitive global operating environment of the 1990s. Organisational changes have included mergers (Fletcher-Challenge, Goodman-Wattie, Carter-Holt-Harvey) within New Zealand preparing for further offshore mergers, takeover or joint venture of an alliance nature with non New Zealand corporations: The New Zealand component of the Company concerned is now only capable of interpretation within the Company's global framework. Changes affecting the organisation globally may therefore impact on their activities in Rotorua. International links of New Zealand's "prime movers" have always been important and "represent counter-core tendencies". The increasing internationalisation of these enterprises has been accompanied by reappraisal of the New Zealand operation - often involving rationalisation of production facilities. Fewer sites nationally are favoured for (re)investment. Accompanying reinvestment has been a substantial reduction in the number of production sites nationally for example within the Dairy Industry there has been a reduction in Companies from 120 in 1965 to 29 in 1986 (Le Heron 1988). However, the internationalisation of the Prime Movers has involved establishing and maintaining links with either core (Europe, America and Japan) or selected semi-peripheral (Brazil, Singapore, Hong Kong), and peripheral countries (Philippines and Chile). The extent of internationalisation and the list of assets held by the above organisations is impressive. (Refer to Table 4.1)

TABLE 4.1 INTERNATIONALISATION OF NEW ZEALAND'S PRIME MOVERS

A INTERNATIONAL EXTENT	
Europe	GFW (UK, the Netherlands and Belgium) FCL (UK) NZDB NZAPMB
North America	FCL (Canada and the USA) NZDB NZAPMB
South America	CHH (Chile) FCL (Brazil and Chile)
Japan	CHH, NZDB, NZAPMB
Australia	GFW, FCL, CHH
Other Asia	GFW (Singapore) ERNZFP (CHH) (Hong Kong) FCL (Energy projects in the Philippines)

B ASSETS HELD	
Processing Facilities	NZDB, NZAPMB
Marketing Agencies	NZDB, NZAPMB, GFW
Forests	CHH, FCL
Mills	FCL
Shipping	FCL, NZDB, NZAPMB
Chip Loading Facilities	CHH

C TURNOVER		
GFW	67%	from sale of products sourced outside New Zealand in 1988
FCL	30%	originated from the North America Division
NZDB	20%	from sale of products sourced outside New Zealand

## Sources:

- 1 Annual Reports
- 2 Le Heron (1988)
- 3 Le Heron, Roche and Anderson (1989)
- 4 Le Heron (1989)
- 5 Le Heron (1986)
- 6 NZ Forestry Briefing for the Minister of Forestry and Associate Minister of Forestry (1990)

## RESTRUCTURING OF GOVERNMENT DEPARTMENTS

Occurring at the same time as the internationalisation of New Zealand business, the deregulation of the internal economy and the opening up of the economy to global influences, has been a far reaching continual reappraisal and subsequent ongoing restructuring of all Government activity. The philosophy underlying State restructuring has been the belief, and commitment to that belief, that the market rather than the State is the most appropriate mechanism for allocating resources and that individual and corporate freedom to respond to "market dynamics" is the key to economic progress. The emphasis on market determination rather than State direction, has been argued "as a means of reversing the reduction in the rate of economic growth in most OECD countries in the 1970s and 1980s. A contributing factor in the relative decline in (economic) performance was held to be the size of the public sector" Britton, Le Heron and Pawson (1992,164).

The State, through the establishment of state organisations in response to "settler" requirements and pressures over the course of New Zealand's development, had become a major economic player in its own right and dominant in employment terms in a variety of industrial sectors - construction 29%, mining 37%, finance 38%, forestry 55%, transport 55%, electricity 96% and communications 100%. In addition state trading enterprises were responsible for 20% of New Zealand's investment and accounted for 12% of New Zealand's national income. However, state organisations recorded poor economic performances. For example State Coal had run at a loss for 20 years and 10% of the national income had been invested in enterprises operated by the Ministry of Energy (MOE), New Zealand Forest Service (NZFS), Department of Lands and Survey (DLS), and the Post Office (PO), yet post tax returns were zero (Britton, Le Heron and Pawson, 1992,164,165).

Treasury in 1984 presented the incoming Labour Government with a paper entitled "Economic Management" in which three options of assessing future state involvement in state service activities were outlined. Firstly, where benefits were primarily individual and separately identifiable, they should be sold (The Privatisation option). Secondly, where benefits were both societal and individual, State Owned Enterprises should be established and expected to operate commercially (the Corporatisation option). Thirdly, where benefits were more societal than individual, Government Departments should be retained (the Departmental option).

The Treasury model, embodied in the State Owned Enterprises Act (1986) and State Sector Act (1988), has been rigorously applied to state sector activity on an ongoing basis. Government continues to evaluate its commercial and non-commercial functions in order to promote an increasing level of efficiency, thus enabling further discontinuation of "taxpayer subsidies" to the organisations concerned. Non-commercial functions have been (are) subject to evaluation of whether they are still essential and whether the mode of service delivery can be changed in order to cut costs and improve efficiencies. State commercial activities have been given the principle objective of making profits like any other business. In the past the failure of State trading enterprises to make a satisfactory rate of return was excused "because it was a public service, as if that of itself were sufficient justification for maintaining an activity which was either loss making or provided a less than satisfactory rate of return on resources used" McKinlay (1987,15). This position is now no longer acceptable. "The essence of the problem is that the public sector needs to be adapted to meet the management needs of a modern economy" Douglas (December 1985), McKinlay (1987,14)

The Labour Government's economic statement of 12 December 1985 set five principles that have influenced and are providing a basis for ongoing state sector restructuring. They are as follows:

- "1. Responsibility for non-commercial functions will be separated from major State Owned Enterprises.
2. Managers of SOEs will be given a principal objective of running them (the SOES) as successful business enterprises.
3. Managers will be given responsibility for decisions on the use of inputs and on pricing and marketing of their output within the performance objectives agreed with Ministers so that managers can be held accountable to Ministers and Parliament for the results.
4. The advantages and disadvantages which SOES have including unnecessary barriers to competition will be removed so that commercial criteria will provide a fair assessment of managerial performance.
5. Individual SOES will be reconstituted on a case by case basis in a form appropriate for their commercial purposes under the guidance of Boards comprising members appointed from the private sector" McKinlay (1987,79).

On April 1 1987, the most significant reorganisation of the New Zealand Public Service occurred. The Department of Lands and the NZ Forestry Service were reorganised into single focus organisations along commercial and non-commercial lines. The non-commercial functions of the above two departments were assigned to the Department of Conservation (DOC), Ministry of Forestry (MOF) and the Department of Soil and Land Information (Dosli). Two Commercial Units (SOEs) - Land Corporation and Forestry Corporation - were formed. The Department of Energy and the Post Office were similarly divided into the Electricity Corporation and Coal Corporation (Energy) and Telecom, NZ Post and Postbank (PO). Other SOEs established on 1 April 1987 were the

Airways Corporation and the Government Property Services Corporation. A total of nine new State Owned Enterprises, established as limited liability companies under the Companies Act, were created and added to the five existing State Owned Enterprises - Air New Zealand, Petrocorp, Railways Corporation, Shipping Corporation and the Tourist Hotel Corporation. Several state activities prior to the creation of the new SOEs were of significance to the Rotorua economy. The creation of SOEs signalled that this significance was to change and that the presence and role of state activities in Rotorua would be subject to an ongoing process of re-evaluation within a changing national organisational context.

The new commercial focus of the State Owned Enterprises has facilitated both internal and external reorganisation with spatial and social consequences of the enterprises concerned (closure of marginal Post Offices and the continual shedding of staff by all SOEs). Corporatisation has proved in many cases to be a transitional phase to the eventual privatisation; reorganisation occurring in the new corporations designed to create profitable and saleable assets. The Tourist Hotel Corporation, Telecom, Post Bank, part of the original Forestry Corporation (Conical Hill Sawmill in Nelson and a proportion of forest cutting rights) have been sold. The new, smaller Forestry Corporation (1992) is still for sale (Waipa Sawmill Rotorua and associated forests). Petrocorporation was sold to FCL, Air New Zealand has been partially sold to Japan Airlines, British Airways, Quantas and BIL. The Railways Corporation is being transformed into a saleable asset - portions of its original structure have already been sold such as Speedlink and the Passenger Bus Group (Intercity). Other assets sold have included the State Insurance to Norwich Union Insurance (British) and the Rural Banking and Finance Corporation to FCL.

Change in the public sector is vital and a profit making state is a vital component to New Zealand economic recovery. Attention is currently focusing on reforming Education (bulk funding) Health (creation of "four super corporations") and Welfare on efficiency and competitive criteria as part of the ongoing reappraisal of the State responsibilities. Collins and Keesing (1987,68) state that "starting from the logic of opening up the economy to the world, if New Zealand business is to compete internationally it needs to be able to get the goods and services it requires from the rest of the domestic economy efficiently. A profit making State ensures that efficiency and cost cutting become as much the objective of the Government as it is of private enterprise". Furthermore, "the internationalisation of the New Zealand economy is proceeding apace and the size and impact of the Public Sector and its vital control over so many resources makes it essential that people in the sector accept the same disciplines and accountability as the rest of the business community and subsequently the same rewards. Government expenditure accounts for 40% of GDP, and it is therefore clear that a return of a more sustainable and satisfactory rate of economic growth would only be likely if the Public Sector could make a significant contribution to this process". The result is an increasing convergence of behaviour of private and public enterprises. The restructuring of public enterprise in terms of the profit motive will have far reaching significance on where "components of the organisation" will be (re)located in the future and how these various components/functions will be linked nationally and internationally. The reorganisation and restructuring of Government organisations has involved the adoption of new technological systems which enhance efficiency and impact on (re)location influencing the centralisation or decentralisation of functions nationally.

## CONCLUSION

The continually changing international economic operating climate and the connection and articulation of the New Zealand economy to the emerging economic order, provides a background to understanding contemporary changes occurring nationally and in Rotorua in both private and state sector organisations. Change, in both private and State sector organisations, in both an organisation and technological context in combination, has and is having a differential impact. The geography of the 1990s is one of transition with change in production and consumption relationships being the dominant characteristic. Change includes restructuring (internal and external components, functions, activities) of organisations and is manifest in the transformation, deindustrialisation, selective industrialisation, growth and decline of activities, (re) locational centralisation and decentralisation options and involves a continual re-appraisal of an organisation's core-peripheral functions. Change is evident in activity (private and State sector) orientated towards both international and domestic markets. Changes are qualitatively reshaping the links, activities in the Rotorua Urban Area have, to the wider national and international economic environments. Evidence suggests that organisational rather than technological changes, have been more important at this point in time in the restructuring of activity in the Rotorua economy. However, even within the (re)organisational context, technological change has had some effect and therefore it would be foolish to ignore or minimise technological influences which appear to be hidden. (For example, service components of manufacturing activities.) Technological change may be of more importance in subsequent phases of the restructuring process.

Current geographic and economic research is providing a widening body of literature focusing on the nature of internationalisation (restructuring) of

activities that comprise the New Zealand economy and the effects on companies, industrial sectors, workers and communities. As far as Rotorua is concerned, it would appear that an overwhelming proportion of decisions affecting and impacting on activity in Rotorua have been made outside our community. The question arises whether local managers of private and state sector activities have been able to influence decisions made in national and/or international arenas? Have they been overwhelmed directly (government restructuring agenda) or indirectly (private sector through competitive pressures created by the "open border" policies). Has public sector restructuring altered Rotorua's sense of place as a stepping stone in a defined public service career path? Does management within public sector activities reflect "loyalty to the firm" rather than the place as is perhaps evident in large multi-locational private sector activities. Chapters Five and Six examine changes and restructuring of both Private and State Sector activities that have occurred in the Rotorua Urban Area since the mid 1980s.

## CHAPTER FIVE

### RESTRUCTURING WITHIN ROTORUA'S<sup>1</sup> PRIVATE MANUFACTURING SECTOR

#### INTRODUCTION

This chapter examines the restructuring that has occurred within Rotorua's private sector manufacturing activity since the mid 1980s. This chapter focuses attention on changes, restructuring and internationalisation of Rotorua's food processing, clothing, timber milling and timber using, paper products, metal products, machinery and equipment and "other" industries. Changes which have occurred within Rotorua's grocery and hardware wholesaling activities are also discussed. This chapter examines changes with reference to specific companies which allows for the exploration of different and unique restructuring responses both within and between the various manufacturing sub-categories represented in Rotorua. Business Statistics data (1987 and 1990) providing a picture of employment change and survey data derived from interviews conducted between May and September 1991, have been combined to analyze changes. Recent research of restructuring outcomes of like or similar activities in other places in New Zealand is included where appropriate to illuminate differences and /or similarities of responses recorded in Rotorua. A benchmark survey of Rotorua's industrial structure in 1983 provides a pre-restructured (internationalised) picture of manufacturing activity in Rotorua. Where possible data from this survey has been used and incorporated into the analysis of change. Chapter Five commences with a discussion of Rotorua's industrial structure in 1983.

1. Rotorua's Manufacturing sector is predominantly private with the exception of NZFC, an SOE (Waipa Sawmill).

ROTORUA'S INDUSTRIAL STRUCTURE IN 1983

In 1983 an industrial survey of all activities within the Urban Area's industrial zones was conducted (the Waipa Mill was not included in the survey as its site within the Whakarewarewa State Forest Park was not industrially zoned). 489 activities returned questionnaires and it is estimated that this represented a 95% response rate.

TABLE 5.1 SIZE OF FIRMS PER NUMBER OF EMPLOYEES 1983

No. of Employees	No. of Firms	%	No's Employed	%
1-4	257	52.54	611	12.18
5-9	109	22.29	736	14.68
10-14	42	8.59	483	9.64
15-19	20	4.09	330	6.59
20-24	24	4.92	535	10.68
25-29	4	0.82	109	2.18
30-34	4	0.82	127	2.53
35-39	2	0.41	70	1.40
40-44	7	1.43	292	5.83
45-49	2	0.41	95	1.90
50-54	6	1.24	311	6.21
55-59	1	0.20	56	1.12
60-64	1	0.20	64	1.28
65-69	0	--	--	--
70-74	2	0.41	141	2.81
75-79	0	--	--	--
80-84	2	0.41	163	3.25
85-89	0	--	--	--
90-94	1	0.20	93	1.86
95-99	0	--	--	--
100+	5	1.02	795	15.86
Total	489	100%	5011	100.00

Source: 1983 Industrial Survey Questionnaire

Note: (Waipa Sawmill not included in above totals but approximately 800 were employed in 1983)

A total of 52.5% of all activities surveyed, employed less than 5 persons including the working proprietor. These activities generally service the immediate local market and although a wide variety of enterprises were represented in this category, there was a concentration in vehicle service and repair, trades and various contracting activities associated with the construction industry, service and repair activities for domestic and commercial appliances and a variety of wholesale and distribution activities. Some activities employing less than 5, manufactured items such as blinds, billiard tables, sheepskin and wrought iron products, as well as producing potato chips, farm meat packaging and bread and bakery products.

A further 22.3% of firms employed between 5 - 9 persons and included small engineering workshops, electrical heating and refrigeration contractors, frozen food wholesalers, boat sales, repairs and supplies, aluminium joinery, bottle and scrap metal depots as well as the manufacture of small goods. Firms within this category although predominantly servicing the local market, would have had in some instances a wider regional and national role (eg scrap metal).

Although firms employing 1 - 9 persons comprised 74.8% of all the enterprises within the Urban Area's industrial zones, they accounted for only 26.9% of the industrial labour force. The remaining 25.2% of enterprises therefore employed 73.1% of the Urban Area's industrial labour force of which 32% were employed in 18 enterprises employing 50 or more employees. These included one timber mill (Thurstons) a joinery factory (Lee Brothers) two clothing factories (Halls Manufacturing and Trewmasters), two heavy vehicle assemblers (Mills-Tui Trailers and Road Runner Trailers) and a fishing rod manufacturer (Kilwell). Two activities were associated with "consumption" - Foodstuffs Warehouse and the retailing of motor vehicles (RM Transport) as well as a road surfacing

contractor (Emoleum Neuchatel). Furthermore, the five largest of the 18 enterprises, each employing more than 100 persons, accounted for almost 16% (ie half of the 32% of the greater than 50 employees category) of the total industrial labour force within the Rotorua Urban Area. These included two timber mills (FCL and NZFP), a downstream timber using activity (Lockwoods), a clothing factory (Mitchell's Clothing) and a transport company (Direct Transport). The three remaining activity units in the top 18 located in the industrial zones were the Engineering and Works Department of the Rotorua District Council and the Rotorua Electricity's Line Depot Workshop and Rotorua Electricity's Office complex.

Industrial activities in Rotorua in 1983 exhibited a wide range of production and consumption relationships ranging from production for international markets, import substitution activities and essential goods and services (eg clothes and repair of vehicles) that linked the respective activities into the national and international markets. Most of the smaller "servicing" enterprises catering for the local market were consumption outlets often using inputs sourced from outside the area (for example car parts). The larger enterprises can generally be characterised as activities producing for wider national and international markets and in the case of timber milling (including Lockwoods) used locally sourced inputs. However each industrial activity exhibited diverse production/consumption links into the local, regional, national and international economies. In other words activity in Rotorua in 1983 was never purely local and exhibited a range of "spatial action fields" or operated within overlapping nested hierarchies that were set within an international (global) context. The "spatial action fields" reflected and were dependent on a particular New Zealand global connection and the regulation of activity internal to New Zealand. Within this context competitive pressures (both national and

international) especially that of larger activities affected local activity in a variety of direct and indirect ways.

In 1983 activity in Rotorua was protected by the friction of distance and various national "incentives" including transport regulations, "regional development subsidies", export incentives and other measures which enabled "profitable production" to occur. The national sphere in turn was also protected from the international environment by the friction of distance and various tariffs, quotas and exchange rate barriers. In 1984, the local and national borders were effectively "collapsed" by policies adopted by the Fourth Labour Government which thereby permitted national and international influences to more fully penetrate and affect local production and consumption activities. Tariffs, import controls and quotas were abolished and the exchange rate was floated. The government adopted a non-intervention policy which affected interest rates and permitted repatriation of dividends to foreign owners. Government policies also enabled economic agents to raise finance on the global market. Internally, the Government deregulated the transport industry and removed other constraining legislation influencing the operation of various activities for example, the NZFS was required by Government policy to favour domestic processing over log exports. The Forestry Corporation of New Zealand is now not constrained by this requirement. In addition the government has removed specific support for industries that were never economically viable.

The result of the above policy changes on local production and consumption activities has been far reaching. There has been increased and increasing foreign competition in local, national and international markets. New entrants of foreign origin have established new productive capacity in New Zealand. The Tachikawa Timber mill on Vaughans Road is a Rotorua example of this. Some national enterprises have adapted by establishing joint ventures between

the New Zealand and foreign firms or retreating or partially retreating from production by becoming importing firms (clothing). Production and consumption activities have adopted new technology and modernised to remain competitive. Some of this modernisation is due to new resources (the second timber harvest). Some industries have been affected by the production or import of substitute products (nylon carpets) and others now require less raw material due to technological changes and enhanced properties of particular raw materials. Internally there have been changes in customer demands and tastes as well as demographic and other changes which have impacted on production and consumption (eg increased awareness of environmental issues).

The changed economic operating environment has forced a wide range of responses by enterprises to remain competitive and has affected the internal (plant) organisation and the plant's wider national and international links. Organisations are continually redefining their core and peripheral functions in a more volatile market. Some have divested non-core functions while others have diversified their products and services. Quality and productivity improvements have impacted on the internal organisation of enterprises along with the imperative of better marketing and follow up services to customers and clients. Industries have restructured and rationalised their domestic and international productive capacity. Some plants with obsolete technology have closed. Other companies have adapted by specialisation of branches within the corporate structure thus contributing to an increasing integration of production in several locations. Mergers and acquisitions have dominated some of the changes occurring nationally especially that of key players. Some enterprises have taken over competitors long term contracts so that the competitor can exit from the market or have purchased and retired a former competitors productive capacity. Some enterprises have followed a policy of flexible sourcing of inputs while others have fostered a pro-active research

and development program. There has been an introduction of new labour practices and a generalised reduction in labour. What changes have occurred within industries within the Rotorua Urban Area and how has restructuring of activity affected Rotorua's production and consumption activities? What has happened between 1983 and 1991 to Rotorua's Industrial Structure? How have enterprises adapted to the changed economic operating environment? What are now the important influences and links of enterprise operating in Rotorua?

The following analysis examines change in activity units employing 10 or more persons. These activity units although comprising 25.2% of all industrial enterprises in the Rotorua Urban Area account for 73.1% of the industrial labour force. Analysis will focus on changes within the following groups of industries - food processing, clothing, sawmilling and "timber" using industries, paper products, fabricated metal products, machinery and equipment industries, "other" industries and changes in wholesaling/consumption operations.

#### CHANGES WITHIN ROTORUA'S FOOD PROCESSING INDUSTRIES

Business Statistics data for the Rotorua Urban Area, based on 10 and more employees, for the Food Processing Industries, recorded a decrease in employment from 247 (1987) to 209 (1990). This represented a 15.38% decline between 1987 and 1990. Included in the above figures were two small home cookery businesses which employed 28 (1987) and 26 (1990) staff. In addition the 1987 total included 15 persons who were employed by the Rotorua Milk Company, a milk processing and bottling plant which closed down in October 1988. This one closure accounts for 40% of the decline in employment in the Food Processing industries between 1987 and 1990. The range of products presently processed by Rotorua's food industries include bread and

breadcrumbs, pizzas, pastry, pastry products, meat pies and the processing and packaging of small goods and venison.

Business Statistics data, although providing a picture of declining employment and change between 1987 and 1990, does not provide a picture of the state of the Rotorua food processing industry before restructuring.

TABLE 5.2 FOOD PROCESSING ACTIVITY UNITS AND EMPLOYMENT

1983 <sup>1</sup>		1987		1990	
No. Firms	No. Employed	No. Firms	No. Employed	No. Firms	No. Employed
7	148	8	219 <sup>2</sup>	8	183 <sup>3</sup>

Note: 1 Data derived from 1983 Industrial Survey  
2 & 3 Figures do not include Home Bakery employment totals

From the above table, between 1983 and 1987 there was an increase in employment of 71 which represented a 48% increase. Between 1987 and 1990 there was a reversal in employment of 36 representing a 16% decline. While the total number of processing units has remained relatively constant (increasing by 1 between 1983 - 1987), the composition within this group has changed. The 1983 figures included two firms, one of which bottled milk and the other soft drinks. The Soft drink bottler discontinued bottling before 1987 and now operates as a distribution centre. The Rotorua Milk Company closed down in October 1988. Additions since 1987 included a small goods manufacturer, a pizza manufacturer and breadcrumb manufacturing became a separate operation from Homestyle Bakeries. The following analysis is based on six food processing enterprises which were surveyed between May and September 1991. The six enterprises accounted for 89% (1987) and 84% (1990) of the employment within the Rotorua food processing and manufacturing industry.

The most significant change that has occurred in Rotorua's food processing industries since the mid 1980s has been ownership change. Most of the food processing enterprises were originally locally owned and one of the first to be taken over was Tenderkist Meats by Waitaki Meats prior to 1983. Since then there have been several transfers of ownership to GFW, FCL and the Tenderkist Rotorua operation is now a part of a wholly owned subsidiary of Auckland Farmers Freezing Co-operative (AFFCO). GFW purchased Homestyle Bread (1986) and Bonza Pies (1987). The significance of the ownership changes in the above enterprises is that they represent an increasing integration and co-ordination within a national production system of their respective "parents". This has been accompanied by a changed role and specialisation of the Rotorua operations within the respective company's total New Zealand operation. The above ownership changes, representing the domestic arm of the New Zealand multi-nationals, places the Rotorua operations into an international context by virtue of the international orientation of GFW and AFFCO and links the local production directly into two significant national prime mover companies.

The latest takeover of Tenderkist Meats by AFFCO places the Rotorua operation within the context of a nationally co-ordinated small goods production system in which each of the Company's four production sites within the North Island process specified products. In the initial years Tenderkist produced a range of small goods products, such as fresh and pre-cooked sausages, polonies, saveloys and ham. However the Rotorua operation now specialises in marinated steaks, corned beef and lamb cutting. The Auckland site produces the bulk of the Company's sausages and in Wanganui, hams are cured and processed. Tenderkist also operates a pet-food factory in Tauranga. As the Rotorua operation is part of the AFFCO group, it is encouraged to purchase supplies from the company. However, AFFCO operates

a policy of "open contestability" which favours flexible sourcing of supplies and there is therefore no compulsion to purchase supplies from within the group if they can be obtained cheaper from other sources.

GFW production in Rotorua consists of three operations - Homestyle Bread and its offshoot Crumbcraft and Pie manufacture. All three companies are part of the Quality Bakers group each manufacturing a specific range of products and are responsible to service defined geographic markets. The Rotorua pie operation is one of three pie makers in the "Northern Region" and supplies an area from Huntly to Turangi. At present the Rotorua operation is unable to supply pies to the East Coast because of arrangements entered into by GFW when it purchased a small pie making factory in Whakatane. However, it is GFW's policy to ultimately centralise pie making into three locations nationally - Auckland, Rotorua and Palmerston North, to achieve greater economies of scale and profit for the parent. The Rotorua pie manufacturer also produces small quantities of ready rolled pastry, cakes and a large percentage of the North Island Tegel Chicken stuffing. Both Pie manufacture and Stuffing use breadcrumbs which are supplied by Crumbcraft in Rotorua, (Rotorua is one of four national production sites for Crumbcraft, the others being Auckland, Wellington and Christchurch). There are therefore strong links between GFW operations in Rotorua and pie rationalisation in the future is likely to strengthen the "part-processing" nature of the GFW "complex" in Rotorua. At present, production from GFW's Rotorua operations is regional in scope but coordinated within a national production structure. It is perhaps significant that after the takeover of Bonza Pies, Crumbcraft was separated from the bread baking operation. (Crumbcraft was absent from the 1987 Business Statistics data.) Originally Crumbcraft used returned bread but now special breads are baked for crumbing. Of the remaining food processing operations not tied to "NZ Prime Movers", two exhibited international links. Firstly, Mair

Venison, one of three New Zealand companies processing and packaging venison for export (both wild and farmed) operates plants in Rotorua and Hokitika. Rotorua therefore represents the North Island arm of the Company's operations. The other two venison packaging and processing companies are Fortex with two processing plants (one in the Kaimais and the other in the South Island) and a Farmers Co-operative with 3 plants (in Fielding, Hastings and Mossburn). Secondly, Richmond Foods a pastry maker, has international links through holding the NZ McDonald's franchise enabling the firm to manufacture apricot and apple pies for the fast food chain. The company also imports dried apricots, spices, starches and proprietary mixes from Spain, the

TABLE 5.3 FOOD PRODUCTS MANUFACTURED IN ROTORUA 1991

MARKET	FOOD PRODUCT	ACTIVITY UNIT WITHIN COMPANY STATUS <sup>1</sup>	PARENT
INTERNATIONAL	Venison	Two Plant Clone Structure	Mair Venison H.O. Christchurch
NATIONAL	Pastry Pies Sausage Rolls Pastry	Independent though tied to foreign multinational through Franchise for Pastry pies. Concentrated production structure.	"McDonalds" USA
NORTH ISLAND	Meat Products  Chicken Stuffing	One of Four Plants each specialising in particular meat or range of smallgood product.	AFFCO H.O. Auckland  GFW (Quality Bakers) H.O. Auckland
REGIONAL	Meat Pies Pastry  Breadcrumbs	One of three Pie Makers in the Northern Region of GFW  One of Four Plants nationally	GFW (Quality Bakers) H.O. Auckland  GFW (Quality Bakers) H.O. Auckland
LOCAL	Bread		GFW (Quality Bakers) H.O. Auckland
LOCAL AND REGIONAL	Small Goods	Independent Concentrated Production Structure	Soanes H.O. Rotorua

Source: Local Survey 1991

Note 1: Classification based on Massey's (1984) "Three Major Organisational Structures of Production".

USA and Australia. Richmond Foods in addition produces 75% of New Zealand's pre-packed sausage rolls and 5% of New Zealand's pastry and its total production is manufactured in one factory.

The sixth firm surveyed was a small goods manufacturer which operated one plant and marketed 60% of its output of sausages and sliced and packaged bacon and ham within the Waikato/BOP area. The remaining 40% was marketed in Rotorua.

### Conclusion

Restructuring within Rotorua's food processing industries has witnessed the closure of plants bottling milk and softdrinks. Changes in meat products and closer links between pie and breadcrumb manufacturers have been the result of ownership changes. A significant proportion of the food products produced is marketed beyond the Urban and "District" areas to North Island, National and International markets. All but two food operations are part of a multi-plant corporation. Rotorua's meat pie and breadcrumb manufacturing appears to have been assigned strategic importance within the Quality Bakers Group of GFW. However, the sale of Watties to the American food giant Heinz (November 1992) represents a development with unknown implications for Rotorua. For example, will present contracts for chicken stuffing manufactured by the pie manufacturer (Quality Baker's Group) for Tegel chickens (now part of the Heinz Group) be retained and/or continued in the future. Rotorua's Tenderkist Meat operation is a specialised unit within the AFFCO group and at present it is also considered important to AFFCO's production and marketing strategies. "Internationalisation" is represented by the holding of the NZ McDonald's franchise for pastry pies and through the exporting of packed venison products.

While the future would seem reasonably bright for the food processing group in Rotorua, the fortunes of the Rotorua operations are still directly linked to the fortunes of the parent. Possible rationalisation of New Zealand's venison processing and packaging industry could occur, which may or may not be beneficial to Rotorua. Tenderkist could discontinue the specialised meat production from its Rotorua plant without causing disruption to other plants within the group. McDonalds may award the pastry pie manufacturing franchise to a GFW subsidiary under more favourable terms. It is possible that the exporting of products processed in Rotorua may assume more importance in the future due to the international orientation of GFW and AFFCO. Technological changes extending the life of products may make this a viable future option. However, decisions affecting the future of Rotorua's food processing operations will be made outside Rotorua - where parent company head quarters are located.

Although it can be shown that restructuring has occurred in Rotorua's food processing activities, the question that is difficult to assess is whether this restructuring shows similarities to or differs from the restructuring of food processing activities in other New Zealand centres. While restructuring of New Zealand's food processing industry has been the subject of research since the mid 1980s, the attention has focused on a limited range of activities and the major companies associated with these activities. For example, the changing spatial pattern of meat freezing within a companies context, has been well documented (Savage 1991, Le Heron 1989). Also well documented has been the rationalisation occurring within the flour milling (Miller 1991) industry and the internationalisation of GFW (Le Heron 1989). However, what has not received attention is the transmission of restructuring influences from major

companies to linked second or lower tiered activities and the effects produced on the lower ranked activities. This latter consideration is of particular significance, since all of the food processing activity in Rotorua is produced by second or lower tiered activities some of which are co-ordinated within major New Zealand companies such as AFFCO and GFW. Studies related to the rationalisation of meat freezing and flour milling industries therefore have limited applicability to the restructuring of food processing activity except to provide a wider restructuring context for the Rotorua activity.

#### CHANGES WITHIN ROTORUA'S CLOTHING MANUFACTURING

Business Statistics data for the Rotorua Urban Area, based on greater than 10 employees, for the textile, apparel and leather goods industries, recorded a decline in employment from 398 (1987) to 213 (1990). This accounted for an almost 47% decrease between 1987 and 1990. Included in the above figures were 3 enterprises which did not manufacture clothing but produced products such as cordage, rope or twine, or processed and dried opossum skins. These three enterprises employed 39 persons in 1987. In 1990 only one of these firms, which processed opossum skins and employed 23 persons remained in the Business Statistics data. The two firms which had closed, accounted for the decline from 6 (1987) to 4 (1990) within the clothing group.

Business Statistics data, although providing a picture of declining employment and change between 1987 and 1990 does not provide a pre-restructuring picture of the state of the Rotorua Clothing Industry.

Table 5.4 shows that between 1983 and 1987 there was an increase in employment of 13 person which represented a 3.75% increase. Between 1987 and 1990 there was a 169 decrease employed or an almost 47% decline.

TABLE 5.4 CLOTHING MANUFACTURING ACTIVITY UNITS AND EMPLOYMENT

1983 <sup>1</sup>		1987		1990	
No. Firms	No. Employed	No. Firms	No. Employed	No. Firms	No. Employed
7	346	6	359	4	190

Note 1: Data derived from 1983 Industrial Survey.

In 1991 when clothing manufacturers were surveyed there were 3 firms still operating employing more than 10 employees. One of the 4 included in the 1990 Business Statistics total has since closed down. This closure affected 30 jobs.

The clothing industry in Rotorua has been characterised by a reduction in manufacturers from 7 (1983) to 3 (1991). Those closed since 1983 are likely to have been Cut, Make and Trim (CMT) enterprises manufacturing the standard clothing items that have been subject to the intense competition from Asian producers on the national market. Of the three presently remaining enterprises, two exhibit reasonably stable employment numbers whilst the third has experienced a dramatic employment decline from 190 (1985) to 30 (1991) (Survey results).

An explanation of the continuing operation of the three remaining firms is essential. How have the three that remained adapted to the changing operating environment? Are they under stress and therefore likely to close down? Have the remaining firms developed production structures consistent with flexible organisation principles? Is all their production concentrated in Rotorua? What does the future hold for clothing manufacturing in Rotorua?

The firm that has experienced dramatic employment decreases between 1985 and 1991 is a family owned and operated business that has all its production facilities concentrated in Rotorua. This firm is a CMT operator manufacturing a brand of jean and denim skirt as its main product items and is experiencing difficulties in planning production because of a 2 - 3 week lead time for orders. The company would prefer a more stable relationship to the wholesale market rather than the loose arrangement that now exists for it. The company is attempting to obtain CMT contracts from Australia and is investigating a joint venture proposal with a Hong Kong company for the supply of cloth and made up garments. The pressures of operating with unstable links into the New Zealand wholesale market without "stable" offshore alternatives may cause this firm to discontinue production and become an importing agency or perhaps close down altogether. The company also has problems generating enough profits to purchase new technological equipment.

The other two firms operating in Rotorua have recorded stable employment numbers between 1987 and 1991. Both firms concentrate on the fashion end of the market. One firm has its Head Office in Rotorua whilst the other's is in Auckland.

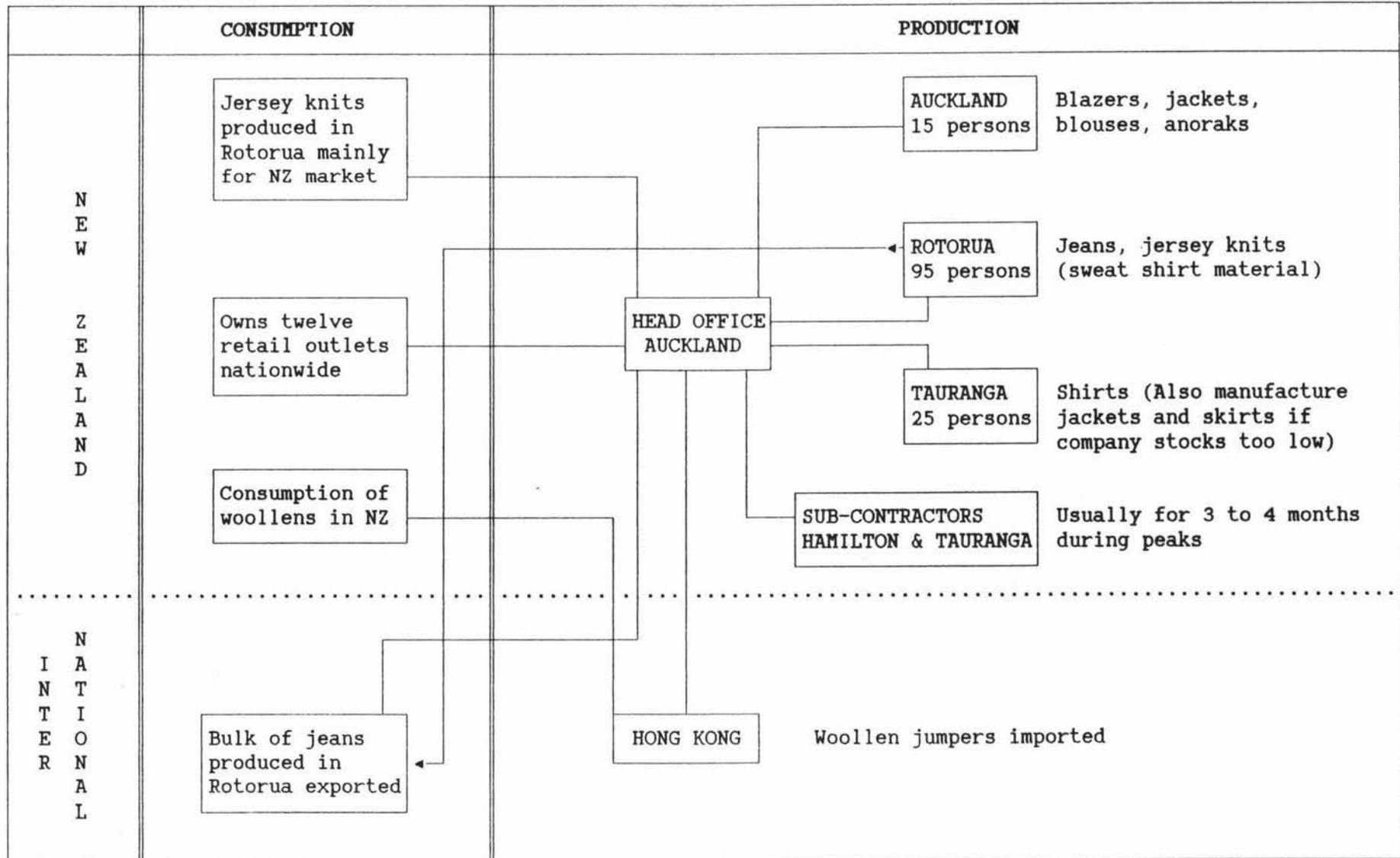
The Auckland company (Halls Manufacturing) which holds a franchise to manufacture "label garments" from the Palmers Corporation, an Australian company, employs 135 persons nationally (all in the northern North Island). However, the Australian "parent" provides the designs and specifies the type and the source of the denim. Geographically, 70.4% of the company's employees are located in Rotorua, 18.5% in Tauranga and 11.1% in Auckland. Each production site specialises in producing particular clothing items. Rotorua's production is divided into two major lines - jeans and jersey knit (sweat shirt material) items. Jeans account for two thirds of the Rotorua

factory's output, the bulk of which is exported to Australia. Jersey knit production is mainly for the New Zealand market. In addition to the production facilities which the Company owns and operates, Hall's Manufacturing, through the Rotorua subsidiary, contracts out at peak times production to "non-related" manufacturers in Hamilton and Tauranga, usually for a period of 3 to 4 months at a time. In addition to its production facilities, the company operates 12 retail outlets nationwide to sell the range produced from its factories. The company exhibits a range of production and consumption relationships expressing its New Zealand and International (Australian) orientation (refer to Figure 5.1). It could be argued that since the bulk of the two thirds of the jeans produced in Rotorua are destined for consumption overseas (Australia), that 2/3 or 63 of the 95 employees represent the extent of the internationalisation of the Rotorua operation. However, because of the stringent conditions attached to the franchise agreement, it could be argued that the whole NZ company is in reality an overseas subsidiary and vulnerable to the "parents" decisions. A withdrawal of the franchise would almost certainly result in the collapse of the company which would impact on the Rotorua operation. In fact, being a part of an international structure is no guarantee for continued long term survival though it may have been a key between 1983 and 1991. Hall's Manufacturing recently (February/March 1992) went into receivership. However, for the Rotorua portion of the Company it is (for the present) business as usual.

(A report in the NZ Herald dated 25 April 1992, outlined the Parent Company's production activities. Palmer Corporation contracts 80% of its sewing to Hong Kong Companies, 15% to Australian Companies and 5% to Hall Manufacturing in New Zealand. A further report in the Rotorua Daily Post on 10 July 1992 stated that Hall's Manufacturing is in the process of being purchased by the Australian Company 'Consolidated Apparel'. Thirteen staff from the Rotorua

Figure 5.1

## THE PRODUCTION / CONSUMPTION STRUCTURE FOR HALL MANUFACTURING RANGE OF CLOTHING ITEMS 1991



Note: 1 Australian Parent specifies cloth (denim).  
 2 All cloth imported from the Far East.  
 Source: Company (Local Survey Information 1991)

factory were made redundant. There were to be no redundancies in Hall's Tauranga plant or throughout the twelve Jag retail outlets throughout the North Island.

On August 6 1992, the Daily Post reported that a further 15 staff were made redundant [only 60 of the original 88 staff employed in February/March 1992 remain]. The Rotorua factory had been separated from the parent company and sold to "Consolidated Apparel", the largest contract jeans manufacturer in Australasia. The new owners were considering the long term option of setting up the Rotorua factory as an international exporting base. The Tauranga factory and the 12 retail outlets [renamed Elle] were not included in the buy out. This portion of the original company manufactures and retails women's clothing. A separate buyer is being sought by the receivers. The Daily Post [6 August 1992] also reported that the Halls Corporation early in its receivership had lost the Jag license which meant it could now no longer manufacture or sell Jag label clothing. This had necessitated the name change for the retail shops.)

The company with its Head Office in Rotorua currently employs 21 staff. It is a part CMT and part own label ladies fashion manufacturer. The Rotorua portion of the operation produces part of the label range. Blazers and coats are produced by Rembrandt's Lower Hutt factory while two Tauranga manufacturers produce the remaining items of the range. Part of the production in Rotorua is manufactured in private homes on a piece-rate basis. Production of label items occupies approximately 5 months of the year. During the remaining 7 months, production is geared to CMT contracts for school blouses and for the armed forces. However, CMT work is tendered for and there is no guarantee that a contract will be renewed or awarded. The company is currently evaluating CMT contracts for Australian companies, but

will only accept the contracts if they do not interfere with the deadlines associated with the production of its own label garments. The aim of this company is to reduce production staff, whilst retaining pattern making and sample machinists, and using sub-contracting agreements to nationally specialised high quality manufacturers, to complete each year's range of garments. This company owns one retail outlet for its range of garments (in Newmarket/Auckland) and sells to 45 selected retailers nationally. Approximately 10% of its production is exported to Australia.

This company exhibits a trend towards being an "organiser of production" of its own label garments. It is not tied to any international clothing manufacturer through franchise arrangements and production is predominantly marketed in New Zealand. However, as with Hall's Manufacturing, cloth is imported from overseas (Italy, Australia and the Far East) but at the discretion of this company. The importing of woollen knitwear from Asia completes the garment range available in New Zealand. Eloise's production/consumption structure is shown diagrammatically in Figure 5.2.

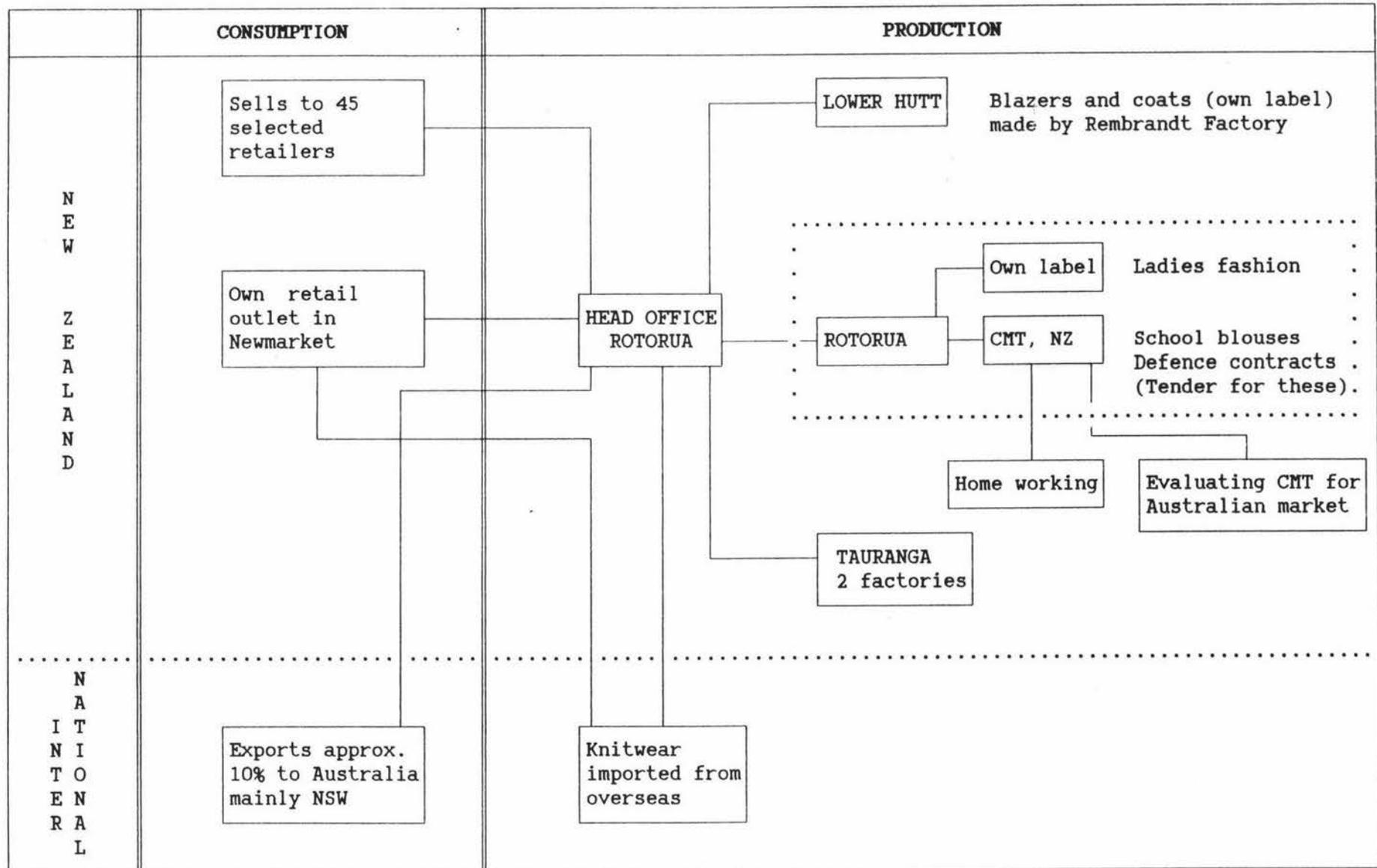
### Conclusion

A question that must be addressed is whether the responses of clothing manufacturers in Rotorua have differed from those of other centres? While there is no full documentation of the restructuring of the New Zealand clothing industry since 1985 available, a study by Brown (1986)<sup>1</sup> of 96 of 481 Auckland based apparel firms in relation to restructuring induced under the Industrial Development Commission (IDC) plan made the following points. Firstly, Brown notes that the ratio of indirect operatives (workers not actually operating production equipment) to direct operatives, changed from 1:3-4 to

Note 1: Report in Changing Places in New Zealand: A Geography of Restructuring, 129-131

Figure 5.2

## THE PRODUCTION / CONSUMPTION STRUCTURE FOR ELOISE RANGE OF CLOTHING ITEMS 1991



Note:                      Cloth imports from Italy, Australia and Far East.  
Source:                  Company (Local Survey Information 1991)

1:5-6 depending on the size of the firm. This reduction was dependent on the introduction of new technology and changes in production practices, for example, alteration of factory floor layout to allow for new flow line production arrangements.

With Hall's manufacturing, there were alterations in the factory floor layout to allow for new flow line production circles, generally without new technological equipment being utilised. There was, however, no comment relating to the ratio of direct/indirect operatives. It may be that this reflects the branch plant nature of the Rotorua facility and that direct/indirect ratio changes may have occurred in the Auckland Head Office. The company's Rotorua employment remained reasonably stable over the study period. For the family based firm, indirect "production" workers were among the first to be reduced but the "ratio" may not have changed because of the general employment decline experienced in this company.

The second of Brown's findings was the trend to externalise production. In Rotorua this trend was evident in all three firms either through homeworking or through the use of subcontracting arrangements to manufacturers in other centres. For Hall's manufacturing, the use of subcontracting represents "overflow" or temporary subcontracting. For Eloise, the subcontracting to specialised national manufacturers was a feature of its production organisation. It represents a counter tendency of small enterprises being able to instill standards and production requirements from large firms.

A third finding was the closure of branch plants by Auckland parents, with one such closure occurring in the Bay of Plenty. Unfortunately, it cannot be confirmed whether this plant was located in Rotorua despite the reduction from 7 (1983) to 6 (1987) firms. It is also not known whether the three

closures since 1987 have been the result of Head Office decisions made outside Rotorua.

A fourth finding was that smaller firms were withdrawing from production to become importers. In Rotorua, this withdrawal may have been partial for Eloise which in 1991 imported its entire woollen knitwear range from overseas' manufacturers. However, it is not known whether Eloise manufactured knitwear either in Rotorua or through subcontracting before becoming an importer.

It would appear that the restructuring trends noted by Brown under the IDC Plan, may well have accelerated (after her study was completed) as a result of the depressed local market and rising competition from low cost third world countries (through tariff and quota reductions). Several New Zealand manufacturers entered into joint venture arrangements with manufacturers in the Pacific (Fiji) and Asia; the offshore partner becoming a CMT operator. In the process, capacity (in New Zealand) once dedicated to the manufacture of low cost knitted or leisure wear has been cut back. To some extent the loss of this production has been countered by the success of specialised upmarket and quality orientated fashion garment manufacturers. These two trends in relation to the Auckland clothing industry have Rotorua parallels.

For the three remaining Rotorua clothing manufacturers different responses to the changed economic environment are evident. For the first firm, without stable reasonable long term contracts either from within New Zealand or from overseas, its future seems uncertain. It may develop into an importing firm or close down altogether. For the second firm, though providing employment for 95 staff, its future lies in the hands of receivers. Potentially 95 jobs could be lost. In the case of the third firm, its tendency and aim to become

an organiser of its own label garment range through subcontracting to specialised national manufacturers, offers little employment prospects for machinists that may lose their jobs in the first two mentioned enterprises. Without direct "foreign" investment in establishing new or purchasing existing production facilities, the clothing industry might well cease to exist in Rotorua. However, a risk accompanying integration into an international organisation is that the overseas parent remains viable and that it continues to perceive its Rotorua or New Zealand operation as an essential part of its organisation. This cannot be guaranteed. Technological adaption to remain competitive does not seem to be an option explored or being explored by the three remaining clothing operation.

#### CHANGES WITHIN ROTORUA'S TIMBER MILLING AND TIMBER USING INDUSTRIES

Business Statistics data for the Rotorua Urban Area, based on 10 and more employees, for the timber milling and timber using industries recorded a decrease of employment between 1987 and 1990 of 302 persons representing a decline of 25% even though the number of firms operating had increased by two (net increase). Using employment data derived from the 1983 Industrial Survey and comparing this with the 1987 and 1990 data a picture of a continuing decline emerges.

Table 5.5 shows that there was a 279 decrease in employment in timber milling and timber using industries between 1983 and 1987. This represented a 19.0% decline over the 7 year period. A decline of similar employment magnitude, continued between 1987 and 1990. The total decrease in employment was 579 representing a total decline of 39.0% between 1983 and 1987.

TABLE 5.5 TIMBER MILLING AND TIMBER ACTIVITY UNITS AND EMPLOYMENT

1983 <sup>1</sup>		1987		1990	
No. Firms	No. Employed	No. Firms	No. Employed	No. Firms	No. Employed
7	1471 <sup>1</sup>	7	1194	9	892

Source 1: Data derived from 1983 Industrial Survey

Note 2: Figure includes an estimate of 750 Forestry Corporation of NZ employees. (It was widely accepted locally that approximately 800 persons were working for "Statecraft" in the early 1980s)

3: The 1990 Business Statistics data for all timber companies' employees were disaggregated into several NZSIC Industrial Divisions according to the specific functions performed. Where the various functions appeared in the data, the employment figures have been added together and generally provide a comparable picture with the Survey data. (eg. FCNZ Survey data 435 and NZSIC 426; CHH survey data 135 and NZSIC 110.)

Table 5.6 illustrates that the decline in Rotorua's timber milling and timber using industries was overwhelmingly concentrated in three key New Zealand players - Forestry Corporation, Tasman and Pine Milling, and reflects an adverse national trend in saw milling employment. The first mentioned company accounted for 56.0% of the sector's decline in Rotorua and experienced a continual decline in employment over the 1983 - 1990 period. Tasman's employment decline was more pronounced between 1987 and 1990 while Pine Milling's decline occurred between 1983 - 1987, employment remaining constant between 1987 - 1990. Lockwood's witnessed a 53 person or 36.5% increase in employment between 1983 and 1987 which was reversed between 1987 and 1990. One enterprise, commencing from small beginnings, continued to expand its staff over the entire period, and there was the addition of three new companies with plant operating in Rotorua between 1987 and 1990, one being of Japanese origin. Thurstons Timber which was taken over by NZFP, closed down after 1987. The one closure accounted for 13.1% of the timber group's employment decline between 1983 and 1990.

The timber group of industries can be divided into two main sub categories - timber milling and timber using. The first mentioned sub-group comprise 5

TABLE 5.6 EMPLOYMENT CHANGE IN TIMBER MILLING AND TIMBER ACTIVITY  
UNITS

COMPANY	EMPLOYMENT			CHANGE BETWEEN 1983-1990	
	1983	1987	1990	Numerical	Percentage of group
FCNZ (Waipa)	750	674	426	-324	-56.0
Tasman (FCL)	160	105	37	-123	-21.2
Pine Milling (CHH)	280	110	110	-170	-29.4
McAlpines	40	31	31	- 9	- 1.5
Thurston Timber	76	46	--	- 76	-13.1
Tachikawa	--	--	58	+ 58	+10.0
Lockwoods	145	198	140	- 5	- 0.8
John Crean	20	30	53	+ 33	+ 5.7
Global Timber	--	--	17	+ 17	+ 2.9
Ashley International	--	--	20	+ 20	+ 3.4
TOTAL	1471	1194	892	-579	100.0

Note 1: Tachikawa Forest Products employment figures were reported in the Daily Post August 1991 (Figures confirmed by telephone discussion with Tachikawa 26 November 1992)

companies - 3 major and 1 minor New Zealand player and a Japanese company. The remaining 4 enterprises comprise the timber using sub-category of which Lockwoods, a prefabricated home manufacturer, employs 60% of their combined workforce of 230 employees.

What have been the main changes affecting sawmilling operations nationally and how have these changes impacted on Rotorua's milling operations? A major change affecting timber milling nationally has been a rationalisation of capacity<sup>1</sup> and a shedding of staff as milling adjusts to the "new international

1: Between 1987 and 1990, 93 sawmills closed (NZ Forestry Briefing for Minister of Forestry and Associated Minister of Forestry, February 1990,22). In 1986 there were 400 registered sawmills in New Zealand (Ministry of Forestry 1988,13)

operating environment" in which the preferential policy favouring New Zealand timber milling operations was abandoned with the restructuring of NZFS and the creation of the Forest Corporation as an SOE. Previous government policy required the NZFS to sell logs to domestic milling operators in preference to log sales overseas. However with this policy now abandoned, overseas' sawmillers compete directly with NZ Companies for the supply of logs. The price of logs has increased and many smaller New Zealand companies, without their own forests, were unable to compete and process the logs at a profit and were forced to close or were taken over by other companies (eg. Thurstons Timber). Locally McAlpines and Tachikawa must purchase their log supplies creating pressure on these two companies. Associated with the rationalisation of capacity has been the necessity to modernise production facilities to meet the requirements of the new timber resource, which has different characteristics from the old indigenous and first crop radiata resource. The second crop radiata which is currently coming on stream is smaller than the first crop. (This is because it is harvested younger.)

Both Tasman (FCL) and Pine Milling (CHH) have during the 1980s pursued a policy of modernising their respective productive capacity. Tasman established a new green field mill at Rainbow Mountain and has upgraded plants in Kawerau, Putaruru, and Taupo. The Ngongotaha plant, has not been accorded a similar "modernising" status within the new evolving production structure and has been "by passed " by the company in respect of major new investment. The Ngongotaha plant, which in the early 1980s produced a range of sawmilling products including mouldings and provided kiln drying facilities for Tasman's clients, now is linked to other Tasman plants, particularly Putaruru and Taupo, as a down-stream part-processing facility cutting an equal amount of timber for export and FCLs Placemaker chain. Products

formerly produced at the Ngongotaha site are now produced elsewhere in the group.

Pine Milling (CHH) has followed a policy of rationalising capacity (between 1987-1988 it closed down two of its sawmills) accompanied by modernisation. However, unlike Tasman, the Rotorua plant has been accorded greater status within the Company's long term objectives and new production technologies are likely to be introduced in the near future. Similarly McAlpines, is upgrading and modernising its plant to enable the company to process the "second radiata crop". This company since commencing production has specialised in the milling of Douglas Fir which does not require the same level of processing as radiata does. (eg radiata requires kiln drying, while Douglas Fir does not and can be cut green.)

Part of the explanation of employment decline within Rotorua's timber milling operations can be advanced in terms of rationalisation and technological change within the context of the companies concerned. However, it is difficult to decode causes of the significant employment decline of FCNZ. Some of the decline is attributable to the discontinuation of certain lines of production. (Some of the products now currently manufactured by John Crean and Global Timber were once manufactured by the Waipa Mill). Some of the employment decline may be attributable to the computerisation of office functions. Some may also be a consequence of the Company's recent (expanded) concentration on log exports. Technological change cannot be advanced as an explanation because up until 1991 there had been no major new investment. The status of the company as an SOE available for sale had impeded modernisation until the status was more "certain". This did not occur until mid 1991. (On 9 April 1992 the Rotorua Daily Post reported that a major \$6.5 million upgrading of the Waipa Mill had been completed.)

Tachikawa Forest Products is a new entrant Japanese company utilising the latest optimiser/laser beam technologies (computer aided sawmilling). This provides the Company with a competitive edge minimising wastage and enabling Tachikawa to utilise 60% of the log resource compared with Tasman's 53.55% and Forest Corporation's 45%. Tachikawa therefore has a 33% advantage over Forestry Corporation. Tachikawa is considering doubling its milling capacity in Rotorua and employment increases are expected.

Currently (1991) the five Rotorua timber milling operations both individually and collectively export a major proportion of the sawn timber output overseas. (FCNZ 65%, Tasman 50%, Pine Milling and McAlpines 70% and Tachikawa Forest Products a suspected 100%.)

#### DOWNSTREAM TIMBER USING COMPANIES

The four downstream timber using companies represent Rotorua's past and present "seedbed" generating characteristics and strong links of a "material nature" and/or a "managerial marketing and production nature" into the major timber companies operating in Rotorua and the Bay of Plenty. The establishment of Global Timber, an enterprise manufacturing furniture blanks and currently employing a staff of 20, is a direct consequence of a decision by Waipa Mill's management to discontinue manufacturing the above products. The owner, before the restructuring of the NZFS was a manager within the Mill's operations. John Crean's previous employment with Tasman and Lee Brothers (a local firm taken over by CHH and recently divested from this company to a local building firm) provided the Manager with a knowledge of World markets which has provided a key to the firm's continuing success and growth. Ashley International held a FCNZ contract to pre-cut for finger

jointing and Lockwood's, a firm originally established as a partnership in the early 1950s by Dutch immigrants, also had strong links with the Waipa Mill.

All of the above firms follow a policy of flexible sourcing of supplies purchasing timber from FCNZ, Tasman and Pinex. The purchases from the last two mentioned does not necessarily imply local supply links, as John Crean obtains its "Pinex" supplies from the Tokoroa mill. In addition there is evidence that 3 of the 4 firms are pursuing a policy of supply independence from the main players. Lockwood's purchased a sawmill in Putaruru (1990) which now supplies it with 40% of its timber requirements. Both Global Timber and John Crean have supply arrangements with an independent sawmill in Reporoa and combined, purchase the mills entire annual output. Almost the entire sawn timber for Global Timbers operation is provided by the independent sawmill. However, John Crean still requires and maintains strong links with FCNZ, its main supplier.

The open economic environment has had a differential impact on each of the four firms within the timber using group. Both John Crean and Global Timber<sup>1</sup> market a significant proportion of their production overseas (70% and 90% respectively) and competitive pressures have required the utilisation of newer, often second hand machines, with computerised componentry (Global's optimiser/laser beam and John Crean's reprogrammable machines). Ashley International, one of four national companies manufacturing nursery furniture and wooden toys (blackboards, rocking horses), is a nationally orientated company subject to cash flow problems from major retailing chains. Major retailing chains have tended to order from one supplier, delay payment, re-order from another manufacturer and delay payment until they eventually return to the first manufacturer. Restructuring within this firm has involved

1: A title which seems appropriate given the nature of this thesis.

the discontinuation of production of more elaborate nursery furniture items which required some work to be done outside the firm (fancy wood turning), and a substantial decline in employment from 17 (1990) to 3 persons (mid 1991).

In the mid 1980s, between 30-40% of Lockwood's production was exported predominantly to Middle East countries under specific contract arrangements. The completion of the contracts without replacement export orders of similar magnitude elsewhere overseas and a downturn in the New Zealand market (GST impacts) has resulted in staff being reduced to levels comparable to the early 1980s despite 10-15% of current production being exported. Production in 1991 was approximately 60% of capacity and competitive pressures felt by Lockwood's have been transferred down to linked activities. Lockwood's decision to tender transport, rather than renewing or extending its transport arrangement with Direct Transport, may have been an important factor in the latter firm's demise contributing to it being put into receivership in mid 1991.

### Conclusion

The international orientation of production from the timber sector in Rotorua is high and adjustments to the changing international operating climate is likely to continue. This will have differential impacts on each of the enterprises within Rotorua's wood complex and will be accompanied with "disciplining effects" on linked activities. The employment impact of restructuring in the form of technological change by FCNZ has not yet been felt. It is anticipated that modernisation of the Waipa Mill is likely to have positive impacts on employment. However, it is unlikely that employment numbers will return to the levels they were in the early 1980s.

TABLE 5.7 TIMBER PRODUCTS MANUFACTURED IN ROTORUA 1991

MARKET	PRODUCT	ACTIVITY UNIT WITHIN COMPANY STATUS <sup>1</sup>	PARENT
International 65% Pacific Rim 35% NZ	Sawn Timber Products logs	Concentrated production structure	FCNZ (an SOE) H.O. Rotorua
International Main markets Taiwan, India, USA, Japan and UK	Sawn Timber Products	Clone structure	CHH - multinational company with multiple NZ plants and offshore assets H.O. Auckland
International Japan	Sawn Timber Products	Clone Structure One of 2 plants the other in Japan with logs sourced from Chile and Canada	Tachikawa H.O. Fukuyama City Japan
International Predominantly Australia	Sawn Timber Products	Clone structure - 1 of 2 plants	McAlpines H.O. Rangiora
International and National (Placemakers) (50% each)	Sawn Timber Products	Part Processing Structure with the Bay of Plenty Region	Tasman (FCL) Multi-national company with NZ plants and offshore assets H.O. Auckland
International 70% of production to Australia 30% NZ	Timber Trusses and Mouldings	Concentrated Production Structure with backwards links into an independent sawmill	John Crean H.O. Rotorua
International	Wooden furniture blanks	Concentrated Production Structure with backwards links into an independent sawmill	Global Timber H.O. Rotorua
National	Wooden Houses	Concentrated Production structure, trend towards part-processing within own organisation with purchase of a sawmill. Company also has display facilities within NZ.	Lockwood H.O. Rotorua
National	Wooden Nursery Furniture and toys	Concentrated Production structure	Ashley International H.O. Rotorua

Source: Local Survey 1991

Note 1: Classification based on Massey's (1984) "Three Major Organisational Structures of Production "

One recent development has been FCNZ's aim to re-commence value-added (downstream), manufacturing of timber products such as furniture blanks and mouldings in the near future. Furniture blanks were once produced at Waipa Mill but production discontinued shortly after corporatisation in 1987. Currently furniture blanks are manufactured by Global Timber which took over supplying markets originally developed by the NZFS. However, FCNZ is looking to re-establish itself as a furniture component manufacturer is also looking to recapture markets lost to Global. As far as mouldings are concerned, on 11 November 1992, the Daily Post reported that FCNZ had entered into a joint venture agreement with an American wood processing company to manufacture pine mouldings for the American market.

The status of FCNZ as an SOE that is still for sale, will influence on-site development of the mill at Waipa. It will also have implications for the development of other local and offshore companies located in Rotorua. On 2 December 1992, the Daily Post reported that Tasman (FCL) was interested in purchasing the corporation which includes not only the Waipa Sawmill but the 170,000 ha Kaingaroa Forest.

Sawmilling in Rotorua continues to attract international interest. On 25 November 1992, the Daily Post reported that a Japanese joint venture between "National House Industrial" and "Innosho Homes Limited" is to establish a mill to produce timber framing for house construction in Japan. The mill will also incorporate special facilities to develop a wide variety of furniture uses for radiata. The decision to establish productive capacity in Rotorua by this new entrant was influenced by Tachikawa Forest Products. The Member of Parliament for Rotorua, Mr Paul East is quoted in the Daily Post (November 25, 1992) as having said "this latest project is yet another indication that both domestic and international business people regard the district as a sound investment opportunity".

CHANGES WITHIN PAPER AND PAPER PRODUCTS, PRINTING AND PUBLISHING INDUSTRIES

The paper, paper products, printing and publishing industry in Rotorua comprises 5 enterprises that employed 191 (1987) and 175 (1990) persons. Between 1987 and 1990 there was a decrease of 16 persons representing an 8.4% decline. Closer analysis of firms within this group reveal divergent trends.

TABLE 5.8 PAPER PRODUCTS, PRINTING AND PUBLISHING ACTIVITY UNITS AND EMPLOYMENT

PRODUCT TYPE	1987			1990			CHANGE BETWEEN 1983-1990	
	No. of firms	No. employed	% of group	No. of firms	No. employed	% of group	Nos.	%
Paper Products	1	34	17.8	1	57	32.6	+23	+67.6
Printers	3	87	45.5	3	58	33.2	-29	-33.3
Rotorua Newspapers (Daily Post)	1	70	36.7	1	60	34.2	-10	-14.3
TOTAL	5	191	100.0	5	175	100.0	- 16	- 8.4

From the above table it is evident that the employment decline in the group would have been more severe had not the Paper Products enterprise experienced employment growth. In 1987, 45.5% of the sectors labour force was concentrated in the Printing component of the group. In 1990 all three subcategories employed similar numbers: an internal structural change as a result of the various restructuring influences.

What has contributed to the growth of employment of the paper product manufacturer? Holmes Supa Sacks, commenced manufacturing small paper bags for sweets approximately 10 years ago. The Company is now one of three national paper sack manufacturers, the other two being Multiwall Packaging Ltd, a 100% CHH owned subsidiary located in Penrose (Auckland) and the Ace

Bag Company in Palmerston North (80% CHH owned). A feature of the Paper Sack industry appears to be the operation of managed competition. Holmes manufactures a range of paper sacks, similar to the 'kleensacks' produced by Multiwall and Ace, for industrial customers, particularly the Dairy industry. Other bag products are manufactured for NZ Coal, Mr Chips, Courier and Fastpack bags. The Company tenders for the supply of sacks for the NZDB along with Multiwall and Ace and is usually awarded part of the NZDB's requirements. NZDB activity on the World Spot Markets between August and February, requires production to be almost exclusively orientated towards supplying the NZDB resulting in 24 hour shifts and flexible production. Holmes also tenders for the supply of rubbish sacks for Foodtown, 3 Guys and Woolworth supermarkets. Paper used to manufacture Holmes sacks comes from Kinleith (CHH) and some laminated papers from Paper Coaters (Auckland) a part of the Nylex group (an Australian Company). The growth of Holmes is tied to National Prime Movers - NZDB (demand side) and CHH (supply side). Production for the NZDB represents Holme's internationalisation to a significant degree. All of Holme's production is concentrated in Rotorua.

#### CHANGES WITHIN ROTORUA'S FABRICATED METAL PRODUCTS, MACHINERY AND EQUIPMENT INDUSTRIES

The Rotorua Metal Products and Machinery and Equipment industries consists of a diverse group of activities manufacturing (or assembling) fire trucks and trailers, tool, die, jig manufacturing, industrial machinery and equipment manufacturing, nail manufacturing, metal joinery (aluminium) motor reconditioning and spring manufacturing. The group as a whole experienced a 23.6% decline in employment between 1987 and 1990 (adjusted 33%). From the table below it is evident that different activities within the group experienced different rates of decline and one group experienced a

considerable employment growth. The largest numerical decrease was recorded in transport related activities followed by the closure of a company that provided services to the metal trades.

TABLE 5.9 FABRICATED METAL PRODUCTS, MACHINERY AND EQUIPMENT  
ACTIVITY UNITS AND EMPLOYMENT

FABRICATED METAL PRODUCTS, MACHINERY AND EQUIPMENT	1987			1990				CHANGE BETWEEN 1987 - 1990	
	No. of firms	No. employed	%	No. of firms	No. employed	%	% of group	Numerical	%
Transport	3	240	36	2	116	- 23	- 26	-124	- 52.0
Industrial Machinery & Equipment	8	214	32	8	146	- 29	- 33	- 68	- 32.0
Sawblade manufacture	2	46	7	2	42	- 08	- 9	- 4	8.0
Service Industry to Metal Trades	1	100	15	—	—	-100	-100	-100	—
Other (Nall manufacturer, Metal Joinery, motor reconditioning, springs)	8	67	10	12	205 <sup>1</sup>	+ 40	+ 32	+138	+273.0
TOTAL	22	667	100	24	509 (448)	1	(33)	-158	23.6

Source: Business Statistics data 1987 and 1990

Note 1: Includes 61 employed by Prolog Structural Metal Products which is likely to have been included within figures for Waipa Mill in 1987. The adjusted percentages have been calculated by reducing the totals by 61 to facilitate better comparison. This figure also includes 3 "new firms" that did not have 10 or more employees in 1987.

#### A: Heavy Transport

In 1987, there were three companies in the transport group - assembling fire trucks and trailers. One of these had closed down by 1990. The two remaining companies had experienced ownership changes. Mills Tui was bought and re-sold by an English Company (Chubb) and is now a wholly owned subsidiary of Fuelquip. This firm is one of two New Zealand companies assembling Fire Trucks, the other located in Auckland. International markets for this firm are subject to competition from Japan but the old parts of the "British Empire" continue to remain loyal customers. The final form of fire

truck assembly is likely to be reworked within an Australasian context in which research and development may be concentrated in Australia with assembling conducted in New Zealand. At present most of the production of between 22 - 30 fire trucks is purchased by the NZ Fire Service.

The second company, Road Runner Trailers was recently purchased (1991) by the NZ subsidiary of Domett-Fruehauf, an American Company. Road Runner Trailers was established in 1973 and until the early 1980s assembled approximately 80% of NZ's output of logging trailers, 30% of which was exported to New Guinea and the Solomon Islands. Before being taken over by Domett-Fruehauf, Road Runner Trailers had concentrated on building customised tautliners (container vehicles) under licence to Bow Aloy (a British Company). Road Runner operates a separate "curtain factory"<sup>1</sup> in Rotorua. Road Runner currently produces 40% of NZ's container vehicles and restructuring within the industry since the mid 1980s has resulted in fewer players. The major implication of the change in ownership has been the integration of the Rotorua operation within the total global operation of the American parent. Components such as axles and suspensions manufactured by the American parent are now almost exclusively used in the assembling of trailers in Rotorua.

Changes in the spatial distribution of production and offshore parents taking full control of onshore production facilities, have been two well documented features of the restructuring of the motor car assembling industry (Britton 1992<sup>2</sup>, Greer 1990<sup>3</sup>). These two features appear to have occurred in the restructuring of heavy vehicle assembling if Road Runners of Rotorua is a representative example of the industry. For car assembling this has resulted

1 "Curtains" are the roll up sides of trailers.

2 Britton in Changing Places in New Zealand: A Geography of Restructuring.

3 Greer in Turning it Around: Closure and Revitalisation in New Zealand Industry.

in production being planned and integrated in accordance with the multi-national car manufacturers global strategies. Car companies are now in a position, without the impediments of tariff barriers, to fully rationalise their operations across national boundaries. This appears to have also occurred in heavy vehicle assembling. However, further research in the absence of industry specific studies, is required to confirm this. One conclusion that can be made is that restructuring within both cars and heavy transport equipment is international in context.

**B: The Manufacture of Industrial Machinery and Equipment**

Two companies within this group were surveyed - Hayes Engineering and Mercer. The first mentioned Company originally manufactured equipment for the timber industry when it commenced production 30 years ago. The Company presently specialises in the design and manufacture of machinery for the production of roofing and wall cladding profiles and structural sections such as "C and Z" purlins and metal framing components. In addition a wide variety of associated metal working equipment is also produced. Local engineering firms, with specialised equipment, supply specialised components on a short term contract basis. 90% of Hayes production is exported. The re-equipping of the Company with CNC lathes has been one of the major changes in the 1980s. Other changes include CAD, CA tool design and CAM. The Company hopes to operate an integrated CAD/CAM system in the future.

The Mercer operation in Rotorua is one of five branch plants operating nationally. The others are located in Christchurch (2) Auckland and New Plymouth. In addition to the NZ operation, the Company operates production facilities in Sydney. Internationalisation of the Company is further advanced by the importation of top of the range products into NZ. The Company both

nationally and in Rotorua, produces a range of stainless steel products for both domestic and industrial customers. There is some branch specialisation - the "press shop" for the whole group is located in Christchurch. In Rotorua, stainless steel equipment for the Dairy Industry such as milk collection tankers and equipment for Dairy Factories, and "pulp and paper" industries are manufactured. Other products manufactured in Rotorua include a stainless steel equipment for McDonald's Hamburger Restaurant kitchens and products for the "domestic" market including sink benches and shower trays.

C: Saw Blade Manufacture

Twenty-eight years ago Saw Services was established as a sawdoctoring operation. Rotorua was selected by the Australian founder as a location because it was a sawmilling centre. The Company presently manufactures saw blades.

In 1990 Saw Services was purchased by Iazard-Irwin an American Company which in the early 1970s had established production facilities in Wellsford financed by the Development Finance Corporation (DFC) and Government regional development grants. The purchase of the Rotorua operation represented an extension to the Company's range of saw blade manufacture with each site specialising in a different product. The Company (both plants) produces 95% of NZ's tungsten tipped blades and is the third largest manufacturer in the World. Production is linked into international consumption with the parent owning and operating warehouse distribution centres in Canada and Sheffield (United Kingdom). The takeover of Saw Services by Iazard-Irwin resulted in product specialisation in Rotorua and Wellsford and the transfer of tertiary functions from Rotorua to Wellsford.

**D: Spring Manufacture**

Spring manufacture is included within "other products" of the Rotorua Metal industries. Archer Auto Springs manufacture approximately 5 - 10% of NZ's spring output. The company is subject to intense competition from Transport Wholesalers Limited (TWL), New Zealand's largest importer of heavy transport componetry. Repair of springs comprise the company's core activity, the company's main customers being the New Zealand Dairy Company and Kaingaroa Lumber's fleet of trucks. NZFP was once a major customer but divestment of its fleet of trucks to owner/drivers' has had a significant adverse impact on Archer's production. The two Rotorua heavy transport assemblers accounted for approximately 10% of Archer's production. Major re-equipment will be required if production is to continue in the future as the springs produced by Archer are outmoded. The Company has recently purchased an operation in Auckland which represents an extension of market services.

**Conclusion**

From an analysis of the above, the further recent internationalisation of the New Zealand economy and its impacts on the Rotorua Metal industries has and is continuing to produce differential impacts. The significant reduction of employment in heavy transport assembling has been accompanied by ownership changes and for trailer assembly to be increasingly incorporated into the global framework of its American parent. Fire truck assembly may develop within the context of an Australasian operation. Import deregulations and changes in technology have impacted onto spring manufacture along with the trend of major companies to divest their transport operations into owner/driver contract operations. The impact of NZ prime movers such as the

TABLE 5.10

MACHINERY AND EQUIPMENT AND METAL PRODUCTS  
MANUFACTURED IN ROTORUA 1991

MARKET	PRODUCT	ACTIVITY UNIT WITHIN COMPANY STATUS <sup>1</sup>	PARENT
International	Saw Blades	2 plant structure each specializing in different blade types	Izard-Irwin (USA) Parent company has wholesale facilities in UK (for European Market) and Canada (for North American Market)
	Machinery (Roll/Formers)	Concentrated production structure	Hayes Engineering H.O. Rotorua
National	Sawblades	2 plant structure	Izard-Irwin
	Tool die jig	Concentrated production structure	Hayes Engineering
	Fire Truck Assembly <sup>2</sup>	Concentrated one plant structure (one of two firms nationally producing fire trucks)	Fuelquip H.O. Wellington
	Tautliners (Container vehicles)	2 plant clone structure Company produces 40% of NZ's total production. NZ production part of parent's part-processing structure (use of components manufactured in the USA)	Domett-Frauhaus (USA) NZ H.O. Fielding
North Island/ Regional	Stainless Steel products for the Dairy and Timber industries and for the processing of horticultural products.	6 plant structure. 5 in NZ, 1 in Australia. Some part processing within the NZ branches.	Mercer Industries H.O. Christchurch
	Stainless steel products for McDonald's Family Restaurants		
	Stainless steel products such as sinks and shower trays for the domestic market.		
	Spring manufacture and repair	Concentrated production structure. (Company also owns an operation in Auckland to improve market services.)	Archer's Auto Springs H.O. Rotorua

Source: Local Survey 1991

Note 1: Classification based on Massey's (1984) "Three Major Organisational Structures of Production"

2: Production predominantly for NZ Fire Service at present

Dairy and Timber Industries is discernable. Overseas operators such as McDonald's have also influenced production within this sector. Internationalisation is represented by the exporting of 90% of Hayes production (tool die and jig) and the importation of certain top of the range products (Mercer). Branch plant structure within an international context is represented by Mercer and the production of saw blades links Rotorua's production to consumption in North America and Europe. The seed bed characteristics of the Rotorua economy (a timber town) have been important for the assembling of logging trailers, saw blades and the manufacture of engineering equipment. Table 5.10 details the range of machinery, equipment and metal products manufactured in Rotorua.

#### CHANGES WITHIN ROTORUA'S OTHER INDUSTRIES

One enterprise, one of two (1987) and one of three (1990) in the "other industry" category was surveyed. Employment in Kilwell accounted for 79% (1987) and 50% (1990) of this category's employment. Kilwell commenced operating in Rotorua in 1934, the owner moving from Auckland to Rotorua because the Rotorua Lakes offered an environment to test new designs in fishing tackle. Kilwell manufactures 70% of NZ made fishing rods of which 20% are exported. 75% of Kilwell's "Fibretube" production is exported and includes tubing for sailboard masts, sail battens, canoe and kayak paddle shafts and components for various industrial uses such as radio antennae. The opening up of the economy to foreign imports has resulted in production being geared to the upper end of the market because of the inability of the Company (and industry) to compete with cheap Taiwanese products. Kilwell imports firearms and hunting accessories as well as a range of fishing tackle and cheaper rods. Two distribution outlets in Auckland and Christchurch service all sporting goods retailers in NZ.

The deregulated environment in 1988 has resulted in fewer enterprises manufacturing goods similar to Kilwell, operating nationally. For Killwell deregulation has meant the discontinuation of production of cheaper ranges, these being imported now from Taiwan, and a more integrated organisation of production (local and imported) and consumption nationally through a formalised marketing arm, Kilwell Sports. (Kilwell has three divisions - Kilwell Manufacture (fishing rods and tackle) Kilwell Fibretube (masts, battens etc) and Kilwell Sports (importing and marketing)).

#### CHANGES WITHIN ROTORUA'S WHOLESALING OPERATIONS

Business Statistics data for the Rotorua Urban Area, based on greater than ten employees, for the Wholesale Trade recorded a decrease in employment from 756 (1987) to 694 (1990). The 62 person decrease accounted for an 8.2% decline between 1987 and 1990. The wholesaling sector in Rotorua encompasses many product types ranging from frozen foods, building materials, grocery items, glass, steel, automotive parts, tyres, pharmaceuticals, fresh vegetables stationery and beverages.

The following analysis of change focuses on two types of wholesaling products, grocery items and building supplies, which accounted for 37% (1987) and 35% (1990) of the wholesale sector's employment.

TABLE 5.11 EMPLOYMENT CHANGE IN WHOLESALING ACTIVITY UNITS

1983 <sup>1</sup>		1987		1990	
No. Firms	No. Employed	No. Firms	No. Employed	No. Firms	No. Employed
6	208	5	279	5	245

Note 1: Data derived from 1983 Industrial Survey

Between 1983 and 1987 there was an increase of 71 employees within this group which represented a 34% increase. Between 1987 and 1990 there was a decrease in employment of 34 persons or a 12.0% decline. The 34 person decline accounted for 55% of the wholesale sectors decline.

TABLE 5.12 EMPLOYMENT CHANGE IN WHOLESALE ACTIVITY UNITS BY COMPANY

COMPANY	EMPLOYMENT		
	1983	1987	1990
AWL	35	20	26
FOODSTUFFS	54	113	88 <sup>1</sup>
BENCHMARK	41	40	46
CARTER HOLT TIMBER	40	46	50 <sup>2</sup>
PLACEMAKERS	17	30	24
WINSTONES	21	30	--
TOTAL	208	279	245

Source: Survey information 1991

Note: 1. Survey (1991) total of 125 (therefore a 37 difference)  
2. Figures do not correspond with Survey data of 34 (1985) and 20 (1990).

#### A. Grocery Wholesaling

The two grocery wholesaling enterprises cater for two different grocery operations - supermarkets and dairy/superettes. In addition to market differentiation, the two grocery wholesaling operations represent competing organisations. The presence of the two wholesaling operations in Rotorua

underlies the importance of Rotorua as a link in an integrated marketing structure of New Zealand for the organisations concerned.

Foodstuffs is a cooperative owned by New World, Pak N Save and 4 Square. The company operates nationally and is divided into 4 regions "overseen" from Auckland, Wellington, Christchurch and Dunedin. Centralisation of warehousing operations has witnessed the closure of three warehouses - Hamilton, Tauranga and Gisborne within the Northern Region in 1989. Three warehouses remain - Whangarei, Auckland and Rotorua. The Rotorua operation, as a result of the centralisation, now services a greater market area extending from Hamilton to Turangi/Taumaranui and the Bay of Plenty and Gisborne. In addition to the wholesale operation for the supermarkets, Foodstuffs in 1991 opened a Cash and Carry Gilmour Warehouse in Rotorua, to service and supply dairies and service stations. The recent opening of the Gilmour operation is an attempt to penetrate more fully and extend into a market segment serviced by competitor organisations.

AWL, has experienced a number of ownership changes during the 1980s being owned by Lion Nathan and International Dairy Foods ( a Hong Kong Company). The present owner is J Rattray and Sons which purchased the seven branch chain to provide the Northern link of a national distribution chain. The Rotorua operation supplies an area covering South Waikato, Eastern BOP, Turangi and Raetahi.

Changes such as the establishment of a computerised stock control system able to be accessed at "branch level" to the Central Warehouse, the deregulation of the transport industry and the intensification of competition at a national level underlies changes which have occurred and are continuing to occur within the wholesale sector. The refinement of computer stock control, and

the closure of warehouses in other centres, has translated into an employment gain for Rotorua (in 1991, 125 persons were employed by Foodstuffs - Survey comment).

#### B. Hardware and Building Supply Companies

The three hardware and building Companies represent an overwhelming proportion of the hardware and building supply product "marketed" in Rotorua. Benchmark, with its Head Office in Auckland, operates 40 branches throughout the North Island. It is owned by an Australian parent Burns-Philips International. The two remaining Companies, CHH and Placemakers (FCL), operate "shop locations" in Rotorua reporting to Regional Offices in Napier (CHH) and Tauranga (Placemakers).

Both New Zealand Companies participated in merger activity in the 1980s with CHH taking over Smith and Smith; and Placemakers, Winstones. Both "retailing" operations are currently (1991) experiencing divestment by parent companies. CHH has divested to a local firm an aluminium and wooden joinery factory it purchased in the 1980s whilst the Placemaker operation has recently become a 50/50 partnership - Placemakers and the Branch Manager. While stock control, point of sale merchandising and re-ordering are becoming increasingly computerised, linking the various branches of both Companies to their respective central national warehouses, technological changes of this type have as yet had little impact on the Rotorua operation of both CHH and Placemakers. However, there is a trend for certain tertiary functions such as the processing of wages and accounts and human resource management, being removed from the Rotorua operation to either Head Offices (Benchmark) or Regional Offices (CHH) and this may partly explain the downsizing of staffing

levels which have occurred since the Business Statistics data was compiled. (In 1991 Placemakers had a staff of 16 and CHH 20.)

### Conclusion

The wholesale sector in Rotorua is caught up in the restructuring of wholesaling activities currently occurring in New Zealand. Two trends occurring in the restructuring of wholesale activity include centralisation of warehousing on a national scale as a result of the application of computer technology for stock control and mergers of what previously were competitor organisations. As far as grocery wholesale and timber/hardware wholesaling are concerned, Rotorua has been positively assessed as a distribution centre within an evolving and fluid national distribution system. Other wholesaling activities such as plumbing/bathroom and electrical supplies have featured mergers nationally. This has resulted in duplicate facilities in various communities being rationalised and closed. This has also been evident in Rotorua and to some extent has contributed to the decline of the Ti Street triangle as a light industrial area.

### FINAL COMMENTS

The deregulated economy has provided private sector activity with new operating conditions in which the forces of internationalisation transmitted through direct and indirect competition have been (and are) experienced by individual economic agents. These forces have been selectively assessed either positively or negatively with respect to activity in Rotorua. The new open environment has been important to and presents new opportunities for some activities that are likely to have already been incorporated in varying degrees into wider national and international networks. Other activities have

been denied opportunities and the changed economic climate has undermined their viability resulting in closure. The approach of exploring changes within the six manufacturing sub-categories represented in Rotorua and changes and responses experienced by individual enterprises included within the sub-categories, illustrates the selective nature and novel outcomes of the internationalisation of activity in Rotorua.

The increasing incorporation of surviving "local" activity into wider networks appears to be characterised by loss of local control through sale either to "prime-mover" New Zealand companies or offshore companies such as Domett-Fruehauf or Izard Irwin. It may be that competitive pressures on local activity were so great that at a time of critical decision, there was very little scope or alternative for the "courted activity" but to sell. What is becoming increasingly obvious in this phase of the internationalisation of activity in Rotorua, is that room for Rotorua private sector activity to manoeuvre is becoming increasingly restricted. What is also obvious is that once local activity is encapsulated into production/consumption networks of multi-locational and multi-national enterprises which have Head Offices outside Rotorua, decisions affecting the Rotorua portion of the company are made according to a different logic - a logic that is internationally focused.

## CHAPTER SIX

### RESTRUCTURING OF ROTORUA'S STATE SERVICE SECTOR

#### INTRODUCTION

State sector restructuring has been the subject of much recent attention and often discussed in general terms or in the relation to the restructuring of particular departments or activities such as Post Office and Railway Station closures. Very few studies have explored the combined effects of all government sector restructuring as it effects particular communities. The comprehensive study by Leslie (1990) of the restructuring of the state sector in Palmerston North and the State Services Commission's Social Impact Units (1989) study of public sector employment changes in Te Kuiti and Huntly stand out as exceptions. However, while this chapter focuses on the restructuring of Government Departments in Rotorua, this does not define the full scope of state activities in the economy of Rotorua. Because Government Departments are only a part of the total state sector activity, it is worthwhile to consider briefly the full extent of the state as an economic agent in Rotorua before concentrating on Government Department restructuring.

The State Sector is an important component of the Rotorua economy as shown in Table 6.1. In 1987, 6063 or almost 43% of those employed in the Rotorua Urban Area were employed by the State Sector of which 54% were concentrated in the Community, Social and Personal major industrial division. Transport, Storage and Communication accounted for 15% of the State Sector employment whilst the Business and Financial services and the Manufacturing industrial divisions accounted for almost 14% and 11% respectively of the State Sector employment. There were two major industrial divisions in which State

Sector employment was absent and these were mining and quarrying and electricity, gas and water. The State Sector includes Government Departments, SOEs, former SOEs such as Postbank and Telecom, the Waiariki Polytechnic, the Rotorua Public Hospital, primary, intermediate and secondary schools, and the Waipa Mill. In 1987, 1982 or 31% and in 1990, 2246 or 45% of Rotorua State Sector employees were employed in schools, the Polytechnic and the Rotorua Public Hospital. The Waipa Mill accounted for 702 (1987) and 333 (1990) employees representing 11.5% (1987) and 6.5% (1990) of the State Sector workforce. 83% (1987) and 88% (1990) of the State Sector workforce was employed in the three following major industrial divisions: Transport, Storage and Communication, Business and Financial Services, Community Social and Personal Services.

TABLE 6.1 STATE EMPLOYMENT (including SOEs) in Activity Units Employing 10 or more persons per major industrial division 1987 and 1990.

MAJOR INDUSTRIAL DIVISIONS	NUMBERS EMPLOYED						% CHANGE between 1987 - 1990	
	1987			1990			No's	%
	State	Div	State as % of Div	State	Div	State as % of Div		
1. Agriculture, Hunting, Forestry & Fishing	93	265	35.09	--	299	--	- 93	--
2. Mining & Quarrying	--	--	--	--	13	--	--	--
3. Manufacturing	702	3007	23.34	333	1875	17.76	- 369	-52.56
4. Electricity, Gas & Water	--	108	--	--	125	--	--	--
5. Construction	83	838	9.90	114	636	17.92	+ 31	+37.35
6. Wholesale & Retail Trade & Restaurants & Hotels	141	2869	4.91	126	2810	4.48	- 15	-10.64
7. Transport, Storage & Communication	924	1130	81.77	549	848	67.74	- 375	-40.58
8. Business & Financial Services	832	1776	46.85	348	1349	25.79	- 484	-58.17
9. Community Social & Personal Services	3288	4172	78.81	3609	4665	71.21	+ 321	+10.52
TOTAL	6063	14165	42.80	5079	12619	40.24	- 984	-16.23

In 1990 the State Sector's significance in the Rotorua economy had decreased. 5079 people or 40% of the Urban Area's workforce was employed by the various activity units that comprise the State Sector. The State Sector between 1987 and 1990 had decreased in significance in both percentage and absolute terms. The 984 person decline in the State Sector workforce accounted for 63.6% of the employment reduction within the Urban Area. There were substantial decreases in employment in the Manufacturing Industrial division, 37% of the State Sector's decrease or almost 24% of the total Urban Area employment decline. Business and Financial Services accounted for 49% of the State Sector and 31% of the total Urban Areas decline in employment, and Transport, Storage and Communication accounted for 38% of the State Sector's decline and 24% of the total Urban Area's employment decline. However, one major industrial division, Community Social and Personal Services experienced employment growth of 321 persons. This sector in 1990 accounted for 71% of State Sector employment or 28% of the total Urban Area's workforce. A total of 55% of the employment within the last mentioned Major Industrial Division was within Government Departments (45% in schools, the Polytechnic, and the Rotorua public Hospital).

It has been shown that by almost any indicator the state is of significance to the Rotorua economy. The state is Rotorua's largest employer and provider of various services. The state is also the community's largest provider of (reduced) welfare assistance. Any change occurring within any state activity is therefore likely to have implications for Rotorua. One such change explored in this chapter is the restructuring of Government Departments between 1985 and 1991 and what this has meant for Rotorua. The restructuring of Government Departments in Rotorua is occurring within new organisational frameworks for state activity being established on a national scale. This (re)organisational "formatting" has been made possible by the widespread

utilisation of computer technologies in all Government Departments. How then have Government Departments restructured in Rotorua? How can changes be measured and impacts evaluated?

One level of analysis of change is possible by drawing up two lists of State organisations for the years 1987 and 1990 and comparing these lists. In 1987 a total of 35 "parent" state organisations were operating in Rotorua. In 1991 this had been reduced to 29. The Custom's Department and the Audit Office (1991) have ceased operating from Rotorua as have the Government Printing Office, Meteorological Service (1991), the National Provident Fund and the Ministry of Energy's Geothermal Task Force (1990). The employment impacts of these closures on the Rotorua economy have been insignificant as none of the above employed 10 or more employees in either 1987 or 1990 and were therefore not present in the Business Statistic data. However, the closures do represent a loss of functions performed in Rotorua by the State Sector. However, the restructuring of Rotorua's State Sector has been more complex than this. This chapter focuses on the effects of restructuring of Government Departments in Rotorua in two ways. Firstly, the employment effects are discussed and secondly, how the restructured units now function within the national context of the department concerned.

#### CHANGING EMPLOYMENT WITHIN GOVERNMENT DEPARTMENTS IN ROTORUA

While it is evident from Table 6.1 that employment within Government Departments in Rotorua, when aggregated, has experienced change predominantly in the form of staff reductions since the mid 1980s, some departments representing types of activities have experienced more change than others. Leslie's (1990) classification, used successfully in his comprehensive analysis of the effects of state sector restructuring in

Palmerston North, has been used to divide Government Departments in Rotorua into the following six categories:

1. Welfare, Health and Community Services;
2. Education;
3. Research and Development;
4. State Owned Enterprises;
5. Government Commercial;
6. Government Non-Commercial.

Two sets of data - Business Statistics data based on activity units employing 10 or more employees and survey data collated between May and September 1991 are utilised to trace changes in the above categories. Although both sets of data are imperfect and require qualification, some useful comments can be made. Table 6.2 provides a broad structural picture of Rotorua's State Sector activities between 1985 and 1991.

TABLE 6.2 STRUCTURE OF ROTORUA'S STATE SECTOR ACTIVITY

STATE SECTOR TYPE	BUSINESS STATISTICS				SURVEY DATA			
	1987		1990		1985		1991	
	No's Employed	% of State Sector	No's Employed	% of State Sector	No's Employed	% of State Sector	No's Employed	% of State Sector
Welfare, Health & Community Services	717	22.10	668	29.40	569	21.93	558	29.95
Education	---	---	69	3.04	28	1.08	41	2.20
Research & Development	592	18.24	358	15.75	327	12.60	324	17.39
SOE's	1315	40.58	762	33.55	1205	46.44	581	31.19
Govt. Commercial	86	2.65	140	6.16	114	4.39	71	3.81
Govt. Non-commercial	533	16.43	275	12.10	352	13.56	288	15.46
TOTAL	3243	100.00	2272	100.00	2595	100.00	1863	100.00

Source: Business Statistics Data, and Survey Information 1991.

Despite obvious differences in employment figures between the two data sources, both sets of data present compatible pictures of State Sector structural changes when converted into percentages, except perhaps for SOEs. The percentages of each activity type is also presented in graph form in Figure 6.1. From the above table and the four graphs the following observations can be made:

- 1 There was a decline in employment within all categories except the government commercial and education categories (Business Statistics) and education (Survey Data).
- 2 Welfare, health and community service activities increased in importance within the Rotorua State Sector. This increase was not a result of increasing employment within activities included in this category, but because other categories, more specifically SOEs, had declined.
- 3 The SOEs had declined substantially in employment terms and their relative importance had also declined to 33% (Business Statistics, 1990) and 31% (Survey Data 1991) of State Sector activity in Rotorua.

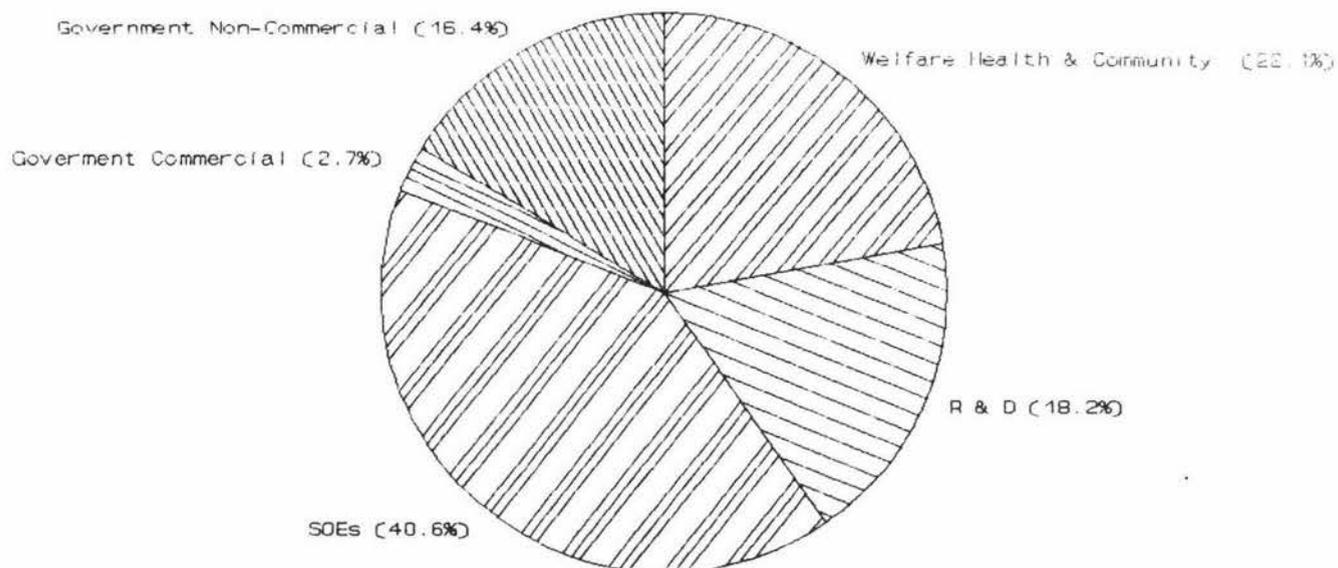
While these broad structural trends are evident within the Rotorua State Sector, the diversity of State Sector activity within each category requires further analysis of the specific impacts of change. The following discussion analyses change within each of the six State Sector categories.

STRUCTURE OF ROTORUA'S STATE SECTOR ACTIVITY

Figure 6.1

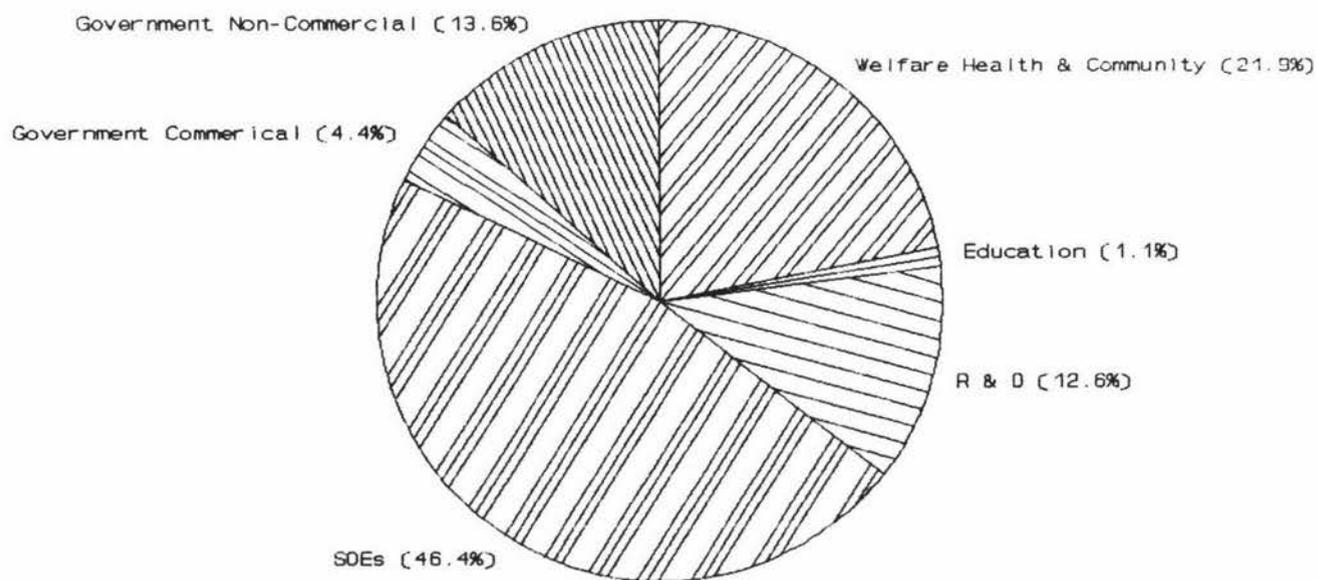
1

Business Statistics 1987

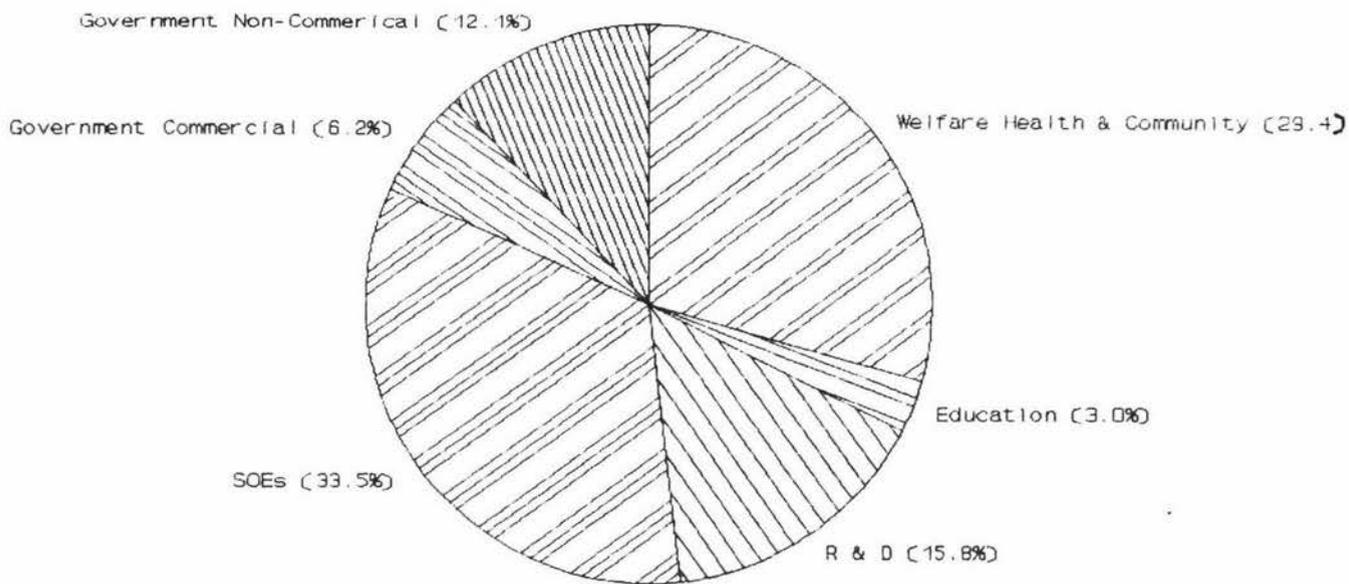


3

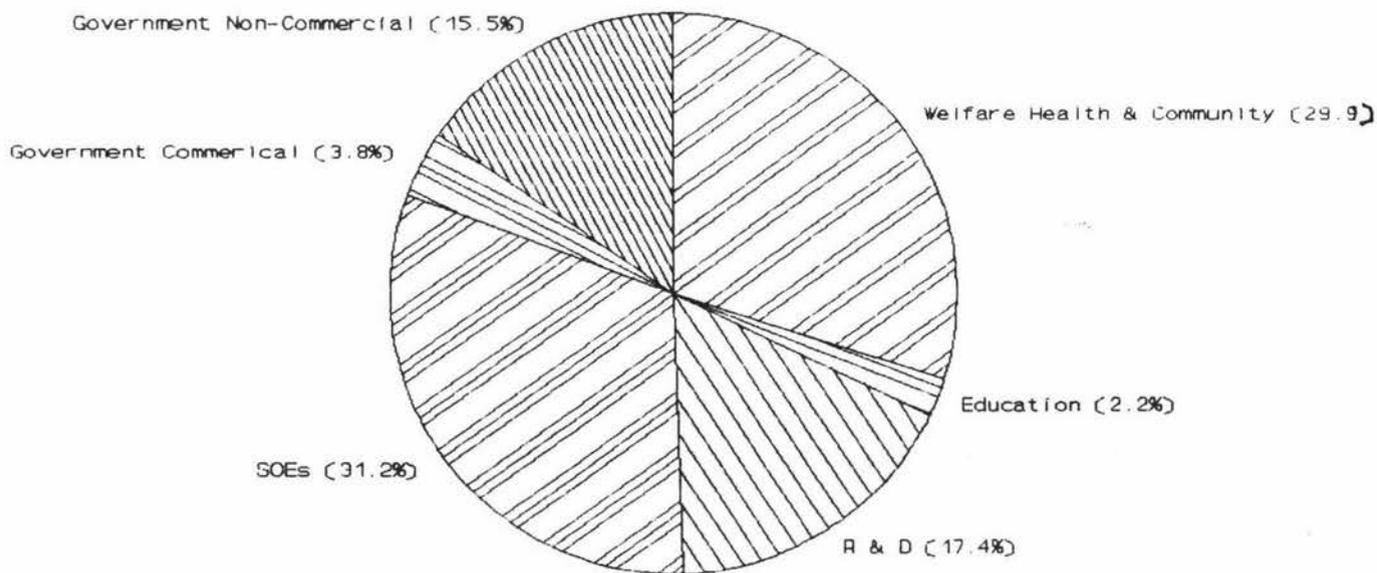
Survey Data 1985



Business Statistics 1990



Survey Data 1991



## 1. Welfare, Health and Community Services

Organisations in this category include the Department of Social Welfare, ACC, Bay of Plenty Area Health Board<sup>1</sup>, Maori Affairs, Department of Justice, NZ Police, Ministry of Transport, NZ Fire Service, Department of Labour, (OSH and NZES).

TABLE 6.3 EMPLOYMENT CHANGES IN WELFARE, HEALTH AND COMMUNITY SERVICES

Business Statistics			Survey Data		
1987	1990	% Change	1985	1991	% Change
717	668	- 6.83	569	558	- 1.93

Refer to Appendix 3 for detail relating to the above Table

Both sets of data show that there has been a decline in employment in departments included in this group. Since the mid 1980s the functions of the Health Department were transferred to the Bay of Plenty Area Health Board and since then several functions have devolved into the three hospitals within the Board's area - Rotorua, Tauranga and Whakatane. The Maori Affairs Department was also devolved into the Maori Land Court under the Justice Department (this portion being retained within this category) while the Iwi Transition Agency is now classified within the Government Non-Commercial Grouping. The Labour Department lost immigration to the Hamilton Office. Decline within the Welfare, Health and Community Services has been small (Business Statistics - 6.83% and Survey Data 1.93%).

1: Ex Department of Health. Employment figures for the Rotorua Hospital were not included.

## 2. Education

Organisations in this category include the Education Review Office, Early Childhood Education, Quest Rapuara, and the Ministry of Education.

TABLE 6.4 EMPLOYMENT CHANGES IN EDUCATION ACTIVITIES

Business Statistics			Survey Data		
1987	1990	% Change	1985	1991	% Change
---	69	+ 100	28	41	+ 46.43

Refer to Appendix 3 for detail relating to the above Table

Employment within the Education administrative organisations have not been of major importance within the Rotorua Government Sector. Both sets of data show that employment in education (excluding the Waiariki Polytechnic and primary and secondary schools) increased from the mid 1980s to 1991. One reason for the increase was the devolution of the Hamilton Education Board and the transference of their responsibility for the Bay of Plenty (BOP) to the Ministry of Education located in Rotorua. The establishment of the Ministry of Education in Rotorua added 18 persons (Business Statistics) to the Education Workforce. Another reason for the increase in education employment has been the transfer of education and training functions from the Labour Department to the "Education family". However, there will be a reduction of employment in this category with the downsizing of the Ministry of Education's presence in Rotorua, announced in May 1992, the result of another round of ongoing restructuring of the organisation occurring nationally. Education activities in Rotorua increasingly appear to be managed from Hamilton as "outposts".

### 3. Research and Development

Organisations in this category include the Forestry Research Institute, DSIR Soil Survey, DSIR Botany, DSIR Water Resources, DSIR Geothermal, Volcanoes and Geophysics and MAFFish.

TABLE 6.5 EMPLOYMENT CHANGES IN RESEARCH AND DEVELOPMENT ACTIVITIES

Business Statistics			Survey Data		
1987	1990	% Change	1985	1991	% Change
592	358	- 39.53	327	324	- 0.92

Refer to Appendix 3 for detail relating to the above Table

Research and Development activities are carried out by the Forestry Research Institute, MAFFish and various specialised DSIR institutions including the DSIR Water Resources which became an independent unit as a result of the restructuring of the MOWD. By far the most significant in employment terms is the Forestry Research Institute. (All organisations within this category have experienced change since mid 1992 as they became Crown Research Institutes but this aspect has not been examined.) Both sets of data portray a decline in employment although the survey data suggests that the decline is insignificant. This is because the survey data contains "constant employment figures for the FRI while the Business Statistics data reveal that employment at the FRI declined from 460 (1987) to 331 (1990). A constant figure is therefore impossible to accept. Another discrepancy is the figures for the DSIR. The Business Statistics show that DSIR employment declined from 132 (1987) to 15 (1990). The survey totals for all DSIR operations in Rotorua were 21 (1985) and 19 (1991). The magnitude of the decline as

expressed by Business Statistics must also be suspect. If the 1987 Business Statistics are reduced by 111 (the difference between Business Statistics and Survey results for the DSIR) the decline in Research and Development organisations is 26.8%. Similarly if 160 is added to the early figure in the Survey data to allow for the FRI discrepancy, then the decline in the Research and Development group is 33.5%. The percentage changes are therefore "reasonably comparable".

#### 4. State Owned Enterprises

Organisations in this category include Postbank, NZ Post, Telecom, NZ Rail, Housing Corporation, Works Consultancy, Works Construction, Rural Bank, BCNZ (Radio Geyserland), Airway Corporation, Forestry Corporation, Landcorp Farming and Management Services and Railways Passenger Bus Group.

TABLE 6.6 EMPLOYMENT CHANGES IN STATE OWNED ENTERPRISES

Business Statistics			Survey Data		
1987	1990	% Change	1985	1991	% Change
1315	762	- 42.05	1205	581	- 51.78

Refer to Appendix 3 for detail relating to the above Table

Both sets of data show that SOEs experienced significant employment declines in both numerical and percentage terms. This is not surprising as SOEs have been leaders in State Sector restructuring. Telecom, NZ Post and Postbank employed 462 persons in 1990 (Business Statistics) compared with the old Post Office total of 753 in 1987 (Business Statistics). The reduction of 291 employees amounted to a 38.6% decline. The Survey data presents a more severe employment decline from Post Office to the three "State Owned

Enterprises" with a decline of 57% or an employment reduction from 780 (1985) to 336 (1991). A part explanation of the disparity can be advanced in terms of the survey data including further recent employment reductions due to the ongoing nature of the restructuring process in the three organisations concerned.

New Zealand Rail (NZRail) in Rotorua, is one SOE which experienced an exceptionally sharp decline in employment between 1985 - 1991 (Survey Data) or an 83% decline. The Passenger Bus Group (Road Services) an important component of the Rotorua Railways operation, employed 110 drivers for both the "Intercity" and suburban networks along with mechanics to service the fleet of buses. The Passenger Bus Group (non-suburban) was privatised, while the suburban routes were taken over by Reesbys (a local bus company). Some of the drivers employed by the two divisions have found employment with the new network operators. In addition to the changes occurring in the Passenger Bus Group, staffing at the Railway marshalling yard has declined from 28 to 4 (survey data), in part a result of the deregulation of the transport industry which removed the railway privileges and has reduced tonnage through Rotorua. Business Statistics portray a 62% decline between 1987 and 1990. Business statistics data did not include the reductions of employment as a result of the privatising of Intercity which occurred in 1991.

Other SOEs such as the Rural Bank (sold to Fletcher Challenge Limited and later resold to the National Bank. [Daily Post, 27 November 1992]) and BCNZ (Radio Geyserland) experienced slight employment declines. Radio Geyserland may experience further employment declines in the future when commercial radio is privatised. Recently (May 1992) it was announced that Radio Geyserland has lost its status as an "independent" radio station. The station

is now managed from a regional centre (Hamilton) and has resulted in a small employment decline.

MOWD employment declined with the transfer of Water Resources to DSIR and the closure of the Rotorua portion of the Property Services Division after the "organisation" was sold to the British firm SERCO. Works Consultancy has experienced some staff reductions and is now of similar size to Private Sector "engineering consultancy firms". Similarly there has been a reduction of employment in Works Construction (Survey data specifies a reduction from 82 to 43 or a 47% decline, there being no comparable Business Statistics data) which could continue due to removal of "protected contracts" for road maintenance thereby enabling State Sector/Private Sector contestability.

Employment in the Housing Corporation remained constant (Survey data) but declined according to Business Statistic data. The Business Statistics which disaggregated various portions of an organisation into "several" Industrial classifications, is likely to have resulted in some portions of the organisation not showing up in the greater than 10 data. The Housing Corporation's restructuring into Housing NZ did not result in a (first thought) substantial employment reduction in the Rotorua operation. It had been predicted that at least half of the staff of around 103 (Survey Data) would be made redundant. However, only 20 positions were disestablished in the Rotorua office. The Rotorua portion of the "new" organisation became a regional centre with its responsibility to administer Housing NZ functions for an increased geographic area. (Daily Post, June 1992.)

## 5. Government Commercial

Organisations in this category include the Public Trust, Valuation NZ, MAFTech, MAFQual, Department of Survey and Land Information, Ministry of Energy, Quality Services Enterprises, Audit Office, Radio Frequency, and the Department of Commerce.

TABLE 6.7 EMPLOYMENT CHANGES IN GOVERNMENT COMMERCIAL ACTIVITIES

Business Statistics			Survey Data		
1987	1990	% Change	1985	1991	% Change
86	140	+ 62.79	114	71	- 37.72

Refer to Appendix 3 for detail relating to the above Table

Business Statistics and Survey data present "divergent employment trends" for State Sector organisations in this group. Employment (Business Statistics) increased from 86 (1987) to 140 (1990) representing a 62.8% increase. Survey data recorded an employment decrease 114 (1985) reduced to 71 (1991) or a 37.7% reduction. A partial explanation accounting for this divergence is the inclusion of employment figures for Quality Services (53) and the Ministry of Energy (12) in Business Statistic Data. These organisations are not included in the Survey data. The Ministry of Energy ceased operating in Rotorua late 1990. Included in the employment figures for the Ministry was the Geothermal Task Force which was established to close down geothermal bores within a 1.5 km radius of Pohutu Geyser - Whakarewarewa Thermal Park. Once the project was completed, the Task Force was disestablished (June 1990). Quality Services were not interviewed. If the 1990 Business Statistics data is amended by the reduction of 65 employees to be more comparable with the

Survey Data, the 62.8% increase becomes a 12.8% decrease. The Survey Data in addition includes employment data for small organisations such as the Audit Office and Radio Frequency (Ministry of Commerce) which did not appear on Business Statistics data because they employed less than 10 persons.

#### 6. Government Non-Commercial

Organisations in this category include NZTP, Internal Affairs, Inland Revenue, Department of Conservation, Iwi Transition Agency, Consumer Affairs and Defence.

TABLE 6.8 EMPLOYMENT CHANGES IN GOVERNMENT NON-COMMERCIAL ACTIVITIES

Business Statistics			Survey Data		
1987	1990	% Change	1985	1991	% Change
533	275	- 48.40	352	288	- 18.18

Refer to Appendix 3 for detail relating to the above Table

Employment in State Sector organisations within the above category declined 48.4% (Business Statistics data). This decline was almost entirely attributable to the decline in the Department of Internal Affairs which employed 310 (1987) and 39 (1990). Quality Services became a separate commercial organisation while the wildlife responsibilities were transferred to the Department of Conservation. The decline in employment was less severe according to Survey data (- 18%). However, only a portion of the original Department of Internal Affairs could be surveyed and this is likely to account for the discrepancy between the two sets of data. Internal Affairs (administration functions/passports) employed 51 (1985) and 41 (1991) which excluded Quality

Services and Wildlife. There is likely to be further reductions in staffing levels as a result of passport production being centralised in Wellington in mid 1992.

A total of 60% of the employment decline within the group was a result of the reduction in staffing levels in the Iwi Transition Agency from 90 (1985) to 52 (1991) (Survey Data). However, the first mentioned figure is overstated and is likely to refer to the total employed in Maori Affairs prior to the split into Iwi and Maori Land Court (Business Statistics 1987 - Maori Affairs total employment figure is 95) Internal Affairs, Inland Revenue and Defence declined by 10, 10 and 9 respectively between 1985 and 1991 according to Survey data.

## 7. Conclusion

Not only has there been an employment decline within the state sector in Rotorua, but this decline has been selectively and unevenly experienced by the various Government Departments concerned. In some categories, Education and Government Commercial (Business Statistics data only) there were increases in employment. However, the employment decline was most severe in SOEs. Business Statistics data records an employment decline within this group of 553 which accounts for 57% of the total state sector decline. Survey data shows an employment reduction of 624 which represents 85% of the total state sector decline in Rotorua. The largest employment reduction within the SOE group occurred within the PO activities (Telecom, NZ Post and Postbank) which accounted for 38.6% (Business Statistics) and 57% (Survey data) of the SOE employment decline. NZ Rail accounted for 20% of the SOE employment decline.

Leslie's (1990) study of state sector restructuring in Palmerston North also demonstrates the selective nature of state sector decline. Firstly, decline in Palmerston North (was) is expressed unevenly within the six categories, a pattern evident in Rotorua also. Four<sup>1</sup> of the six categories in Palmerston North experienced employment decreases while two recorded employment growth. As in Rotorua, SOEs as a group experienced the largest employment reductions. "Amongst the SOEs, Telecom (in Palmerston North) was responsible for two-thirds of the staff losses. These losses stemmed from the computerisation of telephone account issuing processes, the centralisation of Telecom Central's Fault Services to Wanganui and the merger of Palmerston North based Telecom Central with the Hamilton based Telecom Midlands, to form the new Telecom Central, headquartered in Hamilton" (Le Heron 1992,180). Functions and staff from Rotorua had been transferred to Hamilton before the merger of the two Telecom companies occurred. Leslie also noted that the potentially significant staff losses across all divisions of NZ Rail in Palmerston North particularly when the closure of the Palmerston North workshop was taken into account, were largely compensated by an inflow of staff transferring to Palmerston North following either the downsizing or closure of NZ Rail activities in outlying (in relation to Palmerston North) centres. This compares with the almost complete withdrawal of NZ Rail from Rotorua.

The second aspect of the selective and uneven impacts of state sector restructuring nationally is the differentiated effects (of national state sector decline) on individual communities. It would appear from comparing the restructuring experiences of state sector activity in Rotorua with that of

1: Welfare, Health and Community Services; SOEs; Government Commercial Enterprises; and Government Non-Commercial activities

Palmerston North, that the employment decline has been more severe in Rotorua. It seems evident that the centralisation trend, reinforcing "main trunk locations" rather than "branch lines", is marginalising the importance of Rotorua as a government centre. Rotorua's regional significance in the national state sector hierarchy is being lost.

#### ROTORUA'S STATE SECTOR'S WIDER FUNCTIONAL (NATIONAL) LINKS

The restructuring of Government Departments commenced under the direction of the Fourth Labour Government (1984 - 1990) has had differential impacts nationally in the communities where parts of the various organisations are (were) located. The thrust of the reforms were to create single focus commercial and/or non-commercial organisations from the original departments which performed numerous functions. This reorganisational focusing - each organisation cognisant of its "mission" and core functions - has been the first step in an ongoing reform process, the aim of which is to create an efficient organisation at a national level. Subsequent steps have involved:

- the removal of interdepartmental duplication of function;
- continual reappraisal of an organisations ensemble of functions in terms of core/peripheral and commercial logic;
- streamlining of operations based on the utilisation of information technology;
- flattened internal structural reorganisation with an emphasis on concentrating resources at the "coal face" .

All of the above have had a spatial expression.

Restructuring driven by the Central Government's philosophy to avoid duplication, has involved the transferring of functions from one department

to a more appropriate one. With the devolution of the Maori Affairs Department, Maori Welfare was streamlined into the Department of Social Welfare. The reforms proposed under the Ka Awatea framework complete the streamlining process, the new organisation's output limited to policy advice for the Minister. Social Welfare has relinquished the licensing of childcare centres to Early Childhood Education. The education and training functions of the Departments of Labour and Education were combined to form Quest Rapuara. Inland Revenue has transferred family support payments to the Department of Social Welfare while the latter organisation has transferred responsibility for "liable parent" to Inland Revenue. The NZES recruits for Defence's territorial forces. The important point to note is that the functions above are still performed in a local economy by state organisations and the employment impacts are likely to be minimal with staff possibly transferred to the new organisations.

A further type of restructuring involves State organisations ceasing to perform certain functions, these being taken up by the Community but not on contract basis. An example of this is the enforcement and policing of industrial awards which is now the function of Unions (Friendly Societies) rather than the function of the Department of Labour. This type of restructuring also does not necessarily represent a loss of functions performed by the Rotorua economy.

The current emphasis on the avoidance of duplication has shifted to the question of contestability with the Private Sector. If a Private Sector organisation can perform a function successfully and efficiently then the logic is that Government should withdraw from its "production" concentrating instead on the core responsibility of "government". The contestability philosophy is likely to be a powerful force for disintegration of functions from

State Sector organisations contributing to the continuing downsizing of Government Departments. Impacts could be diverse - functions may or may not be performed by organisations in Rotorua.

In order to understand and appreciate the restructuring of Government Departments at a local level, it is important to focus on how the organisation is structured nationally and determine how the Rotorua portion of the organisation is inserted into the National Scheme. (Refer Figure 6.2). Nationally, Government Departments are organised hierarchically into a formal two or three tiered structure - Head Office in Wellington, Regional offices and District Offices. An informal, fourth tier (or third tier) can be added to the structure and involves an agency, either a public or private organisation, performing some of a department's functions in a community where the department is not represented (for example a District Office may have closed or there may never have been a departmental presence). Within the Department's organisation there may be between two and four specialised processing centres that serve large areas for example, two or three such centres in the North Island and one in the South Island. In addition to the formal structure, at each level except the agency level, functions could be contracted out. The contracting out of these functions is under the control of the organisation concerned. The functional status of state sector organisations operating in Rotorua is shown in Table 6.9 A, B and C.

Figure 6.2

## CHANGING FUNCTIONAL STRUCTURE OF GOVERNMENT DEPARTMENTS IN NZ (late 1980s)

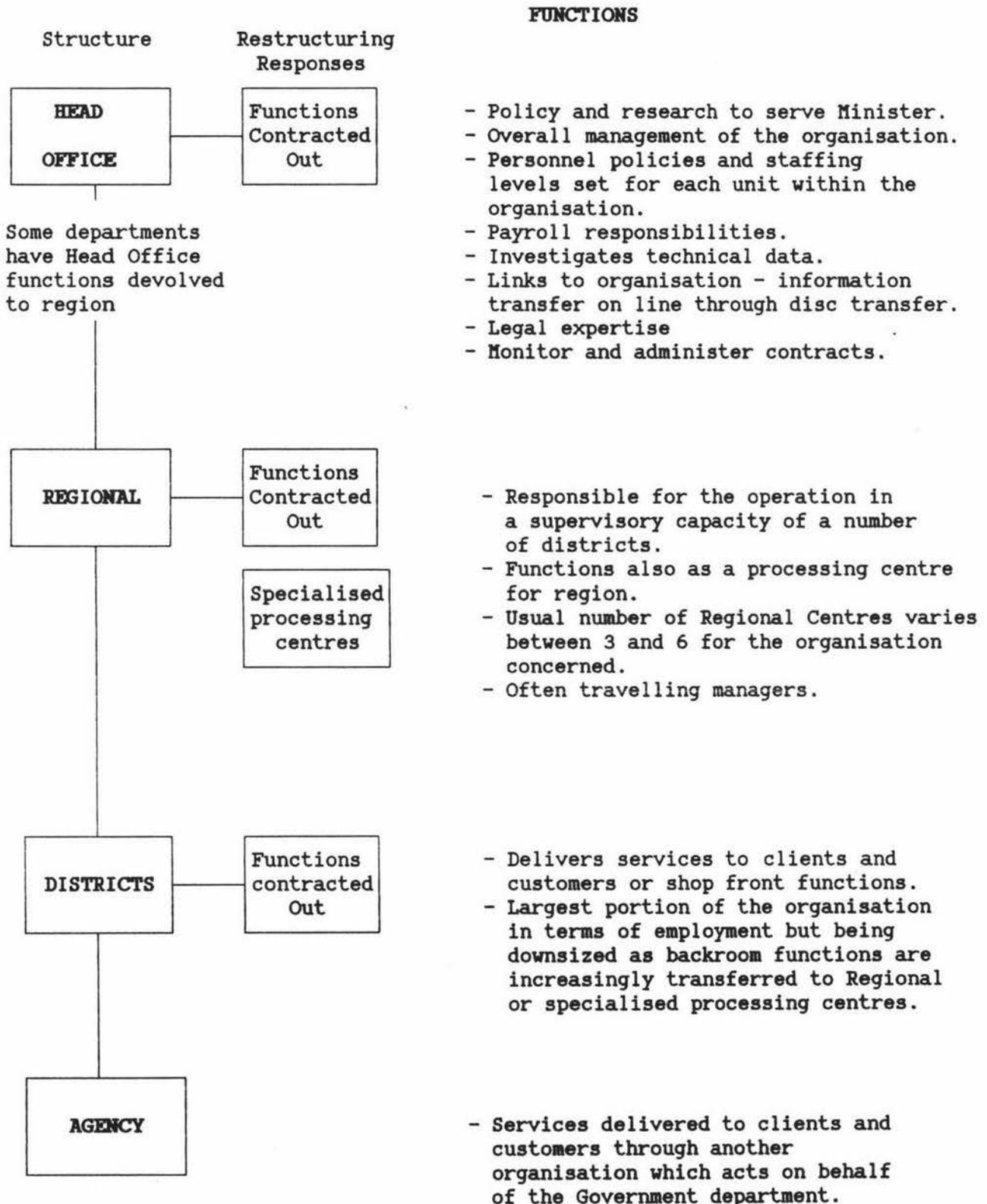


TABLE 6.9 FUNCTIONAL STATUS OF STATE SECTOR ORGANISATIONS IN ROTORUA 1991 - 1992

A State Sector Organisations Functioning in Rotorua in Sub-offices

ORGANISATION	SUB-OFFICE
NZBC (Radio Geyserland)	Hamilton
Early Childhood Education	Hamilton
Defence	Tauranga
Quest Rapuara	Hamilton
Dosli	Hamilton
Education Review	Hamilton
Health Development Unit (ex Health Department)	Functions devolved to Tauganga, Rotorua, and Whakatane Hospitals and "Head Office" activities located in Te Puke.

B Two Tier Structure

ORGANISATION	DISTRICT OFFICE
Iwi Transition Agency	Yes
NZTP	Yes
Landcorp Farming	Yes
MAFFish	Yes
DSIR Water	Yes
DSIR Soil Survey	Yes
DSIR Botany	Yes
DSIR Geology, Volcanoes and Geophysics	Yes
Internal Affairs	Yes
Maori Land Court	Yes
Consumer Affairs	Yes
Landcorp Managment	Yes
Ministry of Education	Yes
Department of Conservation	Yes

C Three Tier Structure

ORGANISATION	DISTRICT OFFICE	REGIONAL STATUS
FRI	Yes	Yes
Radio Frequency	Yes	--
Valuation NZ	Yes	--
Works Construction	Yes	Yes
NZ Rail	Yes	--
Works Consultancy	Yes	--
ACC	Yes	lost status
NZES	Yes	lost status <sup>1</sup>
Justice (Probation)	Yes	--
Commerce	Yes	--
Rural Bank	Yes	lost status <sup>2</sup>
Ministry of Transport	Yes	--
Department of Social Welfare	Yes	--
MAF Tech and Qual	Yes	--
NZ Fire Service	Yes	--
Inland Revenue	Yes	--
Justice (Courts)	Yes	--
Housing Corporation	Yes	increased status <sup>3</sup>
Police Department	Yes	Yes
Telecom	Yes	lost status under PO <sup>4</sup>
NZ Post	Yes	lost status under PO <sup>4</sup>
Postbank	Yes	lost status under PO <sup>4</sup>
NZ Rail Passenger Bus Group (Inter-City)	Point in Network	--

1. Some functions still performed in Rotorua - 1 Group Employment Liaison Scheme (Gels) Position, 1 Maori Perspective, 4 Employment Project Positions.
2. Tauranga office which was established as a separate branch (was sub-office of Rotorua).
3. Within the Housing NZ (1992) structure the Rotorua branch has been accorded greater status with the disestablishment of the Hamilton office.
4. Devolution of P.O. accounted for the demise of the regional status of the new organisations.
5. Organisations now not operating in Rotorua - Government Printing Office, National Provident Fund, Meteorological Services, Customs Department, Geothermal Task Force (Ministry of Energy), Audit Department.

## 1. District Offices

The largest proportion of State Sector organisations in Rotorua function as District Offices reporting to Regional administration centres in Hamilton, Auckland, Tauranga and Wellington. Hamilton is the regional office for the largest number of Rotorua's State organisations - Justice (Probation and Court) ACC, Quest Rapuara, Education Review Office, Valuation New Zealand, NZES, Radio Frequency, Department of Social Welfare, Inland Revenue, the New Zealand Fire Service and Telecom. Auckland is the second largest regional office location to which the Ministry of Transport, OSH (Labour) Works Consultancy, the Rural Bank, Housing Corporation and New Zealand Post report. It is perhaps significant that the last four mentioned are SOEs and the regional functions of those organisations may approximate Private Sector Head Office functions. New Zealand Rail, the Audit Office and the Department of Defence report to regional offices in Tauranga while PostBank's regional office is located in Wellington. In addition to the above, four education organisations with a presence in Rotorua are sub-offices of their respective Hamilton organisations - Early Childhood Education, the Education Review Office, Quest Rapuara and the Department of Soil and Land Information. The Department of Defence is a sub-office of Tauranga and Radio Geyserland is managed directly from NZBC in Hamilton.

## 2. Regional Offices and Specialised Functions

Rotorua is a Regional Administration centre for the Works Construction and the Forestry Research Institute is a centre of national importance that also performs regional functions for the Ministry of Forestry. The Hamilton Regional Office for the Police is located in Rotorua.

Since the mid 1980s the Health Department, now part of the BOP Area Health Board, has devolved functions to the Te Puke Head Office and to the three hospitals within the BOP - Rotorua, Tauranga and Whakatane. The Health Department in Rotorua prior to this change, functioned as a regional administration centre. Other State organisations in Rotorua that have lost their regional status since the mid 1980s have been the ACC, NZES, the Post Office and the Rural Bank. The first two mentioned organisations are now overseen by Hamilton as their regional centre. The Rural Bank in Tauranga is now not run as a sub-office from Rotorua but has attained a District status in its own right.

A number of specialised functions are performed by a small number of State Sector organisations in Rotorua. Their "Regional or District" boundaries differ substantially from most other "core" Government Departments which tend to cover the BOP triangle (Taupo - Tauranga - Te Kaha). MAFFish is responsible for the freshwater fisheries of the entire North Island. The Department of Commerce as far as petroleum and geothermal exploration and monitoring is concerned, administers all of New Zealand as its region. DSIR Soil Survey and DSIR Botany are responsible for research regions covering not only the BOP but also Poverty Bay to the East and Mount Ruapehu in the South. DSIR Geothermal, Volcanic and Geophysics's divisions "regional" boundary covers the entire volcanic plateau and White Island. The above research organisations, though performing important data collection and monitoring functions, do not employ a large workforce and are perhaps located in Rotorua because of the geothermal character of the area or because of the Rotorua Lakes. Other specialised functions are performed by the Maori Land Court and the Iwi Transition Agency. Their location in Rotorua reflects in part the large Maori population residing in the Central North Island providing the client base. Landcorp Farming's region covers all the North Island south of the Bombay Hills.

There are a number of State Sector organisations in Rotorua that do not operate within a three tiered structure - the Regional tier being absent. (Refer Table 6.9 B) Included in the "two tiered" group are five specialised research orientated (4 DSIR units and MAFFish) and two consultancy type activities (NZTP and Landcorp Management Services). There is also an information agency (Consumer Affairs). All of these activities are small in employment terms. A "consultancy structure" of Head Office and Branch for consulting/research activities does not appear to require a three tier structure containing supervisory and further processing functions. The Department of Conservation exhibits a two tier structure, functions at Conservancy (District) level "incorporate" regional functions. In other words there are "regional functions" devolved to the conservancy. A similar "regional responsibility" is perhaps devolved to the Maori Land Court, the Iwi Transition Agency and Landcorp Farming operations located in Rotorua. The Department of Internal Affairs is comprised of five district offices (Auckland, Wellington, Christchurch, Dunedin and Rotorua). With the last mentioned organisation it may be that the small number of units nationally allow regional supervisory/process functions to be incorporated at Head Office level.

In Rotorua, 23 state organisations within the three tiered structure and 14 organisations within a two tiered structure function as District Offices. Of these, 3 organisations function as Regional Administration Centres. However, between the mid 1980s to 1991, five Government Departments in Rotorua lost their Regional status. The impact of this reorganisation on Rotorua's workforce has been significant especially with the centralisation trend of clerical and some technical and specialised functions occurring in almost all State sector organisations nationally. Figure 6.3 A-F outline the present boundaries of State Sector organisations administered from Rotorua. It is difficult to express changing geographical areas of responsibility because in

a large number of organisations the original boundaries of activities are not known by present management. Figure 6.3 A-F illustrates that state sector activity in Rotorua is responsible for regions of variable geometry.

### 3. Towards Agency Status: Technology and Service Delivery Changes

The most significant changes occurring within Government Departments is the erosion of functions performed by the District Office. District offices are becoming exclusively client-retail-shop front or coalface orientated. Clerical functions are becoming increasingly centralised at Regional centres although local inputting of data is generally still required. The Ministry of Transport for example processes traffic infringement notices for the whole organisation in three national locations one of which is Hamilton. Account production and payment along with payrolls, are functions that most government organisations have already centralised. Other non-traditional clerical information such as prisoner identification photos and finger prints are being centralised by the NZ Police Department. For most Government Departments that operate in Rotorua, it has meant that clerical functions other than inputting are or have been transferred to other centres, especially Hamilton. However, a counter tendency has also occurred with the increase in functions performed by the Forestry Research Institute (FRI) for the Ministry of Forestry where payroll and accounts have been centralised to Rotorua. There is likely to be a further erosion of "input" functions as each organisation strives to become a paperless point within an electronic office.

### 4. Specialised National Processing Centres

While there has been a tendency to centralise clerical functions, usually at a regional level, some Government Departments and former State organisations

have established within their organisational structure specialised processing centres. The Inland Revenue Department has established three "factories" for processing tax returns and these are located in Upper Hutt, Hamilton and Christchurch. PostBank has established four Operational Support Centres nationally in Auckland, Hamilton, Wellington and Christchurch, which have taken all the "back office" work out of the individual branches. Internal Affairs is establishing a Passport factory utilising computer technologies to be located in Wellington.

The centralising trend has not been limited to the processing of paper only. NZ Post has established four Mail Processing Centres using CFC technology (Culler-size sorting, Facer-faces mail with addresses upwards, and Cancellers - franks postage stamps). In 1992 NZ Post commissioned an Optical Character Reading machines to read and sort typed addresses.<sup>1</sup> Other machines capable of reading hand written addresses are being assessed. Telecom has not only centralised account billing and administration to Regional (Company) offices but Directory Services (018) has been centralised nationally to Auckland and the repair of faults is likely to become nationally centralised in the future by employing micro-chip cards to repair faults. The Fire Service is replacing the present 22 control rooms with four located in Auckland, Hamilton, Wellington and Christchurch to which all 111 calls will be directed.

## 5. Contracting

In addition to the formal two or three tiered State sector structure is the contracting out of functions. This can occur at any level of the hierarchy. In Rotorua the unloading of railway wagons is contracted out. Social Welfare contracts out some of its services to organisations such as Rape Crisis and

1. Rapid electronic address decoders (READ)

Whakaruahau (the Maori equivalent). The Audit Office employs temporary accountants over peak periods. Agencies, representing the formal fourth tier of government organisation also represents a contracting out of functions.

#### 6. International Links of Rotorua State Sector Organisations

Two of Rotorua's State Sector research organisations have developed or continued to develop their international links. The FRI has provided consultancy services for the FAO and the Asia Development Bank and long before the mid 1980s restructuring of Government Departments, the FRI had fostered two way exchanges at an international level. Similarly the DSIR Geothermal, Volcanoes and Geophysics Division has conducted joint research projects (eg the Study of Volcanic activity on White Island) with Japanese and American research interests from time to time.

#### CONCLUSIONS - FUTURE DIRECTIONS FOR THE STATE SECTOR IN ROTORUA

Government restructuring nationally and therefore also in Rotorua is far from complete. Even among organisations which could be said to contribute the leading edge of Government restructuring such as the State-owned enterprises and privatised SOEs, there is no indication that the restructuring process has entered its final phases. Programs to reform the mode for delivering core Government and other services are very much in their infancy. It is evident that State Sector restructuring will continue to be a principal determinant of the path taken by the Rotorua economy in the future.

The general thrust of State Sector restructuring appears to be consistent with the belief that commercial and non-commercial functions of State Sector organisations should be conducted separately from each other. The State

Sector therefore is beginning to regroup into a smaller number of organisations providing essential non-commercial services and a number of other organisations delivering services to both the public and private sectors on a fully commercial basis.

A continuing trend for commercial organisations to be sold to private enterprise as part of the ongoing asset sale program is likely. Some commercial organisations however are likely to be retained in the State Sector because they possess a monopoly on the supply of certain information services and because the client base remains predominantly within the Public Sector. Other organisations are at present protected by legislation, for example Valuation NZ's mission is to provide local authority valuations on a five yearly basis.

There is potential for non-commercial government services to be transferred to private enterprise under a contract basis or devolved to the Community itself. Devolving responsibility for certain services to the Community assumes that the Community possesses sufficient skills and resources to competently and effectively deliver these services, otherwise the quality, range and effectiveness of the services could be dramatically impaired.

The way in which the size, shape and role of the State Sector is changing and evolving in New Zealand (and therefore Rotorua) is a complex phenomenon and one which is driven by and subject to a number of often contradictory factors both from within and outside the Government Sector. The commitment within the Government Sector to continually (re)define outputs and markets against core/peripheral frames of reference, to eliminate overlapping responsibilities or duplication of effort, is likely to accelerate rationalisation and transference of services and functions between organisations. Welfare, Health and

Community organisations are becoming increasingly subject to new disciplines and reforming requirements in the latest round of State Sector restructuring under the National Government.

The operating environment for Government commercial enterprises is likely to become more clearly defined as these organisations become increasingly reliant on market conditions to indicate where business strategies are best directed. Change within non-commercial organisations will remain politically driven. Policy changes, for example, in health and welfare can generate significant and immediate employment effects. A withdrawal of government support for a particular welfare service (State House Rentals) effectively makes all staff directly associated with that function redundant. However there are also likely to be indirect effects on "corporate services" for example a reduction in typists and "input staff".

Shrinking budgets and funding constraints will continue to place "disciplining pressures" on the organisations concerned and could be compensated for by the contracting out of functions and/or staff cutbacks in the parent organisation. Similarly deregulation of once protected markets is forcing State Sector organisations to structure their operations towards the eventual full contestability of markets that had been reserved for them.

The ongoing privatisation program will continue to reduce the size of the State Sector. Staffing levels and service delivery changes provided by these once state sector and SOE organisations will become fully subject to market considerations and to the strategic objectives of parent companies. The employment effects on Rotorua may well be as significant as those that occurred with Telecom, Postbank and NZ Post.

Added to the above is the "technological capabilities" of computerisation and information technology that will continue to effect staffing levels in all State (and Private) Sector organisations in a diverse range of occupations - manual, technical and clerical. The organisational changes which have occurred in the state sector both nationally and in Rotorua since the mid 1980s, rest on technical capabilities inherent in information technologies. Information technology provides a platform for further change. It is therefore likely that restructuring of state sector activity will be ongoing. The computerisation of functions is responsible for the centralisation of various operations in 1 to 4 locations or processing factories. There is therefore the continuing trend for local operations in all but a few selected New Zealand centres to function in the capacity of shop-front service centres, which could eventually devolve into agency status as an increasing range of "backroom" functions are centralised. While the implications of change for activity in Rotorua cannot be known in advance, if the trends evident since the mid 1980s continue, the state sector in Rotorua will continue to shrink. This will have continuing implications for office accommodation requirements of the "downsized" government departments.

Figure 6.3 A

1991 BOUNDARIES OF GOVERNMENT COMMERCIAL ACTIVITIES

ADMINISTERED FROM ROTORUA



<b>LEGEND</b>	
-----	- Radio Frequency
.....	- Valuation NZ

Figure 6.3 A

1991 BOUNDARIES OF GOVERNMENT COMMERCIAL ACTIVITIESADMINISTERED FROM ROTORUA

<b>LEGEND</b>	
-----	- MAF Tech
.....	- Public Trust
- . - .	- Audit Department



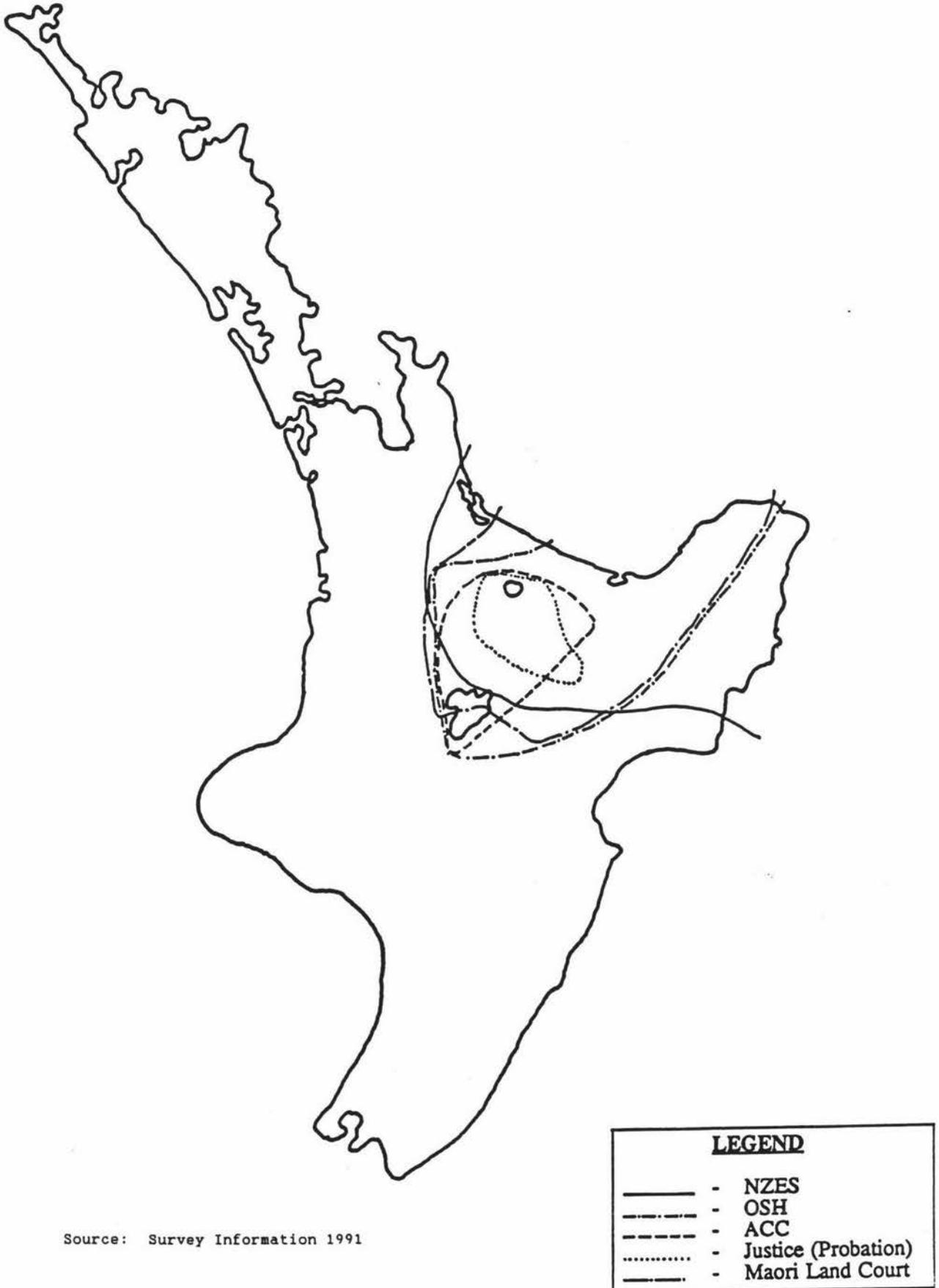
Figure 6.3 B

1991 BOUNDARIES OF GOVERNMENT NON-COMMERCIAL ACTIVITIES  
ADMINISTERED FROM ROTORUA



**LEGEND**  
- - - - Internal Affairs

Figure 6.3 C

1991 BOUNDARIES OF WELFARE, HEALTH AND COMMUNITY SERVICEACTIVITIES ADMINISTERED FROM ROTORUA

Source: Survey Information 1991

Figure 6.3 C

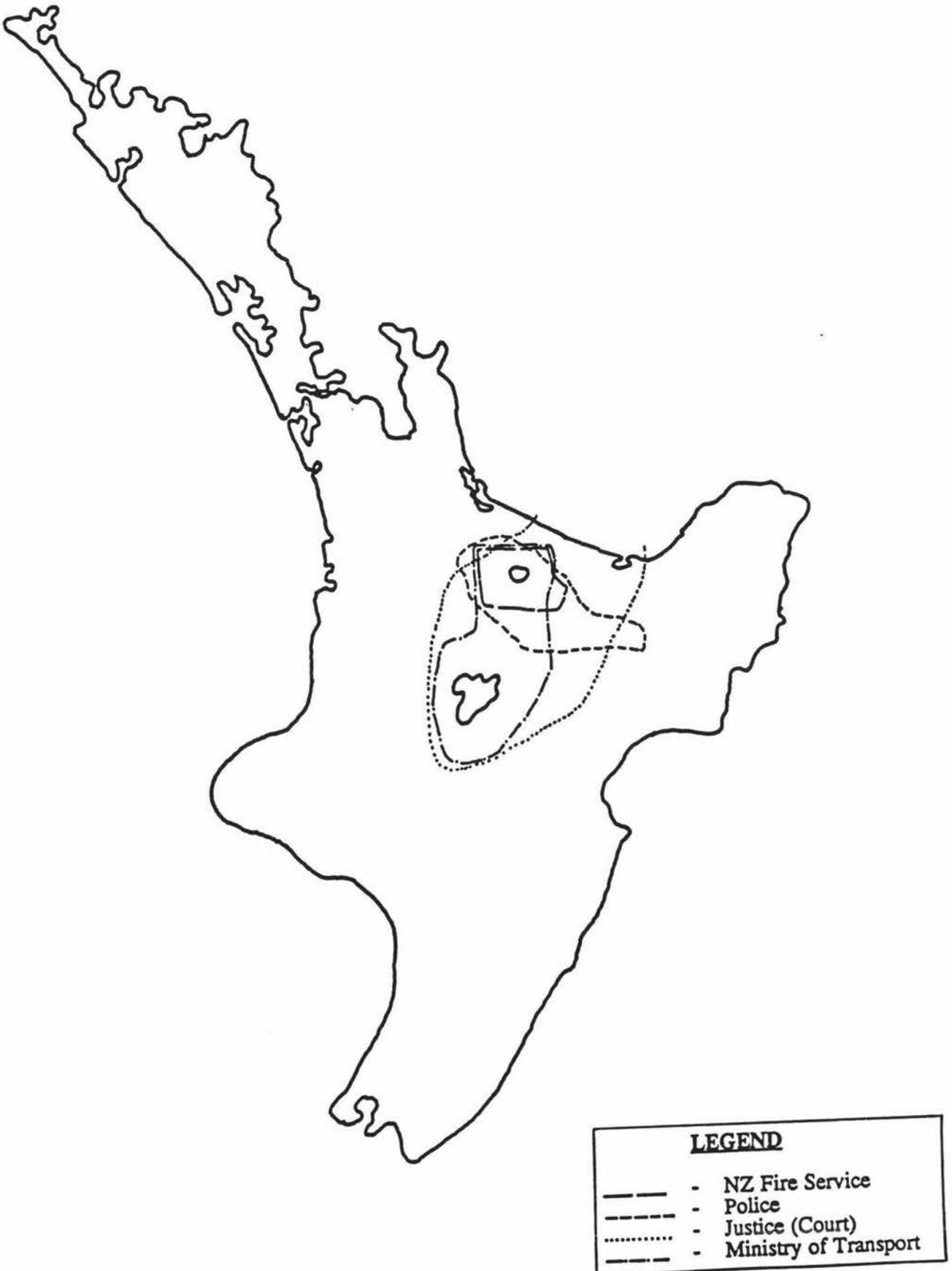
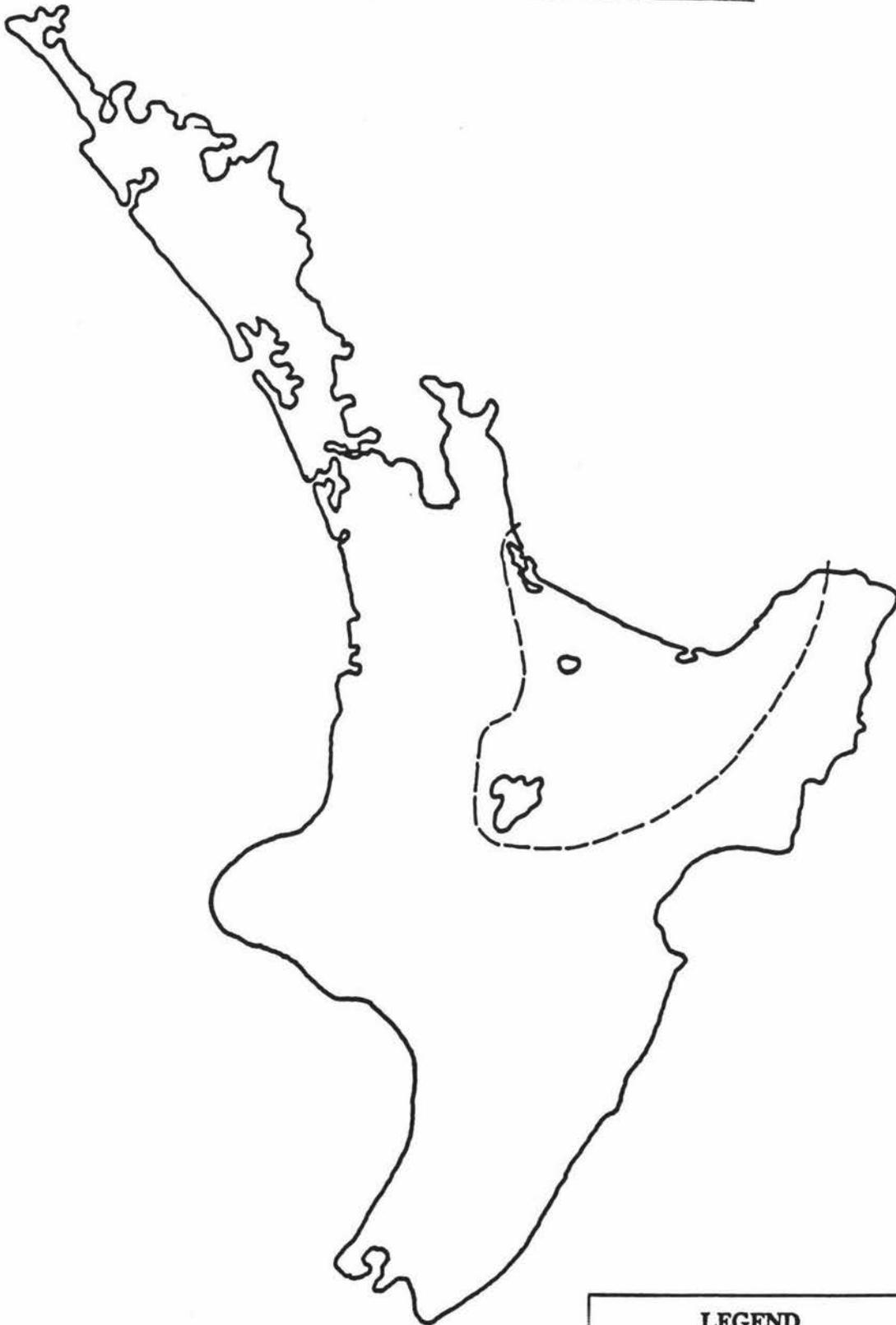
1991 BOUNDARIES OF WELFARE, HEALTH AND COMMUNITY SERVICEACTIVITIES ADMINISTERED FROM ROTORUA

Figure 6.3 D

1991 BOUNDARIES OF EDUCATIONAL ACTIVITIESADMINISTERED FROM ROTORUA**LEGEND**

- - Ministry of Education
- - Education Review
- - Early Childhood Education
- - Quest Rapuara

Figure 6.3 E

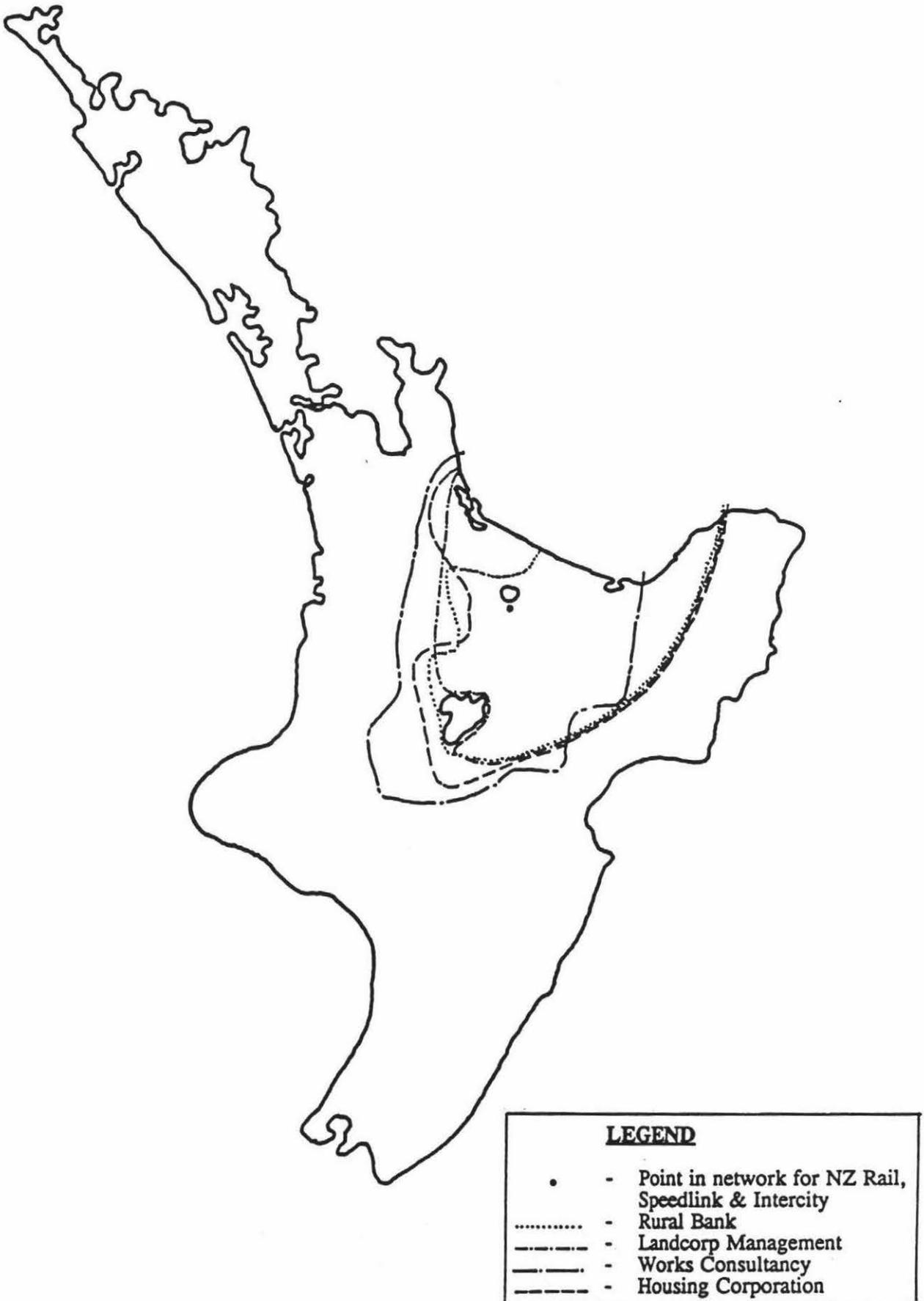
1991 BOUNDARIES OF SOEs ADMINISTERED FROM ROTORUA

Figure 6.3 E

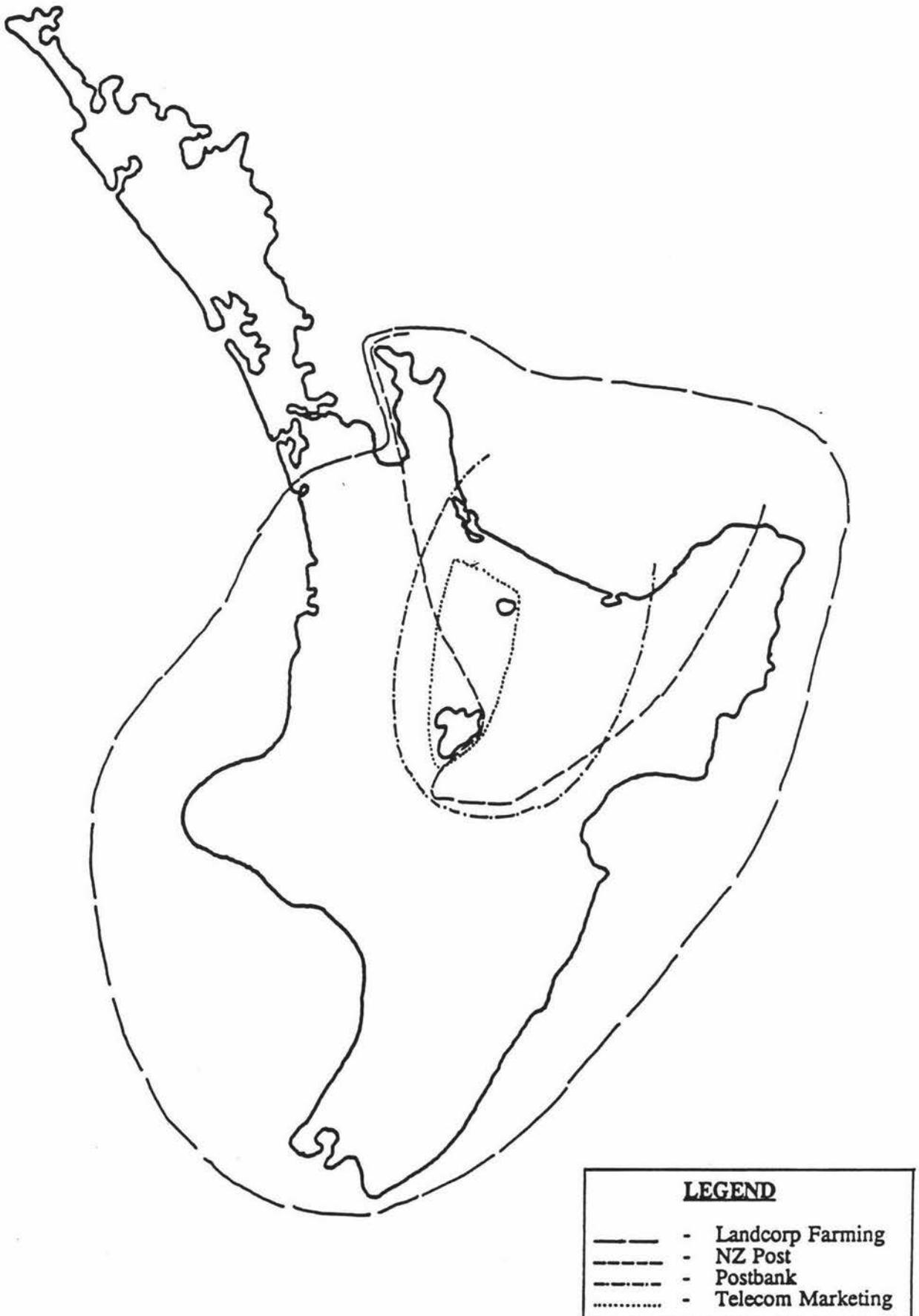
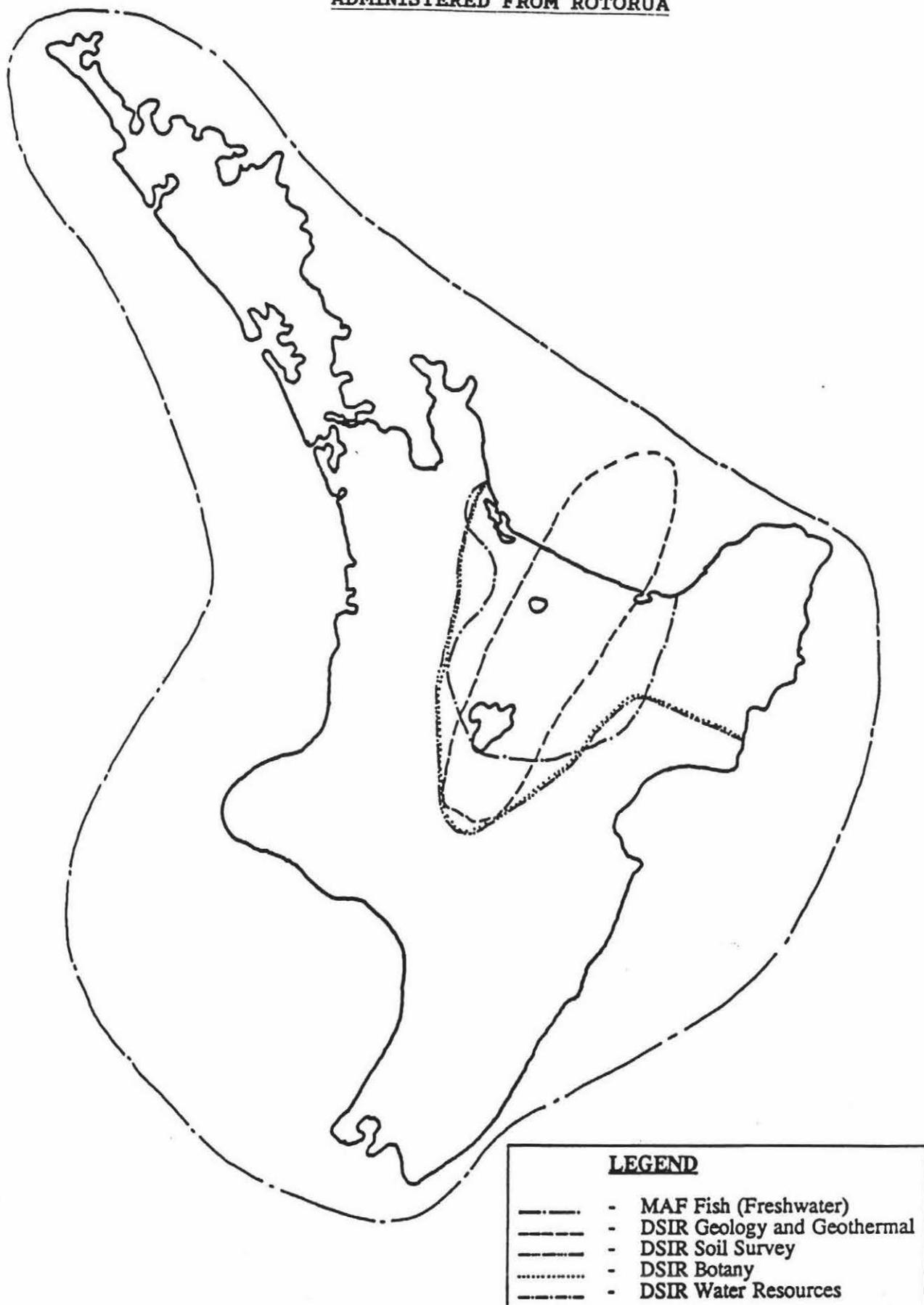
1991 BOUNDARIES OF SOEs ADMINISTERED FROM ROTORUA

Figure 6.3 F

1991 BOUNDARIES OF RESEARCH AND DEVELOPMENT ACTIVITIES  
ADMINISTERED FROM ROTORUA



## CHAPTER SEVEN

### ROTORUA'S INTERNATIONALISATION

#### CHANGING NATIONAL - LOCAL AND LOCAL - GLOBAL LINKS

##### INTRODUCTION

Chapters 2 and 3 outlined a broad theoretical framework for an interpretation of change and restructuring of activity in Rotorua since the mid 1980s. The main argument of Chapter 2 is that activity in Rotorua is connected unevenly to activities in other places. The future development potential of activity in Rotorua will therefore be constrained but not determined by the present functional relationships. Changes occurring in other places, especially global and national control centres, will eventually impact on activity in Rotorua though the connections and causes may be quite indirect. Activity in Rotorua is connected to the global economy through a specific policy mix established by central government which affects all activity in New Zealand. The circuits of capital theory helps conceptualise how Rotorua's activities are inserted into the global economy through specific geographies of production, realisation and reproduction.

Chapter 3 describes two processes inherent in capitalist production that are especially influential on changing spatial relationships. Organisational change through the process of concentration and centralisation and technological changes in production and circulation are qualitatively (re)shaping the links and relationships that Rotorua has with other places. These processes are activated by competitive pressures. At specific periods of time the rate of profit will be adversely affected and require organisations to adapt organisationally and technologically to survive. The period between 1987 and 1991 has been one of these periods.

Technological and organisational changes are two processes which occur globally and have local outcomes. They have the potential to and are drawing (excluding or alienating)<sup>1</sup> activity in Rotorua into wider or changed national and global production/consumption networks. New national and global links are being forged and as a consequence activity in Rotorua is inserted (excluded or alienated) into the global economy in a different way. It can be argued that the restructuring of activities in Rotorua are responses consistent with the restructuring and internationalisation of production and consumption at a global scale, the Rotorua dimension and outcomes however are, and always will be specific. The relationship of global to the local is expressed in Figure 7.1. Processes of change occurring within agents adapting to global change are schematically summarised in Figure 7.2.

The question invariably arises whether a particular theory or theoretical framework is satisfactory in explaining complex "real world" phenomena. By focusing attention on an activity's functional relationships and on two identified processes likely to alter these relationships, uneven and/or differentiated outcomes at a local level can be accounted for. However, has the complex phenomena of change been simplified to the extent that it must be questioned whether any important element in the equation (or possible alternative equation) has been omitted? A test of a particular theoretical framework is whether it can be applied to and guide empirical research. Can it be utilised as an aid in explaining complex change of seemingly disparate activity and outcomes such as the restructuring of manufacturing, wholesale and State sector services in Rotorua? Is the globalisation or internationalisation thesis a valid one?

1: Exclusion - activity still surviving but outside the economic mainstream.  
 Alienation - activity does not survive and closure occurs

Figure 7.1

GLOBAL - LOCAL INTERACTIONS

CHANGE AT A LOCAL LEVEL IS A RESULT OF OVERLAPPING INFLUENCES AT INTERNATIONAL, NATIONAL AND LOCAL LEVELS WITH DIFFERENTIATED AND UNEVEN FORWARD AND BACKWARD LINKS

↓

INTERNATIONAL INFLUENCES ARE LINKED TO NATIONAL AND LOCAL CHANGE THROUGH STATE ECONOMIC AND OTHER POLICIES

↓

KEY STATE POLICIES AFFECTING ACTIVITY IN ROTORUA HAVE BEEN:

- 1 REMOVAL OF THE REGULATED ECONOMIC OPERATING ENVIRONMENT REMOVING PROTECTION FOR LOCAL PRIVATE SECTOR ACTIVITY FROM INTERNATIONAL AND NATIONAL INFLUENCE
- 2 STATE SERVICES SECTOR RESTRUCTURING AND PROFIT MAXIMISATION AND EFFICIENCY DRIVES

↓

IMPACTS ON ECONOMIC AGENTS THROUGH EFFECTS ON PROFIT (COMPETITION) AND EFFICIENCY

↓

CHANGED OPERATIONAL IMPERATIVES CONTRIBUTING TO THE NECESSARY ADOPTION OF NEW ORGANISATIONAL AND TECHNOLOGICAL CONTEXT OF PRODUCTION

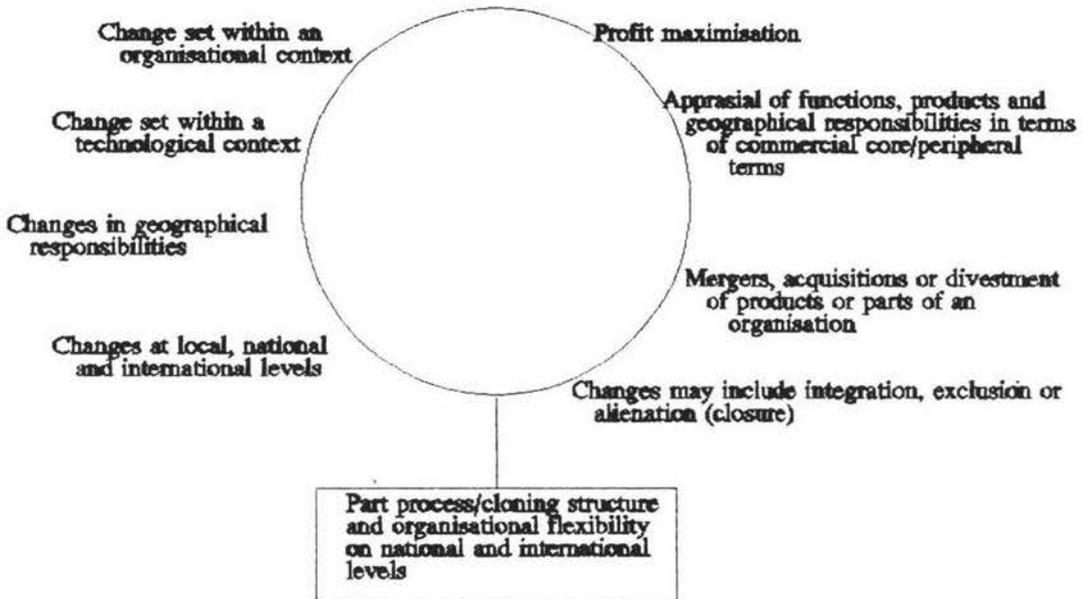
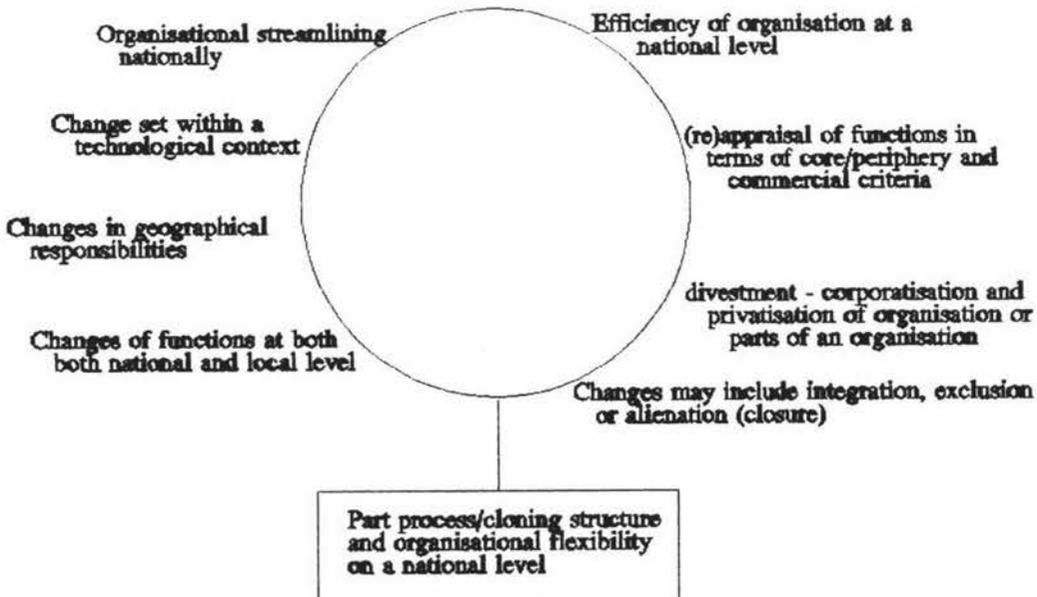
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INCREASING INTEGRATION, (EXCLUSION OR ALIENATION) OF LOCAL ACTIVITY INTO WIDER NATIONAL AND GLOBAL PRODUCTION, CONSUMPTION, AND REINVESTMENT NETWORKS

↓

CHANGES IN LOCAL ECONOMIC STRUCTURE CONSTRAINING FUTURE DEVELOPMENT POTENTIAL OF LOCAL ECONOMY

Figure 7.2

ORGANISATIONAL ADAPTION TO GLOBAL PRESSURES**A: PRIVATE SECTOR****GOAL OF PROFIT  
MAXIMISATION****B: STATE SECTOR****GOAL OF EFFICIENCY**

## GLOBALISATION OR INTERNATIONALISATION OF MANUFACTURING

Chapter 5 outlined significant changes that occurred in manufacturing and wholesale activity in Rotorua since the mid 1980s. The changes have contributed to changed relationships of activity in Rotorua within wider national and global contexts. Underlying the changed relationships is New Zealand's radically different connection to the global economy as a result of central government policies. The "internal" operating environment therefore has a global aspect and global influences "in modified form" have the potential to impact directly onto and affect activity in Rotorua. The form and direction of globalisation has been affected by the open border policies. Adjustments (restructuring) of activity within Rotorua to the effects of State policy change are the local effects of the globalisation of production, consumption and (re)investment. This is not always obvious because the causality is complex and diffuse. None the less there are some clear indicators that help summarise the nature and content of globalisation or internationalisation, for example ownership (industrial concentration). The globalising tendencies and centralisation (organisational) and technological changes as they have affected food processing, clothing manufacturing, timber activities, fabricated metal products, machinery and equipment and wholesaling activities in Rotorua are discussed below.

### 1. Food Processing Activities

Centralisation, through mergers and takeovers along with the deregulation of the internal New Zealand economy, underlie changes experienced by Rotorua's food processing activities. Accompanying centralisation has been technological changes that have enabled the "service and management functions" of production, such as accounts, to be transferred from the once local firm to

the new corporate Head Quarters located outside Rotorua. The deregulation of the economy, particularly the removal of transport restrictions, has been of significance for the beverage component of Rotorua's food processing activities with milk and softdrinks now no longer bottled in Rotorua.

At the beginning of the 1980s, of the food processing enterprises surveyed, all but one activity (Mair Venison) was locally owned. In the beginning of the 1990s, only one (Soanes Small Goods) was locally owned. Takeovers by GFW of a local bakery and pie manufacturer have encapsulated local production into an integrated and co-ordinated national production system which represents the domestic arm of a multi-national and globalising company. The takeover also contributed to Crumbcraft becoming a separate production facility from the bread baking business. The three GFW plants in addition exhibit a high degree of local integration and that could be described as "the Rotorua GFW complex". Affco's takeover of Tenderkist Meats similarly has contributed to a specialisation of local production within a co-ordinated national small goods manufacture, by a globalising company. Internationalisation is also evident with a local pastry maker holding the national franchise to manufacture pastry pie desserts for the multi-national fast food chain "McDonalds".

Of the two other food processing activities surveyed only one firm, Soanes Small Goods, is not involved in international activity. Soanes production is orientated to local and regional markets. Mair Venison, a New Zealand company with two plants, exports most of its processed and packed venison.

## 2. Clothing Manufacturing

While organisational and technological changes have not characterised the restructuring of the clothing industry in Rotorua, this is not to say that

these forces have been unimportant in affecting local clothing manufacturers. For example, these changes may have occurred elsewhere (Asia) and therefore have been responsible for undermining the viability of the local manufacturers. What can be said is that changes in clothing manufacturing in Rotorua appear to mirror changes that have occurred in the clothing industry nationally and also changes that have occurred internationally, particularly in other developed countries. The changes represent a trend towards a "new international division of labour" in global clothing manufacture. Clothing manufacturing in New Zealand and other developed countries is subject to intense competition from Asian producers such as Hong Kong, the Republic of Korea, Taiwan and China, who have an enhanced comparative advantage in terms of low wage labour and vast economies of scale due to long production runs. The open border policy, facilitated by a reduction of tariffs and import quotas, has enabled Asian clothing manufacturers to compete directly with New Zealand manufacturers on what once was a protected market. A result of this has been the uncoupling of national production (with Rotorua consequences) from national consumption. The responses of New Zealand's clothing manufacturers has been diverse ranging from:

- a) discontinuation of certain lines of production;
- b) ceasing production and becoming import agencies;
- c) relocating production facilities to Fiji;
- d) establishing franchise agreements with Fijian manufacturers;
- e) total close down;
- f) flexible production through organisational sub-contracting;
- g) homeworking.

Competition has affected clothing manufacturers unequally with more severe impacts experienced by CMT standardised manufacturers (closures in Rotorua) compared with the manufacturers of high quality fashion garments (discontinuation of woollen knitwear production in Rotorua). Flexible production arrangements and home-working have also been the response of one local clothing manufacturer (Eloise).

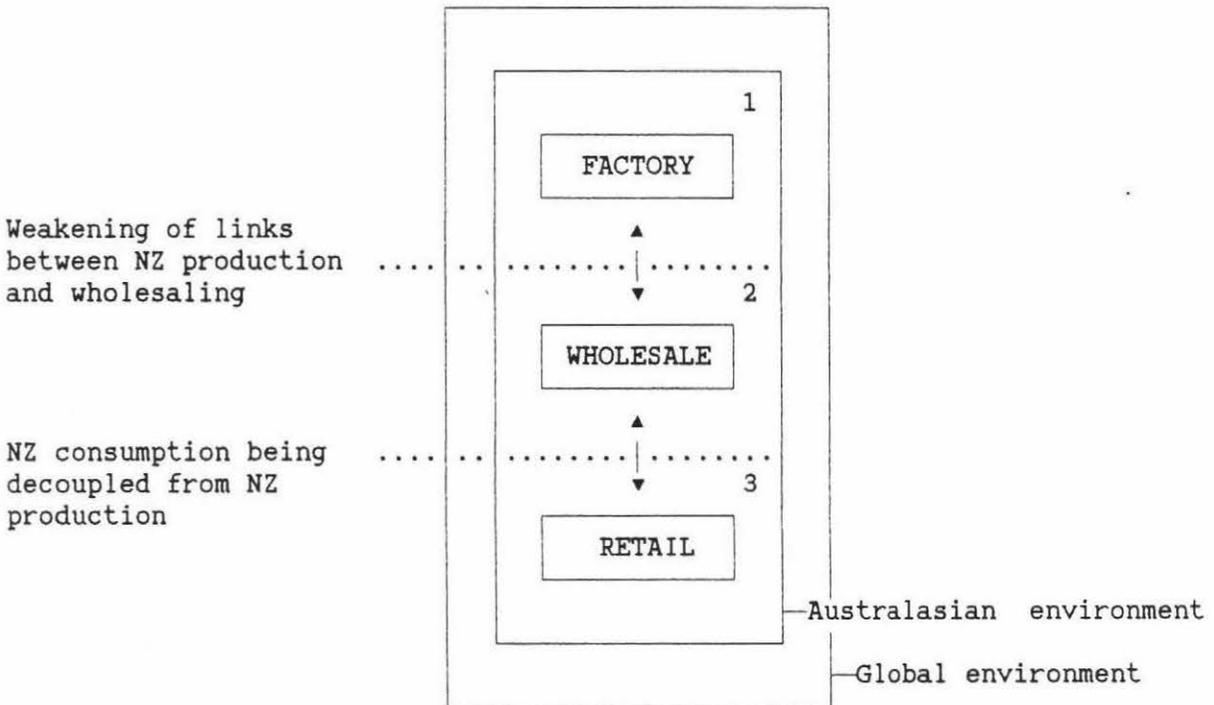
One important trend shaping the future nature of clothing manufacture both in New Zealand and Rotorua is the establishment of production facilities by Australian enterprises. The 1991 opening of the Corfu jeans factory in Thames is an example of this. Other Australian enterprises have entered into franchise agreements with New Zealand manufacturers. This is evident in Rotorua with "Halls Manufacturing". However, the type of clothing manufacture Australian companies are engaged in has been for the fashion end of the market as distinct from the manufacture of standard items produced and imported into Australia from Asian countries. CER arrangements, the low value of the \$NZ relative to \$A, lower labour costs and generally lower overheads (ACC levies are considerably lower in NZ compared with Australia - interview comment from "Eloise") underlies the changing international (Australasian) context of clothing manufacturing both in New Zealand and Rotorua.

The freeing up of import quotas has enabled chainstores and wholesalers to purchase directly from overseas manufacturers. This has impacted onto the production/consumption chain and weakened links between manufacturing, wholesaling and retailing to the extent that the chain is now "uncoupled" and characterised by volatile and unstable links which are expressed both temporally and geographically. Figure 7.3 below represents the changed nature of the production/consumption chain as it now affects the New Zealand and Rotorua clothing industry and the "overlapping" international

environments in which it is inserted. Before the restructuring influences of import quota and tariff reductions, links in the chain were reasonably stable (although retailers could purchase directly from the manufacturer) and production could be planned.

Figure 7.3

IMPACT OF GLOBALISATION ON THE NEW ZEALAND CLOTHING INDUSTRY



- 1 NZ production subject to foreign competition especially in standard items. Segments concentrating on fashion items but within an Australasian context.
- 2 Intense pressure on standard item manufacturers - very short contracts (2 to 3 weeks when the ideal time period is 6 months to a year) - late payment.
- 3 Chain store direct buying from overseas producers.

Source: Interview Impressions 1991

### 3. Timber Activities

Centralisation of timber milling activities in Rotorua characterised by mergers and takeovers, appears to have been insignificant as a restructuring force between 1985 and 1991. This may be a reflection of the high levels of

industrial concentration of timber milling that already existed prior to 1985 and the character of this concentration, for example the major timber companies - CHH (previously NZFP), FCL and FCNZ - operate production facilities in Rotorua. Although rationalisation of timber mills has resulted in dramatic decreases of milling operations nationally, there has been only one closure in Rotorua since the mid 1980s, the closure of Thurstons timbermill, after the takeover by NZFP. NZFP already operated substantial production facilities in Rotorua. Since the mid 1980s a Japanese company has established a new sawmill in Rotorua. The international orientation of all timber mills located in Rotorua has always been high as a significant proportion of production was (is) exported.

Perhaps the biggest change has been the context in which timber production now occurs. Firstly, CHH and FCL are now multi-national corporations and the Rotorua portions of the companies concerned are but a part of a global production system of which timber milling is but one aspect (FCL energy and paper; CHH paper and fishing). In other words centralisation across several industrial sectors. The second significant change has been the creation of a commercial FCNZ (and SOE) from the NZFS and the removal of constraining regulation favouring local milling operators over foreign operators. A third change is the direct linking of local production to the Japanese market by Tachikawa Sawmills.

Technological change, modernising and re-equipping existing production facilities, is occurring within all the mills in Rotorua. The re-equipment of the mills is essential for production to continue in the future and reflects the changing nature of the "coming-on-steam" of the second forest crop (planted in the 1960s) which is harvested younger and therefore has a smaller diameter log than the Depression planted crop. For FCNZ the re-equipping occurred

in 1991. The re-equipping of the FCL plant in Ngongotaha has changed the role of this facility which now operates as a part-processing plant linked to other FCL mills located in the Bay of Plenty. Optimisers (laser log readers) linked to computer control mechanisms are being installed in all timber mills in Rotorua, thereby enabling a reduction of wastage of the log resource in the milling process.

For the downstream timber users, restructuring responses have been differentiated and uneven and have included:

- a) the re-equipping with newer, often second hand optimisers and reprogrammable machines (John Crean and Global Timber);
- b) flexible sourcing of timber from the three major companies though not necessarily from the Rotorua portion of the company concerned (John Crean, Ashley International, Lockwood);
- c) establishment of backward supply contracts to an independent sawmill (John Crean and Global Timber);
- d) independent supply arrangements from main timber companies (Global Timber);
- e) purchase of a timber mill to guarantee supply (Lockwood's purchase of a mill in Putaruru supplies the company with 40% of its current timber requirements);
- f) tendering rather than renewing long standing business arrangements (Lockwood's non renewal of its transport agreement with Direct Transport may have contributed to the latter's demise);
- g) changes in employment numbers and conditions;
- h) discontinuation of some lines of production (Ashley International);
- i) decreased activity in international markets (Lockwoods).

It is evident therefore that centralisation as it has affected downstream timber activities and defined in terms of the wider definition of centralisation being "planned production" rather than single ownership, has occurred through takeovers (e) and "market management" (c,d,g). In addition technological changes in production processes have occurred since 1985.

#### 4. Fabricated Metal Products, Machinery and Equipment

##### A. Heavy Transport Equipment Assembling

The assembling of transport equipment, usually under licence to overseas companies has been part of New Zealand's post war import substitution industrialisation, required a high degree of protection and insulation from global influences to enable production to occur and continue. The size and production level of the total industry in New Zealand is tiny by world standards and produced by numerous assemblers. The "open border" and changed economic environment contributed to closures and rationalisation in the industry nationally. This has also affected activity in Rotorua. In 1983 three heavy transport assemblers were operating in Rotorua, in 1991 there were two. The result of the rationalisation is that in Rotorua the Firetruck assembler is one of two NZ assemblers and Road Runner Trailers (Dommett-Fruehauf) assembles 40% of NZ's container trailers.

Although transport assemblers were linked by supply and licence arrangements to overseas "parents" (by the mid 1980s the two companies still operating in 1991 were locally owned) the current restructuring via ownership changes is integrating the Rotorua operations more directly with their overseas parents, particularly Road Runner Trailers with the US parent Dommett-Fruehauf. The ownership changes in addition represent a withdrawal

of British capital and interests in heavy transport assembly. (Road Runner with the Bow Alloy licence and Mills Tui ownership by Chubb.) The current restructuring has also witnessed the retreat from export activity from the two heavy transport assemblers.

Although there is little local evidence of technological change, centralisation as a restructuring influence (globalising force) has occurred via mergers (Road Runners) and changes in ownership of Rotorua's heavy transport assemblers. The international context of this centralisation has been facilitated through New Zealand's open border industrial policy.

#### B. Metal Products, Machinery and Equipment

Companies and activities within the fabricated metal, machinery and equipment industry demonstrate the uneven influences of the processes of centralisation and technological change and the responses by the companies concerned. Hayes, with a concentrated spatial structure, exports 90% of its production to overseas markets. This overseas orientation has changed little since the mid 1980s. However, internal production processes have witnessed the commissioning of CNC lathes, CAD, CA Tool design and CAM. The Company aims to operate an integrated CAD/CAM system in the future. The technological change option has therefore been of importance to this company.

Mercer's insertion into the global economy is through the supply of equipment to globally orientated organisations in the dairy, pulp, paper and timber industries and through the American fast food chain "McDonalds". In addition Mercer is becoming a more internationally production orientated company, operating production facilities in Sydney. The local saw blade manufacture was taken over by the American company Izard-Irwin in 1990, which also

operates production facilities in Wellsford. Tertiary functions previously performed in Rotorua were transferred to Wellsford. Production in Rotorua is linked directly into international consumption with the "parent" owning and operating warehouse distribution centres in Canada and Sheffield (United Kingdom). Spring manufacture has been subject to intense competition with Transport Wholesalers Ltd (TWL) as a result of the "open border" and the Archer's Autosprings indirect "global orientation" declined substantially with the NZFP divestment of its fleet of trucks into owner/driver operators. Coping measures have focused on better servicing of its market through the purchase of facilities in Auckland.

#### 5. Wholesaling

Wholesaling of grocery items in Rotorua is controlled by two national companies since the sale of the AWL chain by International Dairy Foods (a Hong Kong company) to J Rattray and Sons Ltd. J Rattray and Sons acquired the seven chain AWL to provide the northern link of their now complete national distribution network for the supply of grocery items to dairies and superettes. The Rotorua portion of the chain is now integrated into a wider national distribution network. Foodstuffs operates a warehouse for New World, Pak and Save and Four Square. Foodstuffs operates nationwide. Penetration by foreign competition for the NZ grocery market (Coles Meyers through the Three Guys Supermarkets) has not as yet resulted in the establishment of wholesale facilities in Rotorua to service geographic markets of comparable size to the local facilities of the two national operators. Restructuring of grocery wholesaling nationally has involved:

- a) rationalisation of wholesaling units and increased geographic market responsibilities (Foodstuffs);

- b) penetration into new markets (establishment of a Gilmour outlet by Foodstuffs to service dairies, superettes and service stations);
- c) utilisation of new computer stock control technology.

The wholesaling of hardware and building supplies in Rotorua is controlled by three "globalising organisations" one of which is Australian owned and operates throughout the North Island only. The two national companies are CHH and Placemakers (FCL) and the Rotorua wholesaling outlets, integrated into a national consumption network represent the domestic marketing arm of the two multinational organisations concerned. Both CHH and Placemakers exhibit backward links into their respective companies production facilities. Restructuring has involved:

- a) the centralisation of tertiary functions such as payroll accounts, and human resources to "regional" centres (CHH) or head office (Benchmark);
- b) utilisation of computer stock control;
- c) establishment of 50/50 "joint venture" operations with local managers (ie. disinvestment by FCL).

What is obvious from changes occurring within the wholesaling sector in Rotorua is that takeovers (centralisation) and technological changes, such as computer stock control and computerisation of tertiary functions, have been influential in reshaping not only these activities in Rotorua but how they now function within the national marketing context of the organisations concerned. In addition to and in combination with centralisation and technological changes, there have been changes in the regulatory environment (removal of transport restrictions) as a factor underlying the (locational) centralisation trend observable in wholesaling activities nationally.

## NATIONAL AND GLOBAL CONTEXT OF STATE SECTOR ORGANISATIONS

State Services in Rotorua have always been a part of a national network. Superficially it would appear that State Services national networks have not changed. Structurally government and ex-government activity remains organised in a two or three tiered structure that is spatially dispersed to service the national market. This compares with a wide range of manufacturing activity which commenced serving first the local, then national and are currently being incorporated through organisational changes (mergers/takeovers) into planned and integrated global production/consumption networks either directly or indirectly through particular relationships with multi-national organisations. However, although State services in Rotorua have been and still are part of a tiered national (and sometimes global) network, the current restructuring has changed the nature of the organisations involved and the way the Rotorua portion is inserted into national and/or global networks particularly the privatised units such as Telecom. Underlying changes have been organisational changes involving the creation of smaller focused units and the (rigorous) application of information technology.

Politically driven organisational changes have involved the evaluation of all functions performed by departments in terms of core/peripheral functions and their assessment in terms of commercial, non-commercial, policy and regulatory criteria. The result has been the creation of separate units based on the identified commercial/non-commercial functions, from the previous multi-functional departments. The new organisations armed with mission statements have established their own priorities and agendas and spatial consequences have resulted from this. Commercial organisations that were subsequently privatised such as Postbank (ANZ) the Rural Bank (first to FCL, now the National Bank) and Telecom (Bell-Ameriteck) are now part of multi-national

organisations and the provision of their services to the Rotorua and New Zealand market must be seen within the total global perspective of the organisations involved. Works Consultancy a non-privatised SOE, has also become a globalising organisation with the establishment and operation of offices in Hong Kong, Singapore and London and through undertaking projects worldwide, particularly in the Pacific Basin.

The non-commercial (core government) organisations function differently nationally in 1990 compared with 1985, in a large measure related to the application of information technology and service delivery changes. These factors have impacted on how the Rotorua portion of the departments concerned is inserted into a "new streamlining national context". The application of information technology within government departments has witnessed the separation of "processing from retail" activities. There is a trend for processing activities to be (re) centralised nationally into regional centres (usually 3 or 4 nationally) or into between 2 - 4 specialised processing centres. The backroom functions are thereby being transferred out of District Offices which are increasingly becoming "shop front" client serving facilities, more fully integrated into a part-processing structure.

It could be argued that the process of centralisation defined and characterised in terms of mergers and takeovers, has not been influential in reshaping state activity particularly when the example of organisations such as the (ex) PO are used to demonstrate fragmentation tendencies. However a counter argument is that the initial fragmentation that witnessed the separation of specific groups of lesser functions from multi-functional organisations is necessary to enable the new units to become focused: cognizant of their mission and place in the market. The functional separation actually became a necessary step facilitating the centralisation

(merger/takeover) process at a later date. Centralisation trends of non-commercial state activity appears to be non-existent at present. However, centralisation needs to be contexted in a temporal framework and it is possible that once profiles, missions etc have been sufficiently stabilised, that the non-commercial activities might become subject to centralisation forces as witnessed in the now privatised ex-state activity. However, if the concept of centralisation is widened to include the loss of local control (often the result of the process itself), then it can be argued that local control of state services is not and never has been in the hands of local managers of the various government and ex-state activity operating in Rotorua either in 1985 or 1991.

Technological changes, based on the utilisation of computer and information technologies, have accompanied and facilitated organisational changes in state activity that have reshaped how activity in Rotorua functions within the national context of the organisations concerned. Technological changes have and are influencing changes in service deliveries of functions performed by various activities.

The restructuring of the State sector both nationally and in Rotorua has been rapid, uneven and differentiated and has involved intensification of work processes as well as technological changes due to the application of information technology and rationalisation. The above three restructuring responses have occurred in various combinations affecting all State sector (and ex-State sector) organisations nationally and in Rotorua.

## INTEGRATION AND PART-PROCESSING AND CLONING STRUCTURES

It can be demonstrated that restructuring since the mid 1980s has drawn an overwhelming proportion of activity in Rotorua into wider national and global production and consumption networks as a result of the operation of the processes of centralisation and technological change. Links into the global economy have been direct, indirect, uneven and differentiated. Encapsulation into wider production and consumption networks implies that activity in Rotorua functions within a particular production structure. Two structures that link production over space are the part-process and cloned structures. However, while activity in Rotorua (within the context of globalising organisations) is linked to other activity through either a part-process or cloned structure, the spatial expression of these links and the integration facilitated, vary from the local to the global. The spatial expression of these links also varies in terms of the nature of the activity - manufacturing, wholesale or State service.

State services exhibit a part-process structure, the spatial scale of which is national. The Rotorua portion of the organisation is articulated through its particular relationship to the organisational hierarchy of H.O., Regional Centre or District Office. However, although State services have traditionally been organised on a part-process structure based on a hierarchy of power, the part-process nature is more complete as a result of the utilisation of information technology. In addition to the part-process structure nationally, each district office is a national clone. Similarly, the regional centres are clones and the functional relationships between district and regional centres are also identical or cloned creating a system of several "nested hierarchies".

Wholesaling activities similarly are tending to establish part-processing structures based on the utilisation of information technology. Tertiary functions are being centralised to regional or Head Offices while "the retail and customer service functions" remain in Rotorua. Cloning and cloning relationships are evident at each wholesale outlet and regional "supervisory" centre.

While the spatial expression of part-processing and cloning structures of State services and wholesale activities are national in scale, the integration of activities based on part-processing and cloning structures for manufacturing activities exhibit a variety of spatial integration links varying from local integration to global integration. The GFW part-processing structure within the food processing activities has resulted in a high level of integration within the Rotorua Urban Area. Part-processing integration at a regional level (Volcanic Plateau-Bay of Plenty) is evident within the timber processing organisations of Tasman (FCL) and Lockwoods. Part-processing integration on a national level is represented by Mercer. (This company operates a press shop in Christchurch to service its New Zealand branches.) Part-processing integration at an international level is evident in the assembling of container trailers (tautliners) through the use of specified parts produced by the parent (Dommett-Fruehauf) in America.

Part-processing in the discussion above has assumed an exchange and further processing of physical products. However, part-processing based on the separation of production (physical outputs) from service and managerial functions is also a factor contributing to integration at various spatial scales. The Head Office (control) functions of most of the surveyed companies operating in Rotorua are located outside Rotorua. Part of the restructuring since the mid 1980s has witnessed the transfer of tertiary functions from

previously Rotorua operated activity to new corporate Head Offices (GFW, AFFCO, Iazard-Irwin), located outside Rotorua. The tertiary functions that remain locally are low order input and monitoring functions to service Head Office requirements. Integration via part-processing or cloning structures is more complete in State Sector services and within tertiary functions of wholesale and manufacturing activities. This is a reflection of the product processed - information. For manufacturing activities processing physical products, integration via part-processing structures has shown considerable variation. Spatial proximity at local and regional levels appears to be a key factor affecting activity in Rotorua although there is evidence of part-processing at both the national and international levels.

#### CONCLUSION

It has been demonstrated that the general body of theory focusing on the dynamics of centralisation (organisational) and technological change can be applied to the current restructuring of activities in Rotorua. One conclusion that can be made of the basis of this knowledge is that the restructuring of local activity contexted within the current global economic environment, is likely to continue causing social and physical effects within our community. The theory provides a key to the direction future change will take either integrating, excluding or alienating activity in Rotorua more fully into wider national and global production/consumption networks. No activity is likely to be exempt. The restructuring of manufacturing and government sector activities will continue - various local outcomes in terms of spatial and social effects will be observed. Locally owned retail and consumption activities are likely to continue to experience a decline as competition with aggressive organisations intensifies due to increased local penetration by these organisations. Services such as banking are currently undergoing

restructuring induced via mergers accompanied by technological change (computerisation). These activities are being incorporated into new global networks - Countrywide/United Bank and the Bank of Scotland, the BNZ and the National Australia Bank. In the ANZ there have been staff reductions nationwide (New Zealand Herald 24 July 1992) and new service delivery regimes implemented (cheque book ordering and supply is centralised nationally for all ANZ customers). Change is also currently evident with local electricity supply authorities and issues relating to their privatisation, including a merger option between Rotorua Electricity and Tauranga Electricity, have not yet been resolved in Rotorua.

## CHAPTER EIGHT

### WHAT DO WE DO NOW TOM? - TRYING TO MAKE THE RIGHT CONNECTION

#### INTRODUCTION

It is evident that the restructuring of the New Zealand and the Rotorua economy commenced in the mid 1980s through state "intervention", is far from complete and is a process that is likely to be ongoing. What could further restructuring of both private and public activity mean for the economy of Rotorua which already has one of the highest levels of unemployment nationally?

Mergers and takeovers occurring nationally and internationally are likely to have local impacts if parts of the merged organisations operate in Rotorua. Takeovers and mergers of like activities reduce competition facilitating streamlining which is translated into employment shedding and discarding of duplicate facilities. Merger activity will be evident in new sectors as well as in sectors that have already be subject to merger activity in this or previous restructuring periods. An example being the recent overtures made by FCL to purchase FCNZ. All activities whether they be old or new, will be subject to intense competition (globally contexted) that will necessitate the installing and re-equipping of new technological production processes which are also likely to create employment displacement effects. As far as a large proportion of industrial activities are concerned, the control of production in Rotorua has passed out of local control to head offices located either elsewhere in New Zealand or overseas. Decisions made in these locations will affect production in Rotorua and will be made with a knowledge of wider spatial options being available either nationally or globally. As far as state activity is concerned,

Rotorua has been marginalised by the large-scale withdrawal of functions performed by the various new state sector organisations. The restructuring of the state sector in Rotorua demonstrates the vulnerability of our community to decisions made in other places (Wellington).

The theory advocates that changes (restructuring) in Rotorua will result in Rotorua activity being either more fully integrated (excluded or alienated), into newly evolving national and international production/consumption networks. This poses problems for communities of how to deal with, in Rotorua's case, adverse effects of the new roles of local activity into national and global economies. What are appropriate and effective responses and strategies to mitigate adverse effects? What is the role or are there defined responsibilities for central and local government in the process of change management? Can programmes from community groups such as the Chamber of Commerce or Business Association be successful? What policy implications can be drawn from a knowledge that "things" might get worse - contrary to public expectation of improvement? Is it possible to reverse decline given the new and rapidly changing organisational and technological context of production and consumption?

### POLICY IMPLICATIONS

One policy implication may be the "do nothing" option. A community's natural and comparative advantage in producing a certain range of commodities will be recognised by the market. The market will decide appropriate resource issues and appropriate (re)investment strategies and priorities. This will eventually contribute to an equilibrium being re-established within the context of the "new realities". This policy implication is the basis of central government's "level playing field doctrine".

Le Heron, Pawson and Britton (1992) argue that through the policy of relying and insisting on the market being the arbiter of resource allocation, New Zealand runs the risk of losing investment, jobs and know-how, to other countries. This happens because other countries offer inducements "in the form of various investment incentives which are not only part and parcel of the reality of global competition but an expression of the traditional role of the state in attracting geographically footloose industry. Refusing to play the game of territorial competition by the conventional rules implies that the New Zealand government expects certain outcomes from the reforms." (Le Heron, Pawson and Britton, 1992,293). Three outcomes of the reforms are identified. Firstly, that local producers are not, or will not be interested in unearned additions to their profit margins in terms of subsidies. Secondly, that the domestic economic environment is or will become so attractive that producers will not want to leave New Zealand and thirdly, that major trading partners will soon implement open market policies. Le Heron, Pawson and Britton, make the point that the above three outcomes may never occur.

The current NZ-global connection would therefore appear to be a risky experiment and without advocating a return to the "regulated and protected pre-1984 order" the authors imply that a more hands-on policy stance is required by the state to "protect" a small economy in a world of imperfect competition. In other words part of the Rotorua equation for positive change (a reversal of decline) is to elect a government that will alter the current NZ-global connection. However governments elected on the basis of defined pre-election policies have been unable or unwilling to deliver their promises so that the exercising of electoral choice may not provide answers to local problems.

At a local government level, the "do nothing" - let the market decide approach is politically unacceptable. It does not address the issue of coping with the

present decline. The question arises what are appropriate local government initiatives? Can local government influence and possibly reverse decline?

In the first instance, local government must be seen by the community as being pro-active. In other words the community expects local government intervention and leadership. A number of approaches appear to be available that in combination with other community measures may help address decline. These measures range from image building, including education and promotion of Rotorua as a place to invest, to financial incentives, rate relief, creation of serviced industrial or commercial parks and providing venture capital. However, have local government measures been successful? The answer to this question is that some have while others have not. One example of a successful local authority approach has been the Dunedin City Council's "Economic Strategy" which has been an important component in boosting local confidence. While the Dunedin plan offers no quick and easy solutions it argues that the process of changing (in Dunedin's case) the long standing pattern of economic decline cannot be based on a repeat of projects which might have been appropriate in the past. The plan advocates development on three fronts:

- "1. diversification of the production sector by fostering retention, expansion and diversification of existing firms and encouragement of new enterprise;
2. the promotion of Dunedin as a centre for consumer and producer services within the national network rather than based on hinterland servicing and regional orientated production;
3. the application of new technology and communications systems to the Dunedin economy" (Welch<sup>1</sup> 1992,263).

1. In Changing Places in New Zealand: A Geography of Restructuring.

A key to restoring Dunedin's economic fortunes and place in the national (international) economy is for activity to forge wider spatial links and become more integrated into the national and international economies. However, the changing organisational context of production in forging these wider spatial links appears not to have been considered in Dunedin's "Economic Strategy". The Economic Strategy in addition advocates a technological upgrade of existing activities enabling them to continue to function within a rapidly changing technological environment. The lessons for Rotorua from the Dunedin example are clear - activities must focus on wider national and international "spatial action fields" and must be armed with the latest technologies.

The development of a strategy to guide the future direction of the Rotorua economy within the national and international economies, involves the evaluation of Rotorua's past roles, identification of strengths within the local economy and assessment of a future role which to some extent is constrained but not predetermined by past roles. This may involve, as in Dunedin's case, a rejection of strategies that were successful in the past because they are no longer appropriate for the current situation.

The exercise of assessing strengths and weaknesses of a local economy is an attempt to determine comparative advantages that our economy has in relation to other areas and harnessing these advantages to stimulate growth and employment. In conventional economic theory, comparative advantage treated trade as a country to country (or region to region) relationship determined largely by immobile assets which create particular competitive advantages and produce patterns of trade specialisation. However, in the context of an increasingly integrated global economy, an increasing proportion of international trade occurs within the internal structure of international enterprises. Exchanges are made within corporate hierarchies which control business units in different regions and countries. In other words "the

principle of comparative advantage applies not so much to the physical resource, industry or sector but to the firm specific advantages of transnational business (information, technology, know-how, know-when, know-where, management skills, commercial size, brand names, international access to markets and profits) which have been internalised so as to maximise the generation and retention of profits within a firm" (Le Heron, Pawson and Britton 1992,291). Therefore, for any promotion to be successful in the future, it is essential that the organisational nature of comparative advantage and production be included in development strategies.

The Rotorua District Council has identified two key components of the local economy - tourism and timber - and is involved in the promotion of these sectors. The District Council has assumed direct involvement in tourism promotion. The belief is that the marketing of Rotorua will be translated into an increasing number of tourists which will increase employment opportunities (for residents). Spin-off employment into retailing and services is assumed (the trickling down effect). Allied to the tourism focus is the development of the image of Rotorua as a Spa centre (part tourist/part medical). Similarly the "Cellulose Valley" concept focuses on projecting Rotorua as a timber centre of excellence. Implicit is the idea that a nucleus of milling, research and training facilities already exists and promotion of this nucleus will stimulate a range of associated downstream and other linked activities to (re)locate in Rotorua thereby increasing employment opportunities (the (re)creation of agglomeration economies and spatial multipliers). The above two policy initiatives, focus on image enhancement based on past and present roles as a strategy for future growth to address the present decline. Another idea for consideration could include the establishment of a Maori language and Tourism University.

Image creation and the education and promotion of Rotorua as a place for business to invest is important in re-establishing a long term focus and creating confidence within a community. However, successful image creation programs need to be linked into a pro-active strategy which acknowledges the organisational context of comparative advantage, production and consumption. One pro-active strategy could involve the direct marketing of Rotorua as a production site to key New Zealand organisations in both the private and public sectors. The Council could lobby central government and chief executives of government departments and SOEs for retention and possible relocation of activity to Rotorua. Similarly delegations to major NZ Companies could also be made presenting Rotorua as an attractive location for production. Since the organisational context of production is increasingly global, a search for appropriate overseas companies and the marketing of Rotorua to them might also be an appropriate strategy. It is acknowledged that the marketing strategy may only be possible to influence location of business to Rotorua when the enterprises concerned are considering Rotorua as a possible location among other competing centres.

Image and awareness campaigns should not be limited to "the direct marketing" of Rotorua only. Vacant buildings in the CBD, a focal part of the community, and to a lesser extent in industrial zones, adjacent to arterial routes used by tourists, do not portray a picture of progress and prosperity. Planning measures such as the containment of the physical extent of the CBD may direct activities to vacant buildings or the redevelopment of sites within the CBD. Allied to the containment policy is an option of extending the range of activities permitted to locate and operate within the CBD. Improvement of the CBD may also involve public expenditure. The current CBD upgrade including amenity and landscape improvements is an example of this. However, is this last mentioned measure window dressing only?

Research into growth trends of other centres both in New Zealand and overseas to decode reasons why the other centres perform better might uncover local weaknesses which could then be addressed thereby increasing Rotorua's attractiveness to investment. Similarly the reasons why local and New Zealand enterprises prefer not to invest in Rotorua needs to be understood. Can appropriate measures be made to address this?

### CONCLUSION

What is evident is that activities that comprise the Rotorua economy are experiencing profound change. This is evident in physical symptoms such as vacant retail, office and industrial buildings and social symptoms such as high levels of unemployment. The changes experienced by local activities are related to how the New Zealand economy is being articulated within a new emerging global economy. Local changes are therefore part of the wider global restructuring process. What is also clear is that increasingly activity in Rotorua will be more and more determined by what happens outside Rotorua - factors beyond Rotorua's control. A new "role" for Rotorua within the new global economy is emerging involving a reworking of past roles. New roles may also emerge. What is also clear is that within the new emerging global economy the organisational and technological context of production/consumption will be of strategic importance. What is not clear is how the community and/or elected representatives can effectively influence, manage and direct change thereby restoring real prosperity to the community. Rotorua currently therefore, is a community in a state of transition. Finding the right connections to the global economy to ensure future prosperity may be fraught with frustration but like Tom we must keep on trying.

## APPENDIX 1

**"WHAT'S WRONG TOM?"**

Authors Paul and Emma Rogers  
Illustrated by Colin Robinson

Breakfast is ready  
and Dad's getting washed,  
But Tom's in his bedroom  
getting very cross.

**What's Wrong Tom?**

The picture shows Tom having trouble putting his trousers on. He has both his legs in one trouser leg.

It's raining! It's pouring!  
Can't go outside.  
Hop on the rocking horse,  
Go for a ride.

**What's Wrong Tom?**

The picture shows Tom sitting back to front on the horse holding the horse's tail.

Noah's Ark jigsaw -  
Nearly got it done.  
Which piece fits in here?  
That's the one!

**What's Wrong Tom?**

The picture shows that Tom can't fit in the last remaining puzzle piece even though he has identified where it is to go, because he's got it the wrong way round.

Glass of milk at lunch time,  
bright red straw.  
Suck, suck, hard as he can:  
There's still a bit more

**What's Wrong Tom?**

The picture shows Tom blowing instead of sucking through the straw.

Here comes the sunshine.  
First time today.  
On with the boots  
And out to play

**What's Wrong Tom?**

The picture shows Tom with gumboots on the wrong feet.

Sing a song at supper,  
Soldiers on a plate.  
Eat up your egg now -  
It's getting late.

**What's Wrong Tom?**

The picture shows Tom using a fork instead of a spoon to eat a soft boiled egg in a shell.

Standing on the bathroom chair  
 To see another Tom.  
 Brush your hair, brush your teeth,  
 put your slippers on.

**What's Wrong Tom?**

The picture shows Tom standing on a stool looking in the mirror trying to brush his hair with a toothbrush.

Time for a story -  
 choose a special book.  
 Sleepier and sleepier,  
 One last look

**What's Wrong Tom?**

Picture shows Tom holding the book upside down.

Owl and Teddy fall asleep  
 Any old how.  
 Tom's safely tucked in  
 Nothing wrong now

**What's Wrong Tom?**

The last picture shows Tom sleeping but he has crept out from under his bedclothes. Tom is sleeping down the tail end of the bed complete with cuddly - sucky-cloth, Teddy and Owl. Tom is completely oblivious to the fact that once again, even while sleeping, there's a mismatch.

## APPENDIX 2

## "CIRCUITS OF CAPITAL"

A

FRACTION	INTERNATIONAL CIRCUIT OF CAPITAL			LINKAGES WITH GLOBAL ECONOMY
	Production	Realisation	Reproduction	
National	N	N	N	Direct: imported means of production; licences; offshore finance Indirect: local competition with firms in market-constrained and global fractions
Investment-constrained	N	I	N	Direct: exports, imported means of production; offshore finance Indirect: competition from TNCs for export markets; export franchising
Market-constrained	N (G)	N	G	Direct: TNC branch plants status; imported means of production, offshore finance Indirect: competition with firms in global fraction
Global	N (G)	G	G	Direct: part of TNC networks; global competition with other TNCs; imported means of production; offshore finance

N = nationally-bound circuit  
 I = international circuit  
 G = global circuit (intra-corporate)

Note: Diagram above builds on an original scheme by Bryan (1987) and includes two important modifications: two fractions are specified (national and global) with two 'hybrid' cases (investment-constrained and market-constrained); the range of empirical connections linking each fraction to the global economy are indicated.

Source: Fagan and Le Heron (1991,32)

B

Fractions of Total Capital	Examples	Connections of Individual Capitals to Circuits					
		Production	Inputs	Sales	Reinvestment	Ownership of surplus	Competition
NATIONAL	1	N	N	N	N	N	N
	2	N	N,G	N,G	N	N	N,G
	3	N	N,G	N	N	N/G	N,G
	4	N,G	N,G	N,G	N	N	N,G
	5	N	N/G	G,N	N/G	N	N
GLOBAL	6	N,G	N,G	N/G	N,G	G,N	N,G
	7	N,G	G	N,G	N,G	G	N,G
	8	N,G	G	G	G	G	G

National

Definition based on dominant circuits of capital includes family and publicly-owned multi-plant firms: (1,2) without overseas operations, major exporters constituting the investment-constrained fraction of Appendix 2A; (3) licence and franchise holders; (4) with overseas branch plants; (5) producer marketing organisations with overseas investments. Regional varieties are not shown but patterns of connection could be determined in the same way.

Global

Subsidiaries or branch plants of TNCs: (6) serving primarily domestic markets (the market-constrained fraction of Appendix 2A); (7) with both domestic sales and exports; (8) no domestic sales (as from export processing or free trade zones).

Production systems (for example resource-based commodity chains involving amalgams of enterprises and sectors), and some diversified or conglomerate enterprises, will consist of combinations of connections" Britton (1991).

Source: Fagan and Le Heron (1991,34)

## APPENDIX 3

<u>BUSINESS STATISTICS</u>	<u>1987</u>	<u>1990</u>	<u>%Change</u>
1. <u>Welfare, Health &amp; Community Services</u> DSW, ACC, BOP Area Health Board <sup>3</sup> , Maori Affairs, Justice NZ Police, MOT, NZ Fire Service, Labour (OSH <sup>4</sup> & NZES)	717	668	- 6.83
2. <u>Education</u> <sup>2</sup> Education Review, Ministry of Education NZ Training & Education		69	+100.00
3. <u>Research and Development</u> Forestry Research Institute, DSIR <sup>1</sup>	592	358	- 39.53
4. <u>S.O.E.S</u> NZ Post, Telecom, NZ Rail, Housing Corp Works Consultancy, Works Construction, Postbank, Rural Bank, BCNZ (Radio Geyserland), Airways Corporation, Forestry Corporation <sup>5, 6, 11, 13</sup>	1315	762	- 42.05
5. <u>Government Commercial</u> Public Trust, Valuation NZ, MAF Tech & Qual <sup>7</sup> , Dosli <sup>8</sup> , Ministry of Energy, Quality Services, Iwi Transition <sup>10</sup>	86	140	+ 62.79
6. <u>Government Non-Commercial</u> NZTP <sup>9</sup> , Internal Affairs, IRD, DOC, Iwi Transition <sup>10,15</sup> ,	533	275	- 48.40
<b>TOTAL</b>	<b>3243</b>	<b>2272</b>	<b>- 29.94</b>

1. DSIR total 132 (1967) reduced to 15 (1990). The size of the reduction in light of fieldwork would suggest that the 1987 figure is incorrect.
2. The absence of figures for Education in 1987 could be the result of less than 10 persons employed in the various activity units of 1987. However Education devolved from the old Education Boards and therefore a portion of the old Board is now in Rotorua (The Ministry of Education).
3. Figures for the BOP Health Unit (old Dept of Health) are assumed to be 121 in 1990 under Health Other but not Hospitals. However this figure is perhaps too high in light of survey results.
4. OSH figures were omitted in 1990. Survey Data, 10 persons were employed by this portion of the ex Labour Department.
5. 88 out of 168 (NZ Forest Service) were assumed to be the "Forestry Corporation". FCNZ has been the only SOE to be included in Chapter 5 re restructuring of Industrial Activities in Rotorua. Survey indicates that DOC's staffing was around 80 persons.
6. Figures for Landcorp nor Lands and Survey Department were included in the Business Statistics Figures despite a significant presence in Rotorua in 1987.
7. MAF Fish employment figures not included as less than 10 employees.
8. Dosli included in 1990 only. Landcorp not mentioned in 1990.
9. Figures contain NZTP Travel Agency as this was not separated from NZTP (Policy).
10. Iwi Transition does not include the Maori Land Court which in 1990 was included within the Justice Department.
11. Airways included in 1990, no figures were given in 1990.
12. Business Statistics did not include the Audit Office - less than 10 persons.
13. Tourist Hotel Corporation not included as an SOE. This activity was not surveyed either.
14. Quality Services (53) and Energy (12) not included in Survey totals.
15. Defence not included in Business Statistics.

<u>SURVEY DATA</u>	<u>1985</u>	<u>1991</u>	<u>%Change</u>
1. <u>Welfare, Health &amp; Community Services</u>  DSW, ACC, BOP Area Health Board, Justice (Probation and Court) Justice (Maori Land Court) NZ Police, MOT, NZ Fire Service, Labour (OSH <sup>4</sup> & NZES)	569	558	- 1.93
2. <u>Education</u>  Quest Rapuara <sup>1</sup> , Early Childhood Education, Education Review Office, Ministry of Education (1991)	28	41	+46.43
3. <u>Research and Development</u>  Forestry Research Institute <sup>2</sup> , DSIR Soil Survey, DSIR Botany, DSIR Water Resources, DSIR Geothermal, Volcanoes and Geophysics, MAF Fish	327 <sup>3</sup>	324	- 0.92
4. <u>S.O.E.S<sup>4</sup></u>  NZ Post, Telecom, NZ Rail, Housing Corp Works Consultancy, Works Construction, Postbank, Rural Bank, BCNZ (Radio Geyserland), Housing Corporation, Landcorp Farming and Landcorp Management Services, Railways Passenger Bus Group <sup>5, 6, 7,</sup>	1205	581	-51.78
5. <u>Government Commercial</u>  Public Trust, Valuation NZ, MAF Tech & Qual, Dosli <sup>1</sup> , Audit Office, Radio Frequency, Commerce	114	71	-37.72
6. <u>Government Non-Commercial</u>  NZTP <sup>8</sup> , Internal Affairs <sup>10</sup> , IRD, DOC, Iwi Transition, Consumer Affairs <sup>9</sup> , Defence	352	288	-18.18
TOTAL	2592	1863	-28.21

1. Not included in the Business Statistics Printout - less than 10 employees.
2. The FRI constant figures over 1985 and 1990 contradict Business Statistics figures. The 1985 figure should be at a level equivalent to that of the Business Statistics (around 450 persons).
3. DSIR Total employees 21 (1987) and 19 (1990). The 1987 survey figure is in sharp contrast to Business Statistics figures of 132.
4. For comparative purpose "privatised organisations" have been included within the State Sector on Tables using data from Business Statistics and Survey data.
5. Airways Corporation not included because not surveyed.
6. Forestry Corporation included in "Industry Sector"
7. Tourist Hotel Corporation not included as it was not surveyed. Tourist Hotel Corporation has not been included in the Table based on Business Statistic Data as it was not a Government Department.
8. NZTP includes "Policy" only. NZTP Travel had closed permanently and the NZTP Information Office was sold first to Intercity and then the Rotorua District Council (1991).
9. The Consumer Affairs Office closed in the latter half of 1991 after being surveyed.
10. Internal Affairs - portion surveyed smaller than operations as presented by Business Statistics. Business statistics would have included Wildlife Division.
11. Problem of Interviewee knowledge of different parts of the pre-structured and even present organisation proved to be a problem. Also many present Managers have assumed responsibility after restructuring was "completed".

## APPENDIX 4

PRIVATE SECTOR - MAIN THEME QUESTIONNAIRE

- Q1. Ownership status - part of a larger (diversified) corporation  
- foreign shareholding
- Q2. What are your main products?
- Q3. What have been the main changes in your industry at an international level?
- Q4. What have been the main changes in your industry at a national level? (Government deregulation, merges, rationalisation, overseas expansion)
- Q5. Have changes in 3 and 4 above affected you locally - how?
- Q6. Has your company restructured or changed its internal structure?
- Q7. Has there been a trend towards integration/separation of production processes with either parent or other plants within the company?
- Q8. Autonomy of decision making. How does Head Office help shape plans for the operations here?
- Q9. Technological changes in production processes? Are these the results of
- new resources or inputs?
  - new technology, NZ or overseas?
  - company's policy re Research and Development?
  - new products?
- Q10. Have there been employment and labour practice changes for example flexible working hours, subcontracting or outworking?
- Q11. How is performance monitored and judged now and compared with 5 years ago?
- Q12. What are the main threats and/or opportunities and long term prospects of operating in Rotorua.
- Q13. What are the main input sources and markets for this activity unit?
- Q14. Numbers employed 1985 and 1991?
- Q15. Approximate % market share of activity unit's market?

## APPENDIX 5

STATE SECTOR - MAIN THEME QUESTIONNAIRE

- Q1. What do you consider have been the main influences behind your department's restructuring
- Government policy re cost efficiency, rationalising services, removal of duplication?
  - Competition in the market from private sector companies offering similar, better or substitute goods or services at a lower price?
- Q2. What have been the organisations response to the restructuring influence
- re-appraisal of core/peripheral functions?
  - separation of commercial, non commercial, policy and regulatory functions?
- Q3. Has there been any changes in "technological systems" eg. word processors, computerisation of functions, fax machines, "electronic offices"?
- Q4. How is the Department Structured nationally? (H.O. Regional Centre, District Office, Agency). Where does the Rotorua portion of the Department fit into the total structure of the organisation?
- Q5. Is there any specialisation of functions within different parts of the organisation? (eg. accounts, specialised processing)
- Q6. What functions were performed by the organisation nationally in 1985 and in 1991?
- Q7. What functions were performed by the organisation in Rotorua in 1985 and 1991?
- Q8. Loss of functions. Who performs the functions you now don't do
- functions now not performed nationally by the department therefore they are not performed locally?
  - private sector?
  - private sector under contract?
  - other government departments?

- Q9. Were the functions retained in Rotorua or transferred to other centres to
- other parts of your department?
  - other government departments?
  - private sector?
  - or private sector under contract?
- Q10. Were there any new functions added to your organisation?  
Who performed them before?
- Q11. What have been the effects of reducing budgets?
- Q12. Have any changes occurred within the organisation relating to labour practices? eg. enhanced performance regimes, recompiling of job descriptions, flattening internal structure?
- Q13. Assuming that restructuring will be ongoing, what do you consider to be the thrust of subsequent restructuring activity? Corporatisation? Privatisation? Closure of Rotorua branch and servicing from Hamilton, Tauranga, Auckland?
- Q14. Numbers employed 1985 and 1991?
- Q15. Could you indicate on the attached map the area served by your office in 1985 and 1991?

## APPENDIX 6

RESTRUCTURING OF GOVERNMENT DEPARTMENTS IN THE ROTORUA URBANAREA

- Q1. Has there been restructuring of your department/organisation since 1985? What form did it take? (ie. Was the organisation divided into several distinct functional entities? Were parts privatised?)
- Q2. What do you consider have been the main influences behind your organisation's restructuring:
- a) Government policy re cost efficiency, rationalising services, ie. removal of duplication.
  - b) Competition in the market from private sector companies (national or international) offering similar, better, or substitute goods or services at a lower price.
  - c) Technological developments:
    - i) new products/services
    - ii) competitors use of new technology in their production /service processes.
  - d) Some or all of the above.
- Q3. What have been the organisation's response to the "restructuring influences".
- a) Re-appraisal of core/peripheral functions of the organisation.
  - b) Separation of commercial functions from non commercial or social welfare functions.
  - c) Attempts to reduce costs and/or change method of services delivered to the consumer (public).
  - d) Some or all of the above.
- Q4. How have the above (Q3) been manifest within the organisation nationally.
- a) Closure of uneconomical/inefficient units (nos).
  - b) Reduction of labour.
  - c) Increase of new technology (computer aided functions, word processors, fax machines, etc)

- d) Specialisation of branches within organisation recentralisation /decentralisation of functions.
- e) Non production of some goods and services due to commercial criteria (which functions, numbers of persons employed).
- f) Retention of provision of some goods and services due to social welfare criteria (which functions, numbers of persons employed).
- Q5. What functions (and number of persons employed) were performed by the organisation nationally in 1985 and 1991 and where (specialist activities).
- |      |    |                                 |      |        |
|------|----|---------------------------------|------|--------|
| 1985 | a) | Functions                       |      |        |
|      | b) | number of Full-time (>30 hours) | male | female |
|      |    | number of Part-time             | male | female |
| 1991 | a) | Functions                       |      |        |
|      | b) | number of Full-time (>30 hours) | male | female |
|      |    | number of Part-time             | male | female |
- Q6. What organisation now provides the goods and services that were provided by your organisation in 1985 but not in 1991.
- a) Another government department (eg reduction of duplication).
- b) Private sector on contract to the department.
- c) Private sector (national, international firm).
- e) Other land number of persons employed.
- Q7. What functions (and number of persons employed) were performed by your organisation locally in 1985 and 1991.
- |      |    |                                 |      |        |
|------|----|---------------------------------|------|--------|
| 1985 | a) | Functions                       |      |        |
|      | b) | number of Full-time (>30 hours) | male | female |
|      |    | number of Part-time             | male | female |
| 1991 | a) | Functions                       |      |        |
|      | b) | number of Full-time (>30 hours) | male | female |
|      |    | number of Part-time             | male | female |
- Q8. Employment prospects - short/long term and factors likely to influence this (locally and nationally).
- Q9. What has been the local effect of change in functions.

A) LOSS OF FUNCTIONS

- a) Functions no longer provided/performed locally because they are not provided nationally
- b) Were the lost functions performed in Rotorua, performed on a commercial or non-commercial (social welfare) basis.
  - i) Commercial functions (numbers of person employed).
  - ii) Non-commercial functions (number of persons employed).

Were they transferred to another of the Department's offices in another centre(s)?

- c) Some functions have now been transferred to other government departments/agencies outside Rotorua (which functions, which departments and the number of persons employed affected).
- d) Some functions have now been transferred to other government departments/agencies in Rotorua (which functions, which departments and the number of persons employed affected).
- e) Functions now performed by private sector on contract to government department outside Rotorua on a national basis (Which functions, which organisation, number of person employed).
- f) Functions now performed by private sector on contract to the government by a Rotorua firm on a national basis (which firms, which functions, numbers of persons employed).
- g) Functions now performed by private sector under contract (specify locality or town).
- h) Functions previously performed locally recentralised to another centre (which one) but still within the same organisation.

B) NEW FUNCTIONS

- a) Which new functions have been added perhaps as a result of rationalisation within the organisation (eg. closures in other centres) numbers of persons employed full time, part-time, male and female.
- b) Are these new functions performed in Rotorua on a commercial or non-commercial (social welfare) basis.
  - i) Commercial functions (numbers employed full-time, part-time male and female).
  - ii) Non-commercial functions (nos employed full-time, part-time, male and female).

Q10 Could you indicate on the attached maps the area served by your office in 1985 and 1991.

Q11 Could you provide a general indication of source of funding in percentage terms for 1985 and 1991.

1985

- a) vote allocation by government
- b) other government departments
- c) private sector/clients
- d) other

1991

- a) vote allocation by government
- b) other government departments
- c) private sector/clients
- d) other

Q12 Who were the departments main customers/clients in 1985 and 1991?

1985

- a) other government departments (which ones)
- b) private sector firms (which ones)
- c) the general public
- d) other eg. SOE

1991

- a) other government departments (which ones)
- b) private sector firms (which ones)
- c) the general public
- d) other eg. SOE
- e) reason for change (technology, efficiency criteria (SOE) etc)

Q13 Who provided the departments main inputs in 1985 and 1991?

1985

- a) other government departments (which ones)
- b) private sector firms (which ones)
- c) the general public
- d) other eg. SOE

1991

- a) other government departments (which ones)
- b) private sector firms (which ones)
- c) the general public
- d) other eg. SOE
- e) reason for change (technology, efficiency criteria (SOE) etc)

Q14 Has this branch more or less autonomy in decision making within the department since restructuring in respect of choice of inputs and discretion of suppliers and marketing of outputs.

Q15 Have any changes occurred within the organisation relating to labour practices? eg. enhanced performance regimes, recompiling of job descriptions, etc. Would the implementation of these have contributed to a reduction in staff?

Q16 What changes in technological systems (eg. computers, facsimiles, word processors, or computer aided systems such as CAD machines) have been introduced since 1985 and especially since restructuring.

Q17 Assuming that the restructuring phenomenon will be an ongoing one, what do you consider to be the thrust of subsequent restructuring activity?

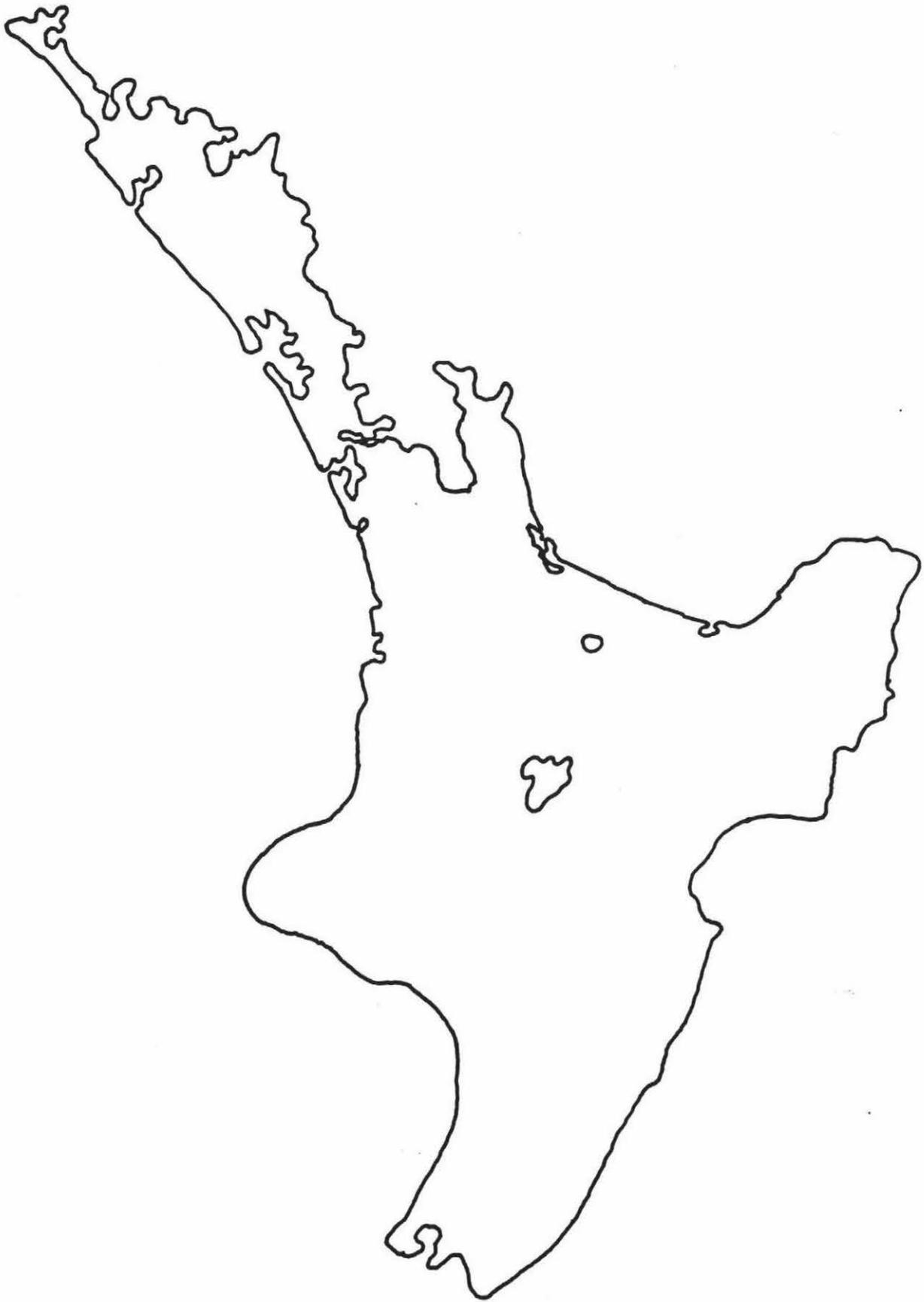
- a) Ultimately commercial functions will be privatised.
- b) Changed delivery profile for non-commercial functions and more user pay.
- c) Closing down of Rotorua Branch and services provided from another centre (Hamilton, Tauranga, Auckland).
- d) Further functions transferred to other government departments.
- e) Functions out to contract either to Rotorua firms or national firms.

- f) Takeover or mergers by private sector firms (regional, national or international).

Q18 Is the department considering relocating within Rotorua in the near future. What type of premises are being considered and where (eg. smaller office, larger office, new workshop and yard, parking for government vehicles).

Q19 What was the wage bill for the years 1985 - 1990.

Q20 How much money (excluding wages) was spent by your Department within the Rotorua Urban Area in 1985 - 1990.





indicate to what degree of importance from 1 - 5 (5 = most important) any of the following responses have been since 1985. Could you tick the appropriate boxes on Chart B.

b) Do you wish to elaborate on any or more of the above.

Q9a How have changes by the Corporation nationally affected this unit's operations in Rotorua. (Specify and elaborate.)

- redefinition of core/periphery Company functions - specify what effect locally.
- changes in input sources (local, national, international)
- changes in the internal structure of this unit (here) (specify)
- higher utilisation of capacity
- rationalisation/changes of products (specify)
- changes in geographic markets or product divisions (specify)
- changes in employment

9b) Has your Company restructured or changed its internal organisation in the past 5 years? What brought about Company restructuring?

Q10 Explore for more detail, government deregulation effects on the Rotorua Company and the Parent Company. When were changes made, what form the changes took, are changes ongoing, future changes.

Q11 Explore for more detail the effects of mergers/acquisition effects on the Rotorua Company and the Parent Company. When were changes made, what form did changes take, are changes ongoing, future changes.

Q12a) Explore for more detail overseas expansion/contraction by NZ Company (parent) and Rotorua Company. When were changes made, what form did changes take, are changes ongoing, future nature of changes.

b) Explore for more detail expansion of overseas enterprises on Parent Company and Rotorua firm.

Q13 Explore increased integration or separation of production processes with parent and other firms. Rotorua and Parent between 1985 - 1990. Has there been a tendency for centralisation/decentralisation of functions of the activity unit since 1985. How has this affected your operations.

Q14 Using Chart C can you indicate your decision making independence from your parent Company. Did links between you and the parent Company strengthen or weaken between 1985 - 1990.

Q15 How does H.Q. help shape plans for (the activity unit) your operations here.

Q16 Is there a ceiling on activity unit capital expenditure. Has this changed between 1985 - 1990? How, details.

- Q17a) Source of funds - can you borrow funds from the Corporation, banks, overseas (degree of financial independence). Has this changed between 1985 - 1990?
- 17b) Is there any foreign corporate shareholding in your parent Company. Has this changed between 1985 - 1990?
- Q18 Explore where profit is invested. Has there been changes between 1985 - 1990. Is there central (H.Q.) or decentralised discretion on profit investment.

Investment of Profit (sensitive) by percentage

Locally (Rotorua)	( )	( )
Regionally BOP	( )	( )
New Zealand wide	( )	( )
Australia	( )	( )
Others overseas	( )	( )

Comments:

- Q19 Explore the importance of a technological change strategy as a restructuring factor - H.Q. view and the Rotorua firm. Has there been any changes nationally and locally between 1985 - 1990.

Production Processes - robots, computer aided manufacturing, J.I.T., laser production techniques, computer numerical tools

- new products, as a result of new raw materials, other technological changes
- office equipment, facsimiles, word processors, computer aided drafting, accounts etc.

- Q20a) What changes have been introduced locally since 1985 (specify).

- b) Has there been pressure to change your production processes as a result of your customers (changed) requirements? (Since your products are inputs for further production). Did they require you to make changes because of specific technological changes they had made to their own production processes (linked technological effects).

- Q21 Was the pressure to change your production processes a result of changed input characteristics from your supply firms?

- your supply firm(s) had changed their technology your new inputs were different so therefore required you to make changes (lower quality, smaller/larger, etc)
- new "second crop" forest has different characteristics than the first.

- Q22 Did your competitors change their production processes (national/international) and did this necessitate your Company to make changes to stay competitive.

Q23 Where did the new technology come from (country of origin) was it adapted in any way by your Company or by your activity unit here?

Q24 Did your Company carry out any R + D?

- new products and their production processes
- old products and their new production processes
- did your Company conduct basic research into the above
- applied research from overseas but refined it to suit NZ conditions
- does your Company employ specialist R + D facilities (eg Government Departments or private sector R + D institutes)
- does your Company maintain international links with specialist R + D firms or formed alliances with foreign R + D firms
- does your Company monitor scientific advances in respect of your products
- do you keep closely in touch with the requirements of your customers and recognise potential markets, etc for improved or new products/processes

Q25a Employment with your Company

Locally		Nationally	
1985	1990	1985	1990
M.F. Full time Pt time			

Q25b) Type of Workforce

Locally                      Nationally

- Wage workers - manual (M.F. etc)
- Professional workforce (M.F. etc)
- R + D workforce (M.F. etc)

Q26 Could you give an indication of your wage costs (locally) for 1985 and 1990?

Q27 Have the changes in employment (same, increase, decrease) reflected a change in functions performed locally or products produced locally? Are the same or more functions/products produced with less labour and superior technological equipment (specify/elaborate).

Q28 Have new labour practices been introduced by the Corporation both nationally and locally. What were they and when were they introduced

(eg. flexibility of hours, quality circles, communication programmes, subcontracting, career ladders, outworking, other).

- Q29 How is performance monitored and judged? Compare changes between 1985 - 1990, what criteria are used? Has this changed since 1985?
- Q30 Product competition (approximate market %)      1985 \_\_\_\_\_ 1990 \_\_\_\_\_  
 Foreign owned competitors including imports  
 Three biggest domestic sellers  
 Your Company
- Q31 What are considered to be the main threats/opportunities and your long term prospects for operating in Rotorua? Does this include relocation/expansion of facilities within Rotorua? Will further restructuring including disinvestment, devolution of unstable non core activity etc take place and affect the Rotorua operations.
- Q32 Using Chart D, could you provide a general picture of the value and source of inputs by region and by Company ownership/organisation.
- Q33 Using Chart E, could you provide a general picture of value and destination of outputs (products) by region and by Company ownership/organisation.

CHART A - NEW ZEALAND CHANGES

Could you indicate to what degree of importance from 1-5 (5 most important) any of the following have been to your Company since 1985?

State Policies Economic

- tariff and import control/quota deregulation	5	4	3	2	1
- exchange rate policies	5	4	3	2	1
- government interest rate and investment policies permitting dividends etc. to be "repatriated" to foreign owner.	5	4	3	2	1
- ability to raise loans on a global market	5	4	3	2	1
- governments philosophical commitment to a level playing field "operational environment" doctrine.	5	4	3	2	1

State Policies Regulatory

- deregulation of internal environment (transportation, etc)	5	4	3	2	1
- Industry Development Commission studies aimed at internal (NZ) rationalisation of capacity	5	4	3	2	1
- removal of specific government support (for an industry that was never viable)	5	4	3	2	1
- government department restructuring as a factor contributing to opportunities or threats to an industry (eg non-obligation to purchase specific outputs - Electricorp and Coal, Selling Forest Cutting Rights)	5	4	3	2	1
- removal of specific constraining legislation (eg NZFS supplied logs that produced 56 % of NZ's output of sawn timber and was required by Government policy to favour domestic processing over log exports. Forest Corp not constrained in this way)	5	4	3	2	1

Competition

- increased foreign competition in local and national markets (which companies, countries, products)	5	4	3	2	1
- new entrants of foreign origin establishing productive capacity in New Zealand (which companies, countries, products)	5	4	3	2	1

- joint ventures between NZ and foreign firms (which companies, countries products production and consumption)	5	4	3	2	1
- retreat or "partial retreat" (eg some product lines) of foreign firms from producing in NZ (which companies, countries, products)	5	4	3	2	1
- government aid through bi-lateral trade policies	5	4	3	2	1
- CER	5	4	3	2	1
- increasing international scale of operation of NZ companies (which companies, products, to which countries)	5	4	3	2	1
- mergers and take-overs	5	4	3	2	1
- non-production of products and importing from offshore sources	5	4	3	2	1

#### Technological

- technological changes and major trends in production processes	5	4	3	2	1
- evolution of new substitute products	5	4	3	2	1
- evolution of technological superior new raw materials	5	4	3	2	1
- modernisation of industry with an ageing capital stock	5	4	3	2	1
- less raw materials required due to technological changes and enhanced properties or resources	5	4	3	2	1

#### Other

- demography changes and impacts on products	5	4	3	2	1
- changes in customer tastes/demands	5	4	3	2	1

Do you wish to elaborate more fully on any or more of the above

CHART B - ORGANISATIONAL RESPONSES TO THE CHANGING OPERATIONAL ENVIRONMENT

What has (or have) been the responses of your Company at a national level to the changed operational environment (economic, regulatory, competitive and technological)? Could you indicate to what degree of importance from 1-5 (5 = most important) any or several of the following responses have been.

- (re)appraisal of an industry's or products' life cycle	5	4	3	2	1
- redefinition of core/peripheral functions of the Company	5	4	3	2	1
- divestment of (some?) non-core functions (which ones, where located)	5	4	3	2	1
- diversification of products and services	5	4	3	2	1
- quality improvements (as perceived by your customers) how, what, when introduced - impact locally?	5	4	3	2	1
- productivity improvements - how, when, where and effect locally	5	4	3	2	1
- better marketing and follow up services for customers, when, how	5	4	3	2	1
- expanding overseas links - mergers/acquisitions agreements/alliances	5	4	3	2	1
- retreating from some overseas markets	5	4	3	2	1
- restructuring and rationalisation of capacity (domestic or international)	5	4	3	2	1
- relocating part of production process overseas (which parts/products, which countries)	5	4	3	2	1
- closing of some plants (obsolete technology or other factors?)	5	4	3	2	1
- non-production of some goods and services which ones	5	4	3	2	1
- changed from a producing company to an importing company	5	4	3	2	1
- specialisation of branches within the Company	5	4	3	2	1
- mergers/acquisitions locally	5	4	3	2	1
- taking over of competitors long term contracts so that they can exit the market	5	4	3	2	1

- purchasing and retiring competitors capacity	5	4	3	2	1
- flexible sourcing of inputs (from which companies, where located)	5	4	3	2	1
- pro-active R + D programme (specify)	5	4	3	2	1
- introduction of new labour practices (specify and compare old with new)	5	4	3	2	1
- reduction in labour	5	4	3	2	1
- introduction of new technology	5	4	3	2	1

Do you wish to elaborate more fully on any or several of the above.

CHART C - DECISION MAKING

<u>Activity Unit</u>	1985 (circle)					1990 (circle)				
	low			high		low			high	
Degree of independence of Activity Unit Management										
Product mix	1	2	3	4	5	1	2	3	4	5
Product availability	1	2	3	4	5	1	2	3	4	5
Product presentation	1	2	3	4	5	1	2	3	4	5
Product features	1	2	3	4	5	1	2	3	4	5
Redesign of product	1	2	3	4	5	1	2	3	4	5
Arrangements with suppliers	1	2	3	4	5	1	2	3	4	5
Services availability	1	2	3	4	5	1	2	3	4	5
Service presentation	1	2	3	4	5	1	2	3	4	5
Service features	1	2	3	4	5	1	2	3	4	5
Arrangements with distributors/outlets	1	2	3	4	5	1	2	3	4	5
Redesign of service	1	2	3	4	5	1	2	3	4	5
Quality control	1	2	3	4	5	1	2	3	4	5
Quality assurance	1	2	3	4	5	1	2	3	4	5
Marketing programmes	1	2	3	4	5	1	2	3	4	5
Numbers employed	1	2	3	4	5	1	2	3	4	5
Work patterns	1	2	3	4	5	1	2	3	4	5
Recruitment/selection	1	2	3	4	5	1	2	3	4	5
Training	1	2	3	4	5	1	2	3	4	5
Conditions of employment	1	2	3	4	5	1	2	3	4	5
Union negotiation	1	2	3	4	5	1	2	3	4	5
Dismissals	1	2	3	4	5	1	2	3	4	5
Disciplinary action	1	2	3	4	5	1	2	3	4	5
Incentive schemes	1	2	3	4	5	1	2	3	4	5
Communications with employees	1	2	3	4	5	1	2	3	4	5

Comments:

CHART D - INPUTS OF THE ROTORUA OPERATION - REGIONAL, NATIONAL AND  
INTERNATIONAL PRODUCTION LINKS

1. Inputs purchased 1985

What is your expenditure for the following services or inputs.  
See attached map. (Please tick the appropriate box in each row.)

INPUT	NZL	1-1,000	1,001-10,000	10,001-100,000	100,001+	Rotorua	BOP %	NZ wide %	Australia %
Information & Consulting Services									
Supplies & Materials (Processing)									
Transport & Maintenance									
Legal, Accountancy, Insurance & Banking									
Office/Rental Accom.									
Others (Please specify)									

Comments:

Are the figures you indicated above

Normal [ ]      Above normal [ ]      Below normal [ ]

when compared to the last 5 years (please tick one box only).

2. Inputs purchased 1990

What is your annual expenditure for the following services or inputs.  
See attached map. (Please tick the appropriate box in each row.)

INPUT	NIL	1-1,000	1,001-10,000	10,001-100,000	100,001+	Rotorua	BOP %	NZ wide %	Australia %
Information & Consulting Services									
Supplies & Materials (Processing)									
Transport & Maintenance									
Legal, Accountancy, Insurance & Banking									
Office/Rental Accom.									
Others (Please specify)									

Comments:

Are the figures you indicated above

Normal [ ]      Above normal [ ]      Below normal [ ]

when compared to the last 5 years (please tick one box only).

3. Source of inputs by Company ownership and production or purchasing alliances.

Own Company and Allied Company by Percentage

INPUT	ROTORUA		BOP REGION		NZ WIDE		AUSTRALIA		ELSEWHERE OVERSEAS	
	1985	1990	1985	1990	1985	1990	1985	1990	1985	1990
Information & Consulting Services										
Supplies & Materials (Processing)										
Transport & Maintenance										
Legal, Accountancy, Insurance & Banking										
Office/Rental Accommodation										
Other (Please Specify)										

Comments:

Are these percentages indicated above

Normal [ ]

Above Normal [ ]

Below Normal [ ]

for 1985  
for 1990

4. Source of inputs as a part of production or purchasing under license/franchise or leasing arrangements.

Companies with licence/franchise or leasing arrangements by percentage  
(not part owned corporate structure or allied companies)

INPUT	ROTORUA		BOP REGION		NZ WIDE		AUSTRALIA		ELSEWHERE OVERSEAS	
	1985	1990	1985	1990	1985	1990	1985	1990	1985	1990
Information & Consulting Services										
Supplies & Materials (Processing)										
Transport & Maintenance										
Legal, Accountancy, Insurance & Banking										
Office/Rental Accommodation										
Other (Please Specify)										

Comments:

Are these percentages indicated above

Normal [ ]

Above Normal [ ]

Below Normal [ ]

for 1985  
for 1990

## 5. Source of inputs as part of a Purchasing subcontracting arrangement

Own Company and Allied Company by Percentage

INPUT	ROTORUA		BOP REGION		NZ WIDE		AUSTRALIA		ELSEWHERE OVERSEAS	
	1985	1990	1985	1990	1985	1990	1985	1990	1985	1990
Information & Consulting Services										
Supplies & Materials (Processing)										
Transport & Maintenance										
Legal, Accountancy, Insurance & Banking										
Office/Rental Accommodation										
Other (Please Specify)										

Comments: Specify subcontractors

- were the above subcontractors in operation before becoming linked to your firm?
- were the subcontractors created from your firm as part of a disinvestment process?
- other

Normal [ ]

Above Normal [ ]

Below Normal [ ]

for 1985

for 1990

CHART E - PRODUCTS (OUTPUTS) OF THE ROTORUA OPERATION - REGIONAL  
NATIONAL AND INTERNATIONAL MARKETING LINKS

1. Products sold specify products	1985	Value	1990	Value
	%	\$	%	\$
Locally (Rotorua)	( )	( )	( )	( )
Regionally (BOP)	( )	( )	( )	( )
New Zealand wide	( )	( )	( )	( )
Australia	( )	( )	( )	( )
Elsewhere Overseas	( )	( )	( )	( )

Comments:

---

2. Part of Sales or Distribution Alliances by percentage

New Zealand companies	( )	( )	( )	( )
Australian companies	( )	( )	( )	( )
Other overseas companies	( )	( )	( )	( )

Comments:

---

3. Part of Sales or Distribution Licensing/Franchising by percentage

New Zealand companies	( )	( )	( )	( )
Australian companies	( )	( )	( )	( )
Other overseas companies	( )	( )	( )	( )

Comments:

---

4. Part of Direct Sales or Distribution Investment by percentage

Australia	( )	( )	( )	( )
Elsewhere Overseas	( )	( )	( )	( )

Comments:

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