

# Funding of regions in New Zealand

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## Abstract

This paper describes the funding structure of regional councils in New Zealand. It starts with an overall description of local government in New Zealand, highlighting the role of central government's reforms in 1980s and 2002 in shaping local government's functions. In order to facilitate understanding of roles regional councils play, some detail is given to the functional division of local government into regional councils and territorial authorities, and to the legal structure of the local government. The paper then analyzes disaggregated cash flow data of all 12 regional. To the extent allowed by the data, determinants of regions' performance are linked to their financial positions. Overall, Auckland and Wellington regions appear to have a special status throughout the analysis, for different reasons: Auckland because it is the only large city in New Zealand, while Wellington due to being the capital city with a large network of related services and requirements. Interestingly, many revenue as well as expenditure components across regions depend on region's population sizes, even when measured on a per-capita basis.

Keywords: local government, regional councils, New Zealand, public finance

JEL classification: H71, H72, H76

## Funding of New Zealand regions

This paper describes the nature in which regional councils are funded in New Zealand. It starts with an overall description of local government in New Zealand, highlighting the role of central government's reforms in 1980s and further in 2002 played in shaping local government's functions. Some detail is given to the functional division of local government into regional councils and territorial authorities, the latter comprising district and city councils. The legal structure of the local government is described in order to facilitate understanding of roles regions play in New Zealand. The paper then proceeds to analyze the disaggregated cash flow data of all 12 regional councils according to basic accounting categories. To the extent the data allows, some analytical conclusions are driven as well about the relative performance of the regions and the extent to which they use different tools for financing and in expenditures.

### ***General background***

New Zealand has an estimated population of 4,148,000 (September 2006) and a land area of 270,534 sq km. It is a constitutional monarchy and a unitary state with parliamentary sovereignty. It has a centralized, unitary form of government, headed by the Prime Minister. The executive consists of the Governor General, the Prime Minister, a cabinet of Ministers, ministries, Crown Entities and State-owned enterprises. The unicameral parliament comprises 120 members that are elected every three years. The Governor General invites the party with the highest number of elected representatives to form the government.

### ***Structure of the local government***

There are 86 local authorities in New Zealand, constituting collectively "local" or "regional" government. They consist of 12 regional councils and 74 territorial authorities. Territorial authorities fall into two types: city councils and district councils. With a few minor exceptions, boundaries of territorial authorities are drawn inside boundaries of a regional council. Four of the territorial authorities are so called unitary authorities which also have the status of a regional council. Table 1 (OECD, 1997) outlines the size distribution of the regional councils and territorial authorities. The smallest territorial authority are Chatham Islands with 750 people, the largest is Auckland City 420,700. West Coast is the smallest regional council with a population of 30,600, and Auckland Region is the largest one with a population of 1,316,700. Table 2 gives details on the size distribution of regions in New Zealand.

Table 1. Size distribution of local authorities (June 2004)

	Smallest	Average	Largest
Regional councils	30,600	1,316,700	338,413
Territorial authorities	750	420,700	54,878

Compared to other OECD countries New Zealand's local government is economically smaller. Its non-market activities contribute only 3.1 % to New Zealand's GDP (Rae, 2002).

Table 2: Distribution of Regional councils and Unitary authorities

Regional Council / Unitary Authority	Number of territorial authorities (TA)	Population	Average Population of a TA
Northland region	3	147,600	49,200
Auckland region	6	1,316,700	219,450
Waikato region	10	381,900	38,190
Bay of Plenty region	6	257,500	42,917
Hawke's Bay region	4	149,100	37,275
Taranaki region	3	105,400	35,133
Manuwatu-Wanganui region	7	227,100	32,443
Wellington region	8	456,900	57,113
West Coast region	3	30,600	10,200
Canterbury region	10	520,500	52,050
Otago region	5	195,000	39,000
Southland region	4	93,600	23,400
Gisborne region	Unitary	44,900	44,900
Tasman region	Unitary	45,800	45,800
Nelson region	Unitary	45,300	45,300
Marlborough region	Unitary	42,300	42,300
Chatham islands	1	750	750
Total	74	4,060,900	54,878

## Legal framework of operation of local government

Central and local governments are completely independent politically, and to very large degrees also administratively and financially. This is reflected in the range of governance and financial structures. The degree of independence was increased in a sweeping government reform in the late 1980s. During these reforms, government agencies were transformed by becoming directly responsible for the outcomes. The framework of outcome-based budgeting has been established across-the-board. This transformation to a top-down budgeting framework led to large decrease in government debt. The reform has also reshaped the operating framework of local governments, mainly in Local Government Act. Changes enacted in this act fell into following categories:

- In 1989, Local Government Commission used a set of demographic, social, cultural administrative and efficiency criteria in streamlining the number of regional councils from 22 to 14 and number of territorial authorities from 205 to 74 (OECD, 1997)<sup>1</sup>. All ad-hoc and special purpose authorities were abolished.

<sup>1</sup> This was a part of broader government reform which also saw restructuring of health and education authorities and electric power boards.

- Community boards were established to provide a voice for the communities within the newly amalgamated regions and district and city councils. They have further improved communication of development objectives in larger regions.
- Direct election of regional councils
- Separation of regulatory functions from service delivery functions
- In situations where efficiency of the national economy was deemed affected, all commercial and trading activities of local authorities had to be channeled through a Local Authority Trading Enterprise (LATEs) set up for this purpose (this was primarily the case of airports, harbours, public transport). In other cases, LATEs were optional.
- Encouragement of privatization and contracting out.
- Introduction of mandatory accrual accounting, where transactions had to be booked at the time the transaction was effected rather than at the time when cash arrived or left the accounts. Compulsory introduction of Annual Reports.
- CEOs were appointed for periods of five years, with the responsibility of staffing the council as necessary.

These changes increased the transparency of the local government by clarifying the respective roles of territorial authorities and regional councils, the former being mainly responsible for natural resource management. They were founded in belief that the role of the government should be marginal, while the role of free markets should be encouraged due to their ability to improve economic efficiency (OECD, 1997).

The second wave of the reform in 2001-2003 introduced new Local Government Act, Local Government (Rating) Act and Local Electoral Act. Among other things, these acts clarified the scope of the administrative interference by the central government in the matters of local government to a ministerial review in cases of significant and persistent failure in the fulfillment of statutory obligations, mismanagement of resources or a significant deficiency of local government's deficiency. A ministerial review can result in an early call of election and an appointment of a commission to act instead of the council.

Central and local governments hold regular fora that bring together the prime minister, deputy prime minister, minister for local government and finance minister as well as the representatives of the local government: president of Local Government New Zealand and members of its National Council. The fora take place two times a year.

Local Government Act 2002 also fundamentally changed the framework of operation of the local government by establishing "general empowerment". Under the old act's ultra vires doctrine, only involvement in activities specifically outlined by law was permitted and local government lacked the general competence powers. General empowerment under the new act gives local governments full rights and privileges (within legal limits) to achieve its purpose. The purpose of the local government is defined by law as 1) enabling democratic decision-making and action by communities and 2) promoting the social, economic, environmental and cultural well-being of communities in the present and the future. There is no sign that the gradual devolution of responsibilities to local authorities is finished. The most recent cases include the development of gaming policies,

additional building inspections required under Building Act 2004, and the authority to set speed limits within the borders of the local authority which used to be in hands of Land Transport Safety Authority.

The act also clarifies the way local government relates to the Treaty of Waitangi, an important document signed in 1840 between Maori chiefs and the British Crown. Treaty of Waitangi is the foundation for settlement of land and other resource rights in New Zealand.

Another important piece of legislation involving local government is the Resource Management Act 1991 which promotes sustainable development of natural resources. In line with overall restructuring process, more powers of management and responsibility for natural resources have been devolved to local government.

## **Elections and structures in local government**

The triennial election of the local government's bodies is outlined in the Local Electoral Act 2001. It gives local governments the choice to use either single transferable vote system, or the more traditional first-past-the-post system. All councils chose postal rather than booth voting in the most recent 2005 election. Resident electors need to be of at least 18 years of age and reside at an address within the local authority for at least one month in the year of the election. Ratepayer electors need to own a property in the area of the local authority, or need to be nominated by a corporate entity which owns a body. One may not be both resident and ratepaying elector in the same local authority. Only electors that are New Zealand citizens are allowed to run for positions in local councils. Finally, councilors may not have a position in both regional and territorial councils in the same region at the same time.

The councils are asked to separate executive and regulatory functions to the amount practical in the particular region or territorial authority. In the more populous regions this leads to councils setting specialized committees. The remuneration of the elected members of local government is administered by Remuneration Authority, an independent body of central government. Salaries are determined according to prescribed factors, most importantly the size of the local government's constituency<sup>2</sup>. According to the report of Local Government New Zealand, women accounted for 27.2% of members of local government's bodies and 18.6% of mayors and chairs in 2002.

Compared to other OECD countries, staffing levels of local government in New Zealand are low. This in part follows from the Local Government Act, which requires only one mandatory local authority officer: the chief executive. The chief executive is appointed for a period of 5 years, with an option of a renewal for a further two years subject to satisfactory performance review. He or she hires other necessary staff members, typically a management team consisting of planning and policy, service delivery, finance, asset

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<sup>2</sup> Local authorities of larger size require full time staff and consequently higher remuneration. Local governments in smaller-sized regions often suffice with part-time staff.

management and corporate affairs areas. Consequently, only 10.3% of public employment in New Zealand in 1995 was in the local (as opposed to central or federal) government. Comparable shares in other countries were: Australia 12%, Austria 56%, Canada 83%, Denmark 73%, Finland 75%, France 31%, Germany 88%, Ireland 12%, Italy 37%, Portugal 14%, Spain 53%, Sweden 83%, United Kingdom 52% and the United States 84% (OECD, 1997).

The activities of local governments in New Zealand are reviewed by all layers of government as well as the community.

Table 3: Control mechanisms of authorities

Level of government	Government body	Area of responsibility	Sanctions
Central	Local Government Commission	Reorganization and representation: Considers proposals for redrawing regional boundaries.	
	Parliamentary Commissioner for the Environment	Environmental Planning and Management	Ministerial review
	Office of the Ombudsman	Official information according to Local Government Official Information and Meetings Act	
	Office of the Controller and Auditor General	Annual financial audit	Tagging audits
Council	Elected members	Decision making	
Community	All residents, ratepayers and community bodies	Planning consultation for Annual plan, Annual reviews for required Annual report	Triennial elections, legal action

The most relevant new requirements for local councils relate to a duty to consult with their constituents. This may be done indirectly through community boards, except in cases of district plans when Resource Management Act 2002 calls for direct consultation with the constituents. The Local Government Act 2002 also requires auditor's opinion on the forecasting assumptions and service levels included in the budget presents a fixed cost that needs to be shared between the constituents. This naturally presents a proportionately larger burden in smaller regional councils and territorial authorities.

The reviewing and consultation requirements introduced in new legislation also include obligations to (LGNZ, 2005):

- Review all bylaws and adopt them via special consultation procedure

- Consult on transfer of small water schemes (transfer of small-size water usage rights)
- Prepare assessments of water and sanitation services
- Consider community views in each stage of decision-making process.

## **Division of competencies in local government**

Traditionally, the view of local councils in New Zealand was that they collect taxes to provide a range of basic services often referred to as “road, rubbish and regulations”. The last one of them came about from a need to limit noise levels, dogs, local public health, buildings and country planning. Although the education remains the responsibility of the central government, the reforms have abolished Education boards and gave their powers to local Boards of Trustees, who are community-based management bodies. Boards of Trustees are responsible for setting staff salaries and certain aspects of school funding.

The “general empowerment” of local governments established by the new legislation holds promise for broader and deeper cooperation between regional councils and territorial authorities. Traditionally, there was little interaction between these levels of local government. But with clearer division of roles between them comes clarity for the avenues of cooperation.

The Local Government and Resource Management Acts outline the following roles for regional councils:

- Integrated management of natural and physical resources of the region
- Biosecurity (Due to its distance from continents, New Zealand has a very large amount of endemic species. Voluntary or involuntary import of foreign species of plants and animals therefore poses risks for the environment. The government is actively pursuing a role of restricting such flow under the auspices of “biosecurity”)
- Rivers and catchment management including flood control
- Harbour navigation and safety
- Marine pollution
- Regional emergency management and civil defence
- Regional land transport planning
- Parks and open spaces: only Auckland and Wellington regional councils have this responsibility.

Regional councils are led by a chairperson elected indirectly by the regional council for a period of three years. They often delegate the responsibilities outlined above to committees set for specific purposes. Specifically, they have the ability to collect taxes (called “rates” at local level in New Zealand), make by-laws, borrow money, etc.

The territorial authorities’ main role is the provision of services to the community. These include:

- Infrastructure
  - Town planning
  - Urban roads
  - District councils share a role with the central government in rural fire protection.
- Public health and safety. Provision of medical care is funded by central government through a network of District Health Boards.
  - Inspections of water quality, commercial premises, egress and noise, etc.
  - Territorial authorities share civil defense responsibilities with regional councils.
  - Refuse collection and disposal
- Recreation, culture as well as resource management. The latter includes control of the use of land (and associated natural resources) for the development or protection as outlined in the integrated management plan set at the regional level.

Territorial authorities are led by a mayor who is elected directly by the community.

## **Financial overview of local governments**

The relatively small size of the local government in New Zealand implies a low level of local governments' budgets. Local governments raise only about 5% of total government revenue, compared to an OECD average of 13% for unitary-government countries and 30% for federal-government countries. However, its asset base is quite large; in 2000, local government's assets were around 40% of country's GDP (Rae, 2002). Local authorities are required by law to keep operating revenues at a level sufficient for covering annual expenses, with a limited scope for running budget deficits. Annual budgets are required to be balanced (realized budget is used for applying the rule) except in the instances of borrowing on capital expenditures. Carry-over to next financial year is possible (Southerland, Price and Joumard, 2006). Although the central government does not approve local government's budget, Local Government Act 2002 states clearly that the central government is also not responsible for local government's debt.

The responsibility for financial management has to be defined in the statutes of each local authority. Every year, details of the budget have to be outlined in an annual plan controlled by a controlling board. The annual plan is subject to public consultation. At the end of each fiscal year, local authority is required to reveal its actual achievements in the Annual Report.

## **Revenue**

The aggregate revenue of local government in New Zealand in 2002/2003 was NZ\$4.25bn (US\$ 2.93bn). The following table outlines the revenue composition.

Table 4: Composition of 2002/2003 aggregate local government revenue

Component	Share
General rates (taxes)	54%
Water rates (taxes)	4%
Fees and fines	5%
Sales and other income	19%
Investment income	7%
Grants, subsidies and levies	11%
Petroleum taxes	1%

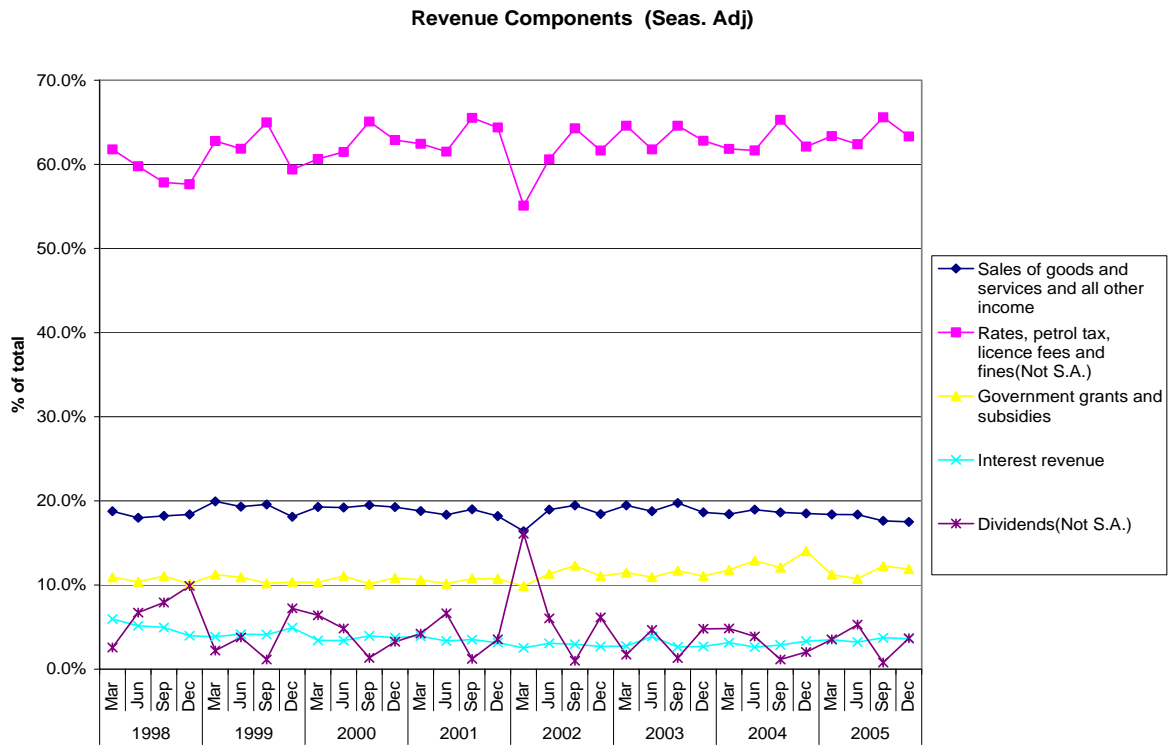
The main source of revenue is property taxation through so-called “rates”. The Local Government (Rating) Act 2002 gives local authorities right to charge property taxes with a considerable discretion. These are usually based on a mix of unimproved land taxes and improved value taxes, both determined in a three-year valuation cycles.

Local authorities are also allowed to borrow money in accordance with their long term plan. However, Local Government (Rating) Act makes it clear that the central government does not guarantee debt of the local authorities.

The only two categories in which local governments’ revenues depend on the central government: grants from specific programs, mostly road construction and maintenance, and property taxes in lieu of land owned by central government. Under one of the programs, Housing New Zealand, national housing body, makes payments to territorial authorities for operating costs of its public housing properties maintained by the territorial authorities.

In less detail, Figure 1 graphs time series of the main components of local governments’ revenue using quarterly data of Statistics New Zealand. The data starts in 1998 and is seasonally de-trended, making it difficult to precisely compare with composition table.

**Figure 1: Seasonally adjusted aggregate revenue components**



The figure shows relatively stable behaviour of the main component of local authorities’ revenue: Rates, petrol tax, license fees and fines, at around 63% of total revenue. The second largest component is the sales of goods and services at an average 19% of total income. Government’s subsidies show a slight upward trend over the last 8 years, from 10% to about 12% of total revenue. Interest income shows a slight downward pattern, from 7% to about 4%. The dividend income is most volatile of all income sources, ranging from 1% to 16% of total income.

### **Cross-regional differences in region’s revenue composition**

We use a unique annual dataset collected from individual Local Authorities’ Statistics for years ending in June. The dataset covers a period of 5 years (1999-2004) and provides vital information on cash flow statements and balance sheets of individual local authorities. Because of the focus of this paper, we only analyze financial statistics of regional councils, as opposed to those of the territorial authorities.

**Table 5: Real Total Operating Income (thousands, 1999\$)**

	1999	2000	2001	2002	2003	2004	average	per capita
Auckland	124,787	110,795	117,757	117,317	127,771	171,669	128,349	97.5
Bay of Plenty	17,302	18,428	19,041	23,570	27,163	28,006	22,252	86.4
Canterbury	42,709	43,817	48,457	51,283	57,403	64,423	51,349	98.7
Hawkes Bay	13,373	14,981	17,474	18,767	20,335	21,570	17,750	119.0
Manawatu Wanganui	23,081	22,526	21,967	25,003	26,625	25,644	24,141	106.3
Northland	9,404	10,089	12,818	12,715	11,974	14,262	11,877	80.5
Otago	12,880	12,694	14,704	17,767	16,927	17,353	15,388	78.9
Southland	15,131	13,662	12,642	15,879	17,910	15,084	15,051	160.8
Taranaki	9,103	8,034	21,730	9,297	9,596	9,572	11,222	106.5
Waikato	35,290	33,430	35,468	38,915	45,770	46,019	39,149	102.5
Wellington	105,407	101,140	106,326	107,987	106,168	106,665	105,616	231.2
West Coast	5,908	12,138	5,854	5,767	6,247	7,124	7,173	234.4
<i>average</i>	<i>34,531</i>	<i>33,478</i>	<i>36,187</i>	<i>37,022</i>	<i>39,491</i>	<i>43,949</i>	<i>37,443</i>	<i>125</i>

Table 5 summarizes the levels of real total operating income of regional councils in all twelve regions of New Zealand. On average, Auckland region has the highest income, followed by Wellington and Canterbury (note that Canterbury is more populous than the capital region of Wellington). West Coast, Taranaki and Northland had the lowest income. We can also conclude that real income has grown in all regions in the 6 years under consideration – which is not unexpected given the overall growth in the economic activity in New Zealand over this period. Table 6 summarizes this growth. The fastest revenue growth has been recorded in oil-rich region of Taranaki: in 2001, revenue of the regional council grew by 170%. Also other small regions of West Coast, Hawkes Bay and Bay of Plenty recorded average double-digit annual growth rates.

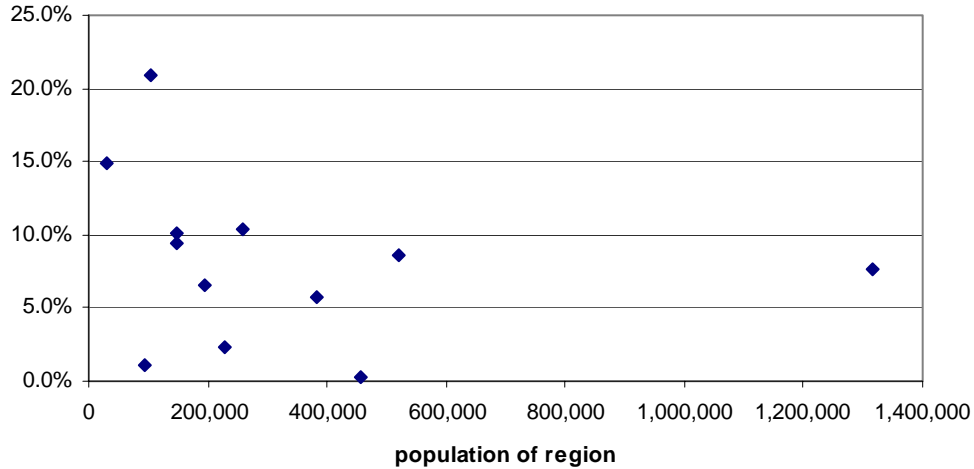
**Table 6: Real annual growth in Operating income**

	2000	2001	2002	2003	2004	average
Auckland	-11.2%	6.3%	-0.4%	8.9%	34.4%	7.6%
Bay of Plenty	6.5%	3.3%	23.8%	15.2%	3.1%	10.4%
Canterbury	2.6%	10.6%	5.8%	11.9%	12.2%	8.6%
Hawkes Bay	12.0%	16.6%	7.4%	8.4%	6.1%	10.1%
Manawatu Wanganui	-2.4%	-2.5%	13.8%	6.5%	-3.7%	2.3%
Northland	7.3%	27.0%	-0.8%	-5.8%	19.1%	9.4%
Otago	-1.4%	15.8%	20.8%	-4.7%	2.5%	6.6%
Southland	-9.7%	-7.5%	25.6%	12.8%	-15.8%	1.1%
Taranaki	-11.7%	170.4%	-57.2%	3.2%	-0.2%	20.9%
Waikato	-5.3%	6.1%	9.7%	17.6%	0.5%	5.7%
Wellington	-4.0%	5.1%	1.6%	-1.7%	0.5%	0.3%
West Coast	105.5%	-51.8%	-1.5%	8.3%	14.0%	14.9%
<i>average</i>	<i>7.3%</i>	<i>16.6%</i>	<i>4.1%</i>	<i>6.7%</i>	<i>6.1%</i>	<i>8.2%</i>

Interestingly, the growth rates are negatively correlated with regional populations (see Figure 2). This would be an expected result on a cross-country scale in a neoclassical growth model, if the smaller regions were poorer countries. However, that is harder to justify this on a regional scale. A candidate explanation may be a speculation of lower

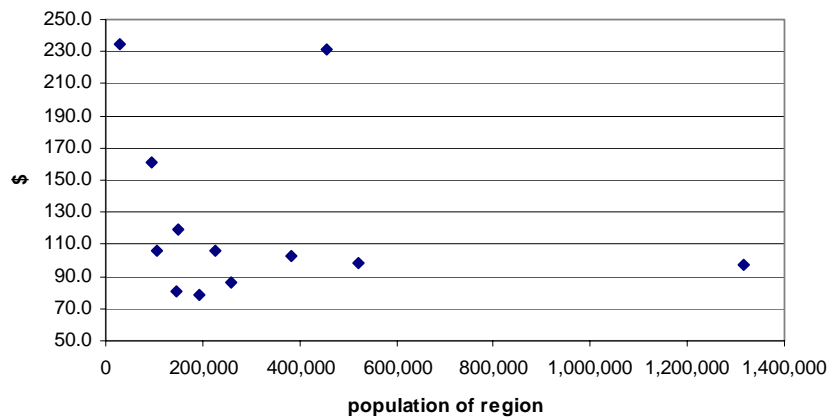
labour productivity in the relatively less populous regions which tend to be more agricultural.

**Figure 2: Average Annual Real Income Growth Rate and Region Size**



We also see that most of the smaller regions have higher average per-capita real income than the largest Auckland (using year 2004 regional population counts): West Coast region is the highest with 2.5 times the per-capita income of Auckland<sup>3</sup>. Clearly, many services provided by regional councils depend on the sizes of population. However, some – like provision of roads – depend on the size of region’s area. Other services can generally be characterized as independent of region’s population or size and are simply a fixed cost (e.g., civil defence). Consequently, one would not expect to see a constant per-capita average real income between regions. As can be seen in Figure 3, there is a weak negative relationship between average real per capita revenue and region’s population.

**Figure 3: Per Capita Real Avg. Operating Revenue (1999\$)**



<sup>3</sup> The notable outlier is the capital Wellington region which, despite having less than half of the population of Auckland has nearly identical operating income.

## Rates as the main source of regional revenue

Table 4 and Figure 1 showed the importance of property and water taxes (“rates”) as source of local government’s income. Is this the case equally for all councils?

**Table 7: Real annual Rate revenue (thousands, 1999\$)**

	1999	2000	2001	2002	2003	2004	average	per capita
Auckland	61,819	62,603	65,180	65,986	70,339	92,084	69,669	5.3
Bay of Plenty	9,284	9,175	9,069	8,745	8,929	9,617	9,136	3.5
Canterbury	31,384	31,847	32,401	32,773	36,424	39,389	34,036	6.5
Hawkes Bay	4,438	6,148	6,323	6,625	6,566	6,967	6,178	4.1
Manawatu Wanganui	13,388	12,770	12,784	12,900	13,539	14,958	13,390	5.9
Northland	2,990	3,043	3,075	3,149	3,119	3,520	3,149	2.1
Otago	4,996	5,577	5,779	5,576	5,808	5,871	5,601	2.9
Southland	4,993	4,940	4,988	5,214	5,529	5,469	5,189	5.5
Taranaki	3,592	3,345	3,163	2,849	3,839	3,793	3,430	3.3
Waikato	18,846	19,137	19,963	20,972	25,936	28,528	22,231	5.8
Wellington	43,206	42,184	46,494	46,333	47,802	48,045	45,678	10.0
West Coast	2,315	2,425	2,398	2,190	2,229	2,303	2,310	7.5
<i>average</i>	16,771	16,933	17,635	17,776	19,172	21,712	18,333	5

**Table 8: Real annual growth rates in Rates across regions**

	2000	2001	2002	2003	2004	average
Auckland	1.3%	4.1%	1.2%	6.6%	30.9%	8.8%
Bay of Plenty	-1.2%	-1.2%	-3.6%	2.1%	7.7%	0.8%
Canterbury	1.5%	1.7%	1.2%	11.1%	8.1%	4.7%
Hawkes Bay	1.0%	2.5%	0.3%	2.5%	4.0%	2.1%
Manawatu Wanganui	38.5%	2.8%	4.8%	-0.9%	6.1%	10.3%
Northland	1.8%	1.0%	2.4%	-1.0%	12.8%	3.4%
Otago	11.6%	3.6%	-3.5%	4.2%	1.1%	3.4%
Southland	-1.1%	1.0%	4.5%	6.0%	-1.1%	1.9%
Taranaki	-6.9%	-5.5%	-9.9%	34.8%	-1.2%	2.3%
Waikato	1.5%	4.3%	5.1%	23.7%	10.0%	8.9%
Wellington	-2.4%	10.2%	-0.3%	3.2%	0.5%	2.2%
West Coast	4.8%	-1.2%	-8.6%	1.8%	3.3%	0.0%
<i>average</i>	4.2%	2.0%	-0.5%	7.8%	6.9%	4.1%

Tables 7 and 8 show that real rate revenue has been increasing on average but that this growth was not the same in all regions. North Island’s Manawatu, Auckland and Waikato regions saw fastest growth in revenue of up to 10% per year in real terms. Although New Zealand was enjoying a healthy economic growth throughout this period, 2002 can be seen as year of average negative growth in real rate growth due to a relative slowdown of GDP growth rate that year. It is possible that rate income is pro-cyclical, with the funding implications for regional councils. However, the lack of quarterly data makes it impossible to assess this hypothesis.

The average per capita rate income (and consequently the average per capita rate burden) is by far the highest in Wellington, at \$10 per person per year (in 1999 real dollars). This is twice the national average of \$5. The poorer Northland and Otago see the lowest average per capita rates.

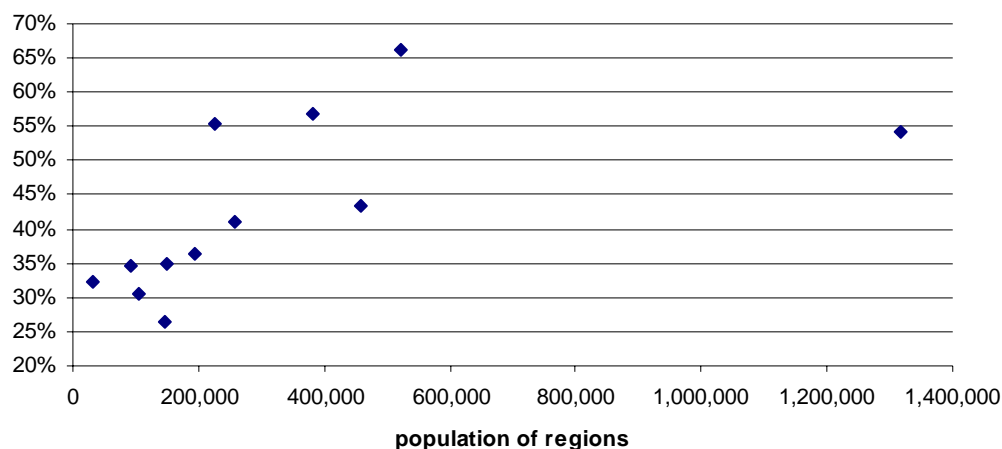
Although we see that rates income trends differently between regions and on average presents a different per-capita burden, we also need to find a way of assessing the importance of each region's rate revenue for financing of local activities. Table 9 does this by summarizing the development of shares of rate revenue in total regional budgets over the 6-year period. Average rate revenue varies from 27% of region's income for Northland to 66% for Canterbury. These regional differences are quite persistent. However, we also see substitution from rates into other sources of finance in some regions (Bay of Plenty, Canterbury and Northland) while in others the opposite is the case (Waikato and Wellington).

**Table 9: Rates as Proportion of Total Revenue**

	1999	2000	2001	2002	2003	2004	<i>average</i>
Auckland	50%	57%	55%	56%	55%	54%	54%
Bay of Plenty	54%	50%	48%	37%	33%	34%	41%
Canterbury	73%	73%	67%	64%	63%	61%	66%
Hawkes Bay	33%	41%	36%	35%	32%	32%	35%
Manawatu Wanganui	58%	57%	58%	52%	51%	58%	55%
Northland	32%	30%	24%	25%	26%	25%	27%
Otago	39%	44%	39%	31%	34%	34%	36%
Southland	33%	36%	39%	33%	31%	36%	34%
Taranaki	39%	42%	15%	31%	40%	40%	31%
Waikato	53%	57%	56%	54%	57%	62%	57%
Wellington	41%	42%	44%	43%	45%	45%	43%
West Coast	39%	20%	41%	38%	36%	32%	32%
<i>average</i>	49%	51%	49%	48%	49%	49%	49%

Interestingly, there is a strong positive relationship between the importance of rates in region's budgets and the size of the region (see Figure 4). More populous regions rely more heavily on revenue from rates. This may again suggest that regional budgets need to fund a lot of activities that do not depend on the population size of the regions. Rates are very useful tools of raising revenue but depend crucially on the population of the region (as they are charged mainly on real estate). Less populous regions are not able to rely on this revenue and have to use other tools instead.

Figure 4: Rates as proportion of Total Income



### The importance of government subsidies

As has been mentioned in the first part of the paper, central government exercises only a limited control over local government's finances. The main such avenue are the purpose-specific subsidies for transportation. Table 10 shows that in more than half of the regions (7 out of 12), the level of real government subsidies has been growing in the 7 years in question. However, there has been no such trend in Northland, Otago, Taranaki, Waikato and West Coast regions.

Table 10: Real Government Subsidies Received (thousands, 1999\$)

	1999	2000	2001	2002	2003	2004	average	per cap.
Auckland	29,445	19,598	26,580	29,425	37,146	56,121	33,053	25.1
Bay of Plenty	247	264	454	935	1,050	1,150	683	2.7
Canterbury	5,979	6,578	8,353	10,231	13,089	16,183	10,069	19.3
Hawkes Bay	153	167	168	239	417	424	261	1.8
Manawatu Wanganui	861	512	765	1,277	723	1,062	867	3.8
Northland	141	253	122	256	143	161	179	1.2
Otago	610	591	1,817	3,533	589	670	1,302	6.7
Southland	3,331	3,845	3,871	4,154	6,547	4,739	4,415	47.2
Taranaki	130	184	282	265	292	175	221	2.1
Waikato	7,870	6,583	6,880	8,755	10,725	8,123	8,156	21.4
Wellington	16,421	16,276	18,513	22,120	21,391	23,829	19,758	43.2
West Coast	450	6,852	155	179	143	145	1,321	43.2
<i>average</i>	<i>5,470</i>	<i>5,142</i>	<i>5,663</i>	<i>6,781</i>	<i>7,688</i>	<i>9,399</i>	<i>6,690</i>	<i>18.1</i>

One reason why regional subsidies may not be growing in some regions is that they are already quite high relative to the overall budgets of those regions. Table 11 investigates this possibility. Clearly, the hypothesis fails: only in West Coast are government subsidies not smaller in importance than average. The 3 regions in which subsidies do not have an upward trend receive below-average government subsidies. Subsidies vary

greatly across regions, from an average of 1% (Northland) to 29% (Southland) of the regional revenue. Auckland region also receives a large average subsidy, possibly reflecting the road network density and the fact that Auckland and Wellington regions administer large regional park networks.

**Table 11: Share of Government Subsidies in Revenue**

	1999	2000	2001	2002	2003	2004	average
Auckland	24%	18%	23%	25%	29%	33%	26%
Bay of Plenty	1%	1%	2%	4%	4%	4%	3%
Canterbury	14%	15%	17%	20%	23%	25%	20%
Hawkes Bay	1%	1%	1%	1%	2%	2%	1%
Manawatu Wanganui	4%	2%	3%	5%	3%	4%	4%
Northland	1%	3%	1%	2%	1%	1%	2%
Otago	5%	5%	12%	20%	3%	4%	8%
Southland	22%	28%	31%	26%	37%	31%	29%
Taranaki	1%	2%	1%	3%	3%	2%	2%
Waikato	22%	20%	19%	22%	23%	18%	21%
Wellington	16%	16%	17%	20%	20%	22%	19%
West Coast	8%	56%	3%	3%	2%	2%	18%
<i>average</i>	<i>16%</i>	<i>15%</i>	<i>16%</i>	<i>18%</i>	<i>19%</i>	<i>21%</i>	<i>18%</i>

## Fines and regulatory revenue

There is a clear upward trend in real revenue collected from fines across regions. Regions were slow to start using this tool to generate revenue: Taranaki, Northland and Hawke's Bay only report first collections in year 2003 while Wellington region reports no collections at all. All other regions that have been collecting fines from an onset report steady growth in real regulatory revenue (Table 12). However, on average the contribution of fines remains small: from a maximum of 7% of total revenue in Bay of Plenty and West Coast to 1% in Waikato. Understandably, this is not the most popular source of revenue and its growth probably reflects the stringency of the by-laws and population size rather than fund-raising motivation.

**Table 12: Real Regulatory and Fines Revenue (thousands, 1999\$)**

	1999	2000	2001	2002	2003	2004	average	per capita
Auckland	5,628	5,892	6,461	6,776	6,844	7,655	6,543	5.0
Bay of Plenty	1,471	1,437	1,877	1,363	1,423	1,179	1,458	5.7
Canterbury	1,200	2,169	2,326	2,366	3,242	3,834	2,523	4.8
Hawkes Bay	0	0	0	0	711	1,133	307	2.1
Manawatu Wanganui	0	0	0	1,103	1,332	1,171	601	2.6
Northland	0	0	0	0	529	1,854	397	2.7
Otago	239	364	381	623	1,575	1,144	721	3.7
Southland	500	283	640	0	751	723	483	5.2
Taranaki	574	0	0	0	1,499	1,421	582	5.5
Waikato	0	0	0	1,006	0	1,911	486	1.3
Wellington	0	0	0	0	0	0	0	0.0
West Coast	231	356	496	705	582	723	516	16.8
<i>average</i>	<i>820</i>	<i>875</i>	<i>1,015</i>	<i>1,162</i>	<i>1,541</i>	<i>1,896</i>	<i>1,218</i>	<i>4.6</i>

## Real Investment Income – great heterogeneity between regions

In all dimensions, real investment income varies between regions. Recall from Figure 1 that investment income on aggregate saw a downward trend (Statistics New Zealand categorizes it as “interest income”). However, such statement masks a great heterogeneity among all regions. Table 13 shows that while some regions saw their real investment income grow rapidly (Bay of Plenty, Hawkes Bay, Northland, Otago, West Coast) others saw a significant decline (Auckland, Canterbury, Manuwatu Wanganui, Wellington). With the Local Government Act 2002 allowing the regions to invest in anything in line with their objectives, this may reflect the desire of regions to seize the opportunities: Bay of Plenty sees a large shift in 2002, Hawkes Bay and Otago smaller similar shifts are apparent. Per capita, investment income is by far the highest in the oil-rich Taranaki (\$52), while Canterbury has the lowest average per-capita real investment income of \$1.6.

**Table 13: Real Investment Revenue (thousands, 1999\$)**

	1999	2000	2001	2002	2003	2004	average	per capita
Auckland	20,082	14,739	8,954	5,937	5,347	6,092	10,192	7.7
Bay of Plenty	5,263	6,370	6,705	10,587	13,462	13,663	9,342	36.3
Canterbury	834	837	1,072	932	685	596	826	1.6
Hawkes Bay	4,160	4,015	4,493	5,885	5,887	6,099	5,090	34.1
Manawatu Wanganui	3,121	2,210	1,946	1,926	1,789	1,620	2,102	9.3
Northland	2,195	2,659	5,691	4,869	2,956	5,704	4,012	27.2
Otago	4,936	4,698	4,686	6,488	5,915	6,598	5,554	28.5
Southland	4,129	2,548	2,027	4,053	2,929	2,254	2,990	31.9
Taranaki	3,332	2,670	16,664	4,022	3,113	3,151	5,492	52.1
Waikato	3,581	2,526	3,582	3,268	2,975	2,962	3,149	8.2
Wellington	8,321	4,815	4,855	4,835	4,400	3,554	5,130	11.2
West Coast	100	116	574	434	452	748	404	13.2
<i>average</i>	5,005	4,017	5,104	4,436	4,159	4,420	4,524	21.8

The fastest growing regions in terms of investment income revenue were also ones in which income revenue was very important as a revenue source. In Taranaki, investment income generated close to half of total revenue for the regional council. Bay of Plenty, Otago and Northland also saw average shares of investment revenue of over 30% (see Table 14). Consequently, we can conclude that inside regions there was little substitution away from investment as a source of income. Energy-rich regions seem to rely on this source rather than on rates for generating income. Recall from Table 8 that rate income as a proportion of total in these regions was below average.

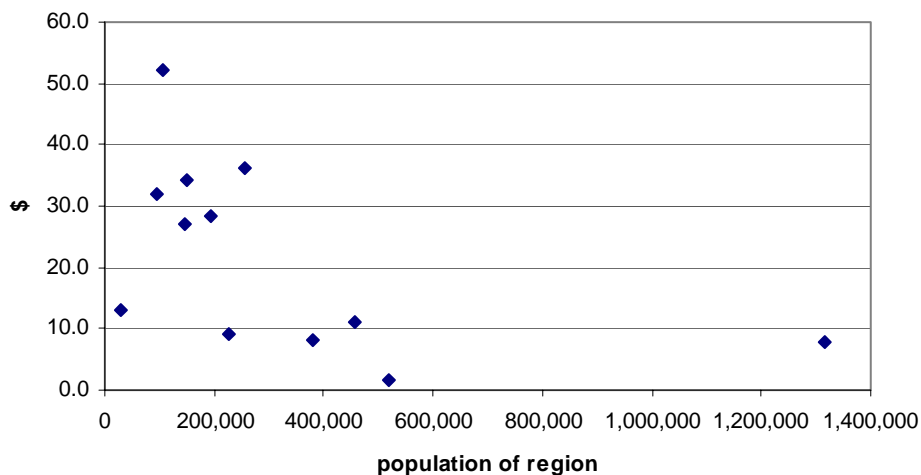
**Table 14: Share of Investment Income in Revenue**

	1999	2000	2001	2002	2003	2004	average
Auckland	16%	13%	8%	5%	4%	4%	8%
Bay of Plenty	30%	35%	35%	45%	50%	49%	42%
Canterbury	2%	2%	2%	2%	1%	1%	2%
Hawkes Bay	31%	27%	26%	31%	29%	28%	29%

Manawatu Wanganui	14%	10%	9%	8%	7%	6%	9%
Northland	23%	26%	44%	38%	25%	40%	34%
Otago	38%	37%	32%	37%	35%	38%	36%
Southland	27%	19%	16%	26%	16%	15%	20%
Taranaki	37%	33%	77%	43%	32%	33%	49%
Waikato	10%	8%	10%	8%	7%	6%	8%
Wellington	8%	5%	5%	4%	4%	3%	5%
West Coast	2%	1%	10%	8%	7%	10%	6%
<i>average</i>	14%	12%	14%	12%	11%	10%	12%

Furthermore, Figure 5 shows the negative relationship between the size of region's population and the average per capita revenue raised from investments. This is in part due to energy-rich resources being located in sparsely populated regions, and gives further weight to the dependence of the smaller (in terms of population) regions on revenue generated from non-rate sources.

**Figure 5: Per Capita Avg. Real Investment Revenue (1999\$)**



### Sales of goods and services as a revenue source

We do not see similar heterogeneity in changes of sales of goods and services between regions. The slight aggregate decline observed in Figure 1 is matched in most regions. Only Bay of Plenty, Hawkes Bay and Otago see a slight upswing in real sales of goods and services (Table 15). Of particular importance in this category is the status of Wellington. With its array of National Galleries, Museums and plethora cultural attractions – all administered by Wellington Regional Council – it is not surprising that on average Wellington alone accounted for 44% of all revenue collected by all regional councils in this budget category. Consequently it is not surprising that this revenue source is extremely important in Wellington, in real terms, the region annually receives \$75 are received per person in this way. This is only exceeded by West Coast region, at \$86 per person.

**Table 15: Real Sales of Goods and Services and Other Revenue (thousands, 1999\$)**

	1999	2000	2001	2002	2003	2004	<i>average</i>
Auckland	7,813	7,963	10,581	9,193	8,096	9,717	8,894
Bay of Plenty	1,037	1,182	936	1,940	2,299	2,396	1,632
Canterbury	3,312	2,387	4,306	4,980	3,962	4,422	3,895
Hawkes Bay	4,622	4,650	6,490	6,017	6,754	6,947	5,913
Manawatu Wanganui	5,711	7,035	6,472	7,798	9,242	6,833	7,182
Northland	4,078	4,134	3,930	4,441	5,226	3,023	4,139
Otago	2,099	1,463	2,041	1,547	3,041	3,070	2,210
Southland	2,178	2,047	1,116	2,457	2,154	1,898	1,975
Taranaki	1,475	1,836	1,620	2,162	853	1,032	1,496
Waikato	4,993	5,184	5,043	4,914	6,133	4,495	5,127
Wellington	37,459	37,864	36,464	34,699	32,575	31,237	35,050
West Coast	2,812	2,388	2,231	2,258	2,840	3,205	2,622
<i>average</i>	6,466	6,511	6,769	6,867	6,931	6,523	6,678

The regions least reliant on this for their revenue source are Auckland, Bay of Plenty and Canterbury (Table 16). On the other hand, the importance of this source in revenue generation is high in West Coast and Wellington but also very high in Hawkes Bay and Northland, both of which receive more than third of their funding from this source, in part due to a high number of tourists visiting the regions.

**Table 16: Share of Sales of Goods and Services in Total Revenue**

	1999	2000	2001	2002	2003	2004	<i>average</i>
Auckland	6%	7%	9%	8%	6%	6%	7%
Bay of Plenty	6%	6%	5%	8%	8%	9%	7%
Canterbury	8%	5%	9%	10%	7%	7%	8%
Hawkes Bay	35%	31%	37%	32%	33%	32%	33%
Manawatu Wanganui	25%	31%	29%	31%	35%	27%	30%
Northland	43%	41%	31%	35%	44%	21%	35%
Otago	16%	12%	14%	9%	18%	18%	14%
Southland	14%	15%	9%	15%	12%	13%	13%
Taranaki	16%	23%	7%	23%	9%	11%	13%
Waikato	14%	16%	14%	13%	13%	10%	13%
Wellington	36%	37%	34%	32%	31%	29%	33%
West Coast	48%	20%	38%	39%	45%	45%	37%
<i>average</i>	19%	19%	19%	19%	18%	15%	18%

The negative relationship between the size of the region's population and the amount of per-capita real revenue raised from sales of goods and services is weaker than it was for investment income. However, the relationship is visible nevertheless in figure 6. The relationship also holds between population sizes and average shares of sales of goods and services in total revenue.

Figure 6: Per Capita Avg. Real Sales of Goods and Other Revenues

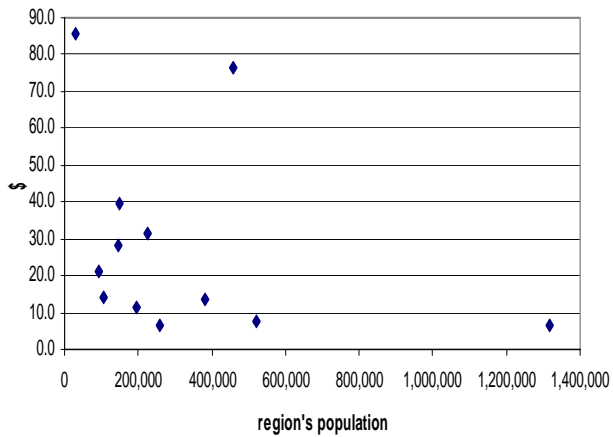
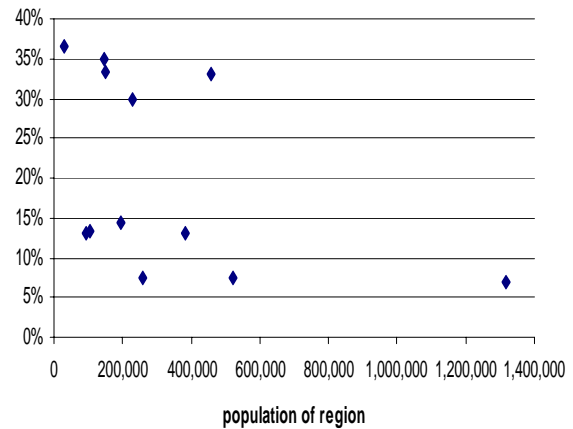


Figure 6b: Share of Sales of Goods and Services in Revenue



## Other revenue issues

### Road transport funding

With one car for every two people, New Zealand has one of the world's highest car ownership rates per capita. Three out of four trips are made by motor vehicle, one third of them for a distance of less than 2km and two thirds for a distance of less than 6km (OECD, 2005). This creates demand for a well-functioning road network, especially in the areas of dense population administered by city councils. At the same time, there are 10,700km of state highways and 82,000km of local roads maintained by territorial authorities. These are used for 60% of domestic freight transport.

The central government's objective is to cover all of the road maintenance and construction costs by a variety of user charges:

- Petrol taxes, paid at the pump, provide half of the revenue. These also include a levy used to finance the Accident Compensation Corporation, responsible for covering medical expenses of all accidents.
- Road user charges for diesel and all commercial vehicles. These provide a quarter of the revenue.
- Vehicle registration and annual licensing fees.

Roads under the responsibility of territorial authorities are financed by a mixture of property taxes and the aforementioned subsidies received from National Road Transport Programme.

The estimates of Ministry of Transport (2005) inclusive estimated environmental costs show that 85% of costs of state highways and 65% of costs of local roads are financed by user charges. In this sense, local roads are more heavily subsidized by the government. Furthermore, user charges cover 73% of costs of local roads in rural areas but only 56%

of costs of local roads in urban areas. Consequently, government subsidies are focused more heavily on urban local road users<sup>4</sup>.

## **Expenditures**

The focus of the Local Government Act 2002 general empowerment and sustainable development does not necessarily mean any additional financial burden on the local communities. There are few direct requirements placed on the councils, mostly in regard to road building and maintenance, public health and safety as well as building inspections (these are provided for by other acts such as Land Transport Act, Health Act and Building Act). The authorities decide their own goals of social, economic, environmental and cultural well-being, and based on these the services they will provide to the constituents. However, the purpose of the new laws to increase participation at the community level placed greater procedural requirements on the local councils, among others:

- To obtain auditor’s opinion on forecasting and other cost assumptions in plans
- To approve bylaws by special consultation procedure
- To consult on transfer of small water schemes
- To prepare assessments of water quality and sanitary services (sewerage)
- To consider community views at each stage of the decision-making process

These procedural requirements increase operating costs of local authorities.

Aside from the operating costs, the general empowerment leaves local authorities with greater decision-making freedom regarding projects community wishes to undertake. The difficult part, of course, is related to making expenditure decisions between competing needs of the community. We can study the expenditure structure to learn about the outcomes in more detail.

The aggregate expenditure of local governments in New Zealand in 2002/2003 was NZ\$4.03bn (US\$2.78bn). The following table outlines the expenditures composition.

Table 17: Composition of 2002/2003 aggregate local government expenditures

Component	Share
Utilities	28%
Road construction and maintenance	26%
Social, cultural and recreational act.	24%
Regulatory functions	11%
Democratic services (elections, etc.)	4%
Other	7%

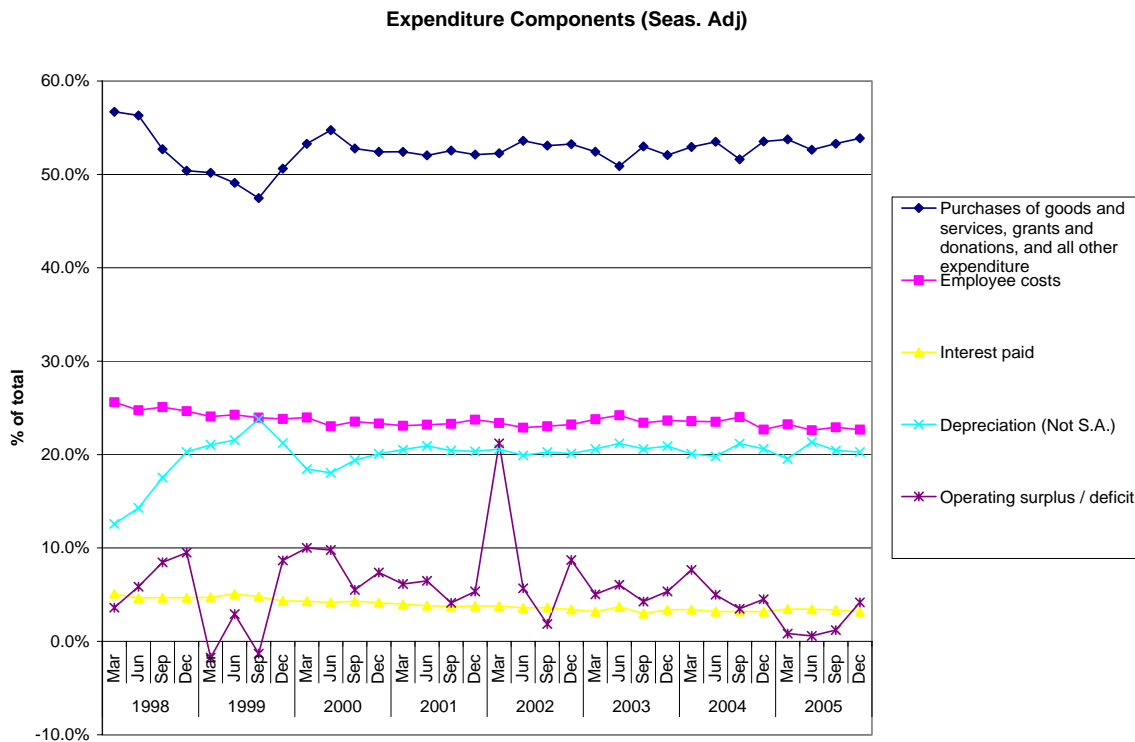
Capital expenditures may be financed through borrowing. In June 1993, long-term debt of local governments amounted to NZ\$1.7bn, and short term debt NZ\$0.5bn. At that

<sup>4</sup> These calculations exclude the costs of non-recoverable assets.

point of time, the relative weight of this debt was NZ\$650 per person or 134% of the annual rates (OECD, 1997).

The following figure plots the seasonally adjusted time series of the main components of local authorities' expenditures. The major component, the total purchases of goods and services, grants and donations (and all else) shows at first a decline from 57% to 47% in from 1998 Q1 to 1999 Q3. The drop in that component was matched by a proportional increase in the depreciation expenditures (capital spending) from 13% to 24%. On the other hand, there is an overall slow downward trend for employee costs from 26% to 23%, and for interest payments on local government's debt from 5% to 3%.

Figure 7: Components of aggregate expenditures of local governments



In line with the requirements imposed in the laws, there were only 2 out of the 24 quarters when aggregate budget balance of local authorities was in deficit (in the amount of 2% of total expenditures). The average budget balance is 5.5% over the period of 8 years. As we have seen in the example of revenue components, what is true at an aggregate level need not be true at the level of individual regions. A slight downward in some cases was caused by strong downward trend in few regions. In other cases, an apparent lack of a trend masked great heterogeneity in trends between regions. Therefore, we now turn to a discussion of the expenditure components of individual regional councils.

## Cross-regional differences in region's expenditure composition

With a balanced budget requirement on most of operating items in their budgets, it is little surprise that total expenditure patterns mirror those of total revenues. Taking inflation out of the picture, Table 18 shows documents the growth in total operating expenditures across the regions. The level of average per capita total real expenditure is the highest in the capital region of Wellington (\$215), followed by much poorer regions of West Coast and Southland. Wellington appears to be a consistent outlier, most likely due to the fact that it is a capital city with a disproportionately high demand for region-related services. Real expenditures in the most populous region of Auckland are the slightly below the average of all regions at \$92 per capita. The lowest per-capita average real expenditure is in Northland at \$66 and in Otago at \$68.

**Table 18: Real Total Operating Expenditure (thousands, 1999\$)**

	1999	2000	2001	2002	2003	2004	average	per capita
Auckland	113,874	108,637	111,041	117,219	128,632	153,014	122,070	92.7
Bay of Plenty	19,284	18,079	19,155	22,459	25,401	28,379	22,126	85.9
Canterbury	40,837	40,671	46,628	50,360	53,557	60,549	48,767	93.7
Hawkes Bay	14,778	14,154	13,949	14,635	17,635	19,378	15,755	105.7
Manawatu Wanganui	20,356	21,782	21,695	24,558	25,313	25,437	23,190	102.1
Northland	9,277	8,959	9,109	10,570	9,679	11,074	9,778	66.2
Otago	14,700	13,266	12,739	12,704	13,465	13,418	13,382	68.6
Southland	12,530	13,851	12,944	13,219	16,414	14,668	13,938	148.9
Taranaki	8,243	9,028	7,900	8,303	8,758	8,509	8,457	80.2
Waikato	40,855	37,320	34,560	39,909	43,685	47,291	40,603	106.3
Wellington	96,233	92,055	101,073	101,814	97,629	102,074	98,480	215.5
West Coast	5,114	5,291	4,991	4,962	5,851	6,228	5,406	176.7
<i>average</i>	<i>33,007</i>	<i>31,924</i>	<i>32,982</i>	<i>35,060</i>	<i>37,168</i>	<i>40,835</i>	<i>35,163</i>	<i>111.9</i>

The overall aggregate real expenditure growth was not shared by all regions (see Table 19). Otago in particular is of concern as it is not only lagging in levels of real regional expenditures but also in terms of their growth rates, with an average real growth rate of -2% over the 7-year horizon under consideration. Another “poorer” region sharing such low-growth profile is Taranaki with an average real per-capita expenditure of \$80 and an average growth rate of 1%. Wellington’s aggregate expenditure also grows very slowly but this may not limit that region’s ability to provide services due to its disproportionately high per-capita expenditure levels.

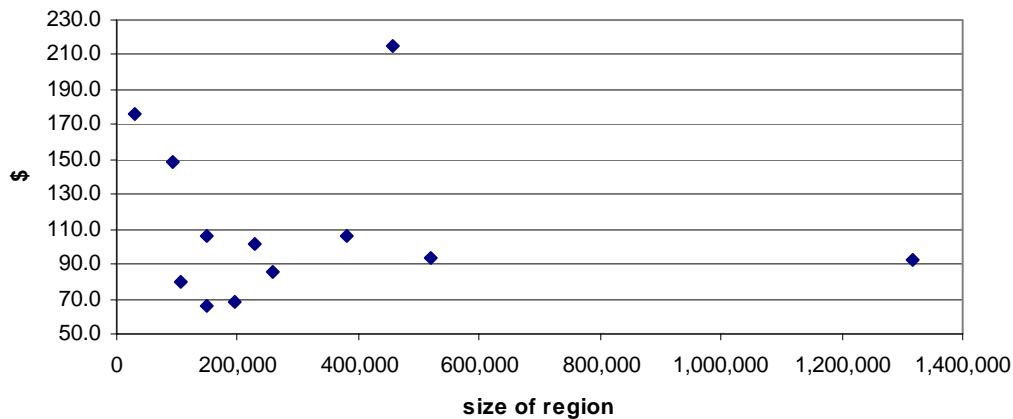
**Table 19: Growth rates of real expenditures**

	2000	2001	2002	2003	2004	average
Auckland	-5%	2%	6%	10%	19%	6%
Bay of Plenty	-6%	6%	17%	13%	12%	8%
Canterbury	0%	15%	8%	6%	13%	8%
Hawkes Bay	-4%	-1%	5%	20%	10%	6%
Manawatu Wanganui	7%	0%	13%	3%	0%	5%
Northland	-3%	2%	16%	-8%	14%	4%
Otago	-10%	-4%	0%	6%	0%	-2%

Southland	11%	-7%	2%	24%	-11%	4%
Taranaki	10%	-12%	5%	5%	-3%	1%
Waikato	-9%	-7%	15%	9%	8%	3%
Wellington	-4%	10%	1%	-4%	5%	1%
West Coast	3%	-6%	-1%	18%	6%	4%
<i>average</i>	<i>-1%</i>	<i>0%</i>	<i>7%</i>	<i>9%</i>	<i>6%</i>	<i>4%</i>

Overall, however, a negative relationship is apparent between average real per-capita council expenditures and the population of the council (especially when taking Wellington out of the picture). Due to the disproportionate costs of road construction and maintenance, expenditures of regions depend on their average distance, which is a function of land area, not of population. Civil defense and biodiversity are examples of other driving forces behind the relationship present in Figure 8.

Figure 8: Per Capita Avg. Real Total Operating Expenditures (1999\$)



## Employee Expenditures

In aggregate numbers, employee expenditures are the second most important component of local government's outlays, with a clear downward trend (Figure 7). This trend is not shared by the regions. We see that on average, regions' employee expenditures grew in real terms. Consequently, it must have been the employee expenditures of Territorial authorities that had a strong downward trend. We see in table 20 that on average, real employee expenditures grew over the period of 7 years. However, this growth was not shared by all regions. The expenditures mainly grew in Auckland, Bay of Plenty, Canterbury and West Coast regions with little or no trend apparent in the other regions.

Table 20: Real Employee Costs (thousands, 1999\$)

	1999	2000	2001	2002	2003	2004	<i>average</i>	<i>per capita</i>
Auckland	24,362	23,116	24,070	25,205	27,134	29,281	25,528	19.4
Bay of Plenty	8,864	8,338	8,232	8,021	10,902	10,800	9,193	35.7
Canterbury	15,177	14,133	14,827	13,669	16,068	16,748	15,104	29.0
Hawkes Bay	6,646	6,491	5,139	5,667	5,839	5,828	5,935	39.8

Manawatu Wanganui	9,553	9,119	8,907	9,356	7,170	9,970	9,013	39.7
Northland	4,605	4,108	4,343	4,384	4,585	5,043	4,511	30.6
Otago	5,072	4,982	4,494	4,136	4,839	4,929	4,742	24.3
Southland	4,542	4,502	4,032	4,076	4,715	4,781	4,441	47.5
Taranaki	4,413	4,113	4,115	3,967	4,262	4,433	4,217	40.0
Waikato	12,440	10,664	11,134	11,804	12,810	12,719	11,928	31.2
Wellington	19,179	19,485	19,983	20,560	20,770	19,744	19,954	43.7
West Coast	1,754	1,777	1,760	1,863	2,052	2,165	1,895	61.9
<i>average</i>	<i>9,717</i>	<i>9,236</i>	<i>9,253</i>	<i>9,392</i>	<i>10,095</i>	<i>10,537</i>	<i>9,705</i>	<i>37</i>

On a per capita basis, West Coast spent by far most on their employees (\$62), followed by Southland (\$48) and Taranaki (\$40). Auckland spent the least, \$19 per capita. Here, a negative relationship between per-capita regional employee expenditures and population of the region is apparent (Figure 9). This is consistent with a hypothesis of employee expenditures presenting a fixed cost that needs to be shared by the population. However, it is not clear to me why employee costs would need to be a fixed cost. Most of region's roles do depend on its population size, and most functions need to be "manned" proportionately, not by a fixed amount. Therefore, this finding could point towards inefficiencies in smaller regions. However, a more detailed division of data would be necessary to firm any conclusions.

Figure 9: Per Capita Avg. Real Employee Expenditures (1999\$)

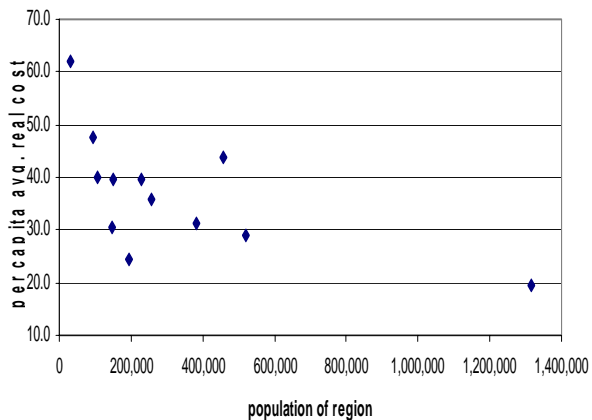
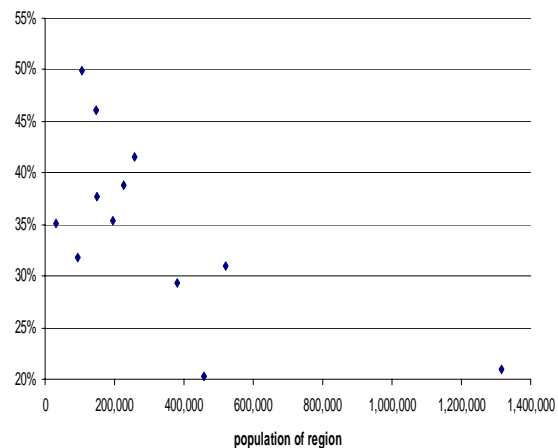


Figure 10: Share of Employee Expenditures in Total Expenditures



The fact that smaller regions spend more of their budget on employees is even clearer in Figure 10 which plots expenditure shares on employees as against regional population.

### Interest Expenditures

Although not widespread, debt is used in financing capital improvement projects. However, it is not used evenly by the regions. Vast majority of the debt financing is used by Auckland and Wellington regional councils. Consequently these two councils on average accounted for 95% of interest expenditures associated with overall regional debt

repayments. Table 21 shows that the two regions drove the overall declining trend in aggregate interest payments of local governments. Over the period of 7 years, Auckland and Wellington regional councils' interest expenditures dropped by 80% and 50%, respectively (measured in real terms). This trend has only been shared by West Coast, Otago and Canterbury regions. The remaining regions saw a relatively constant or a slightly increasing trend in their real interest expenditures. According to this statistic, Taranaki was the only region without any debt in this period of time.

**Table 21: Real Interest Expenditures (thousands, 1999\$)**

	1999	2000	2001	2002	2003	2004	average	per capita
Auckland	18,638	13,003	6,967	4,444	4,129	3,873	8,509	6.5
Bay of Plenty	422	390	435	440	467	427	430	1.7
Canterbury	95	90	89	86	85	83	88	0.2
Hawkes Bay	221	179	139	101	301	242	197	1.3
Manawatu Wanganui	0	0	12	0	10	14	6	0.0
Northland	22	13	8	63	0	0	18	0.1
Otago	5	5	5	0	0	0	2	0.0
Southland	15	5	7	6	6	10	8	0.1
Taranaki	0	0	0	0	0	0	0	0.0
Waikato	24	18	14	23	21	17	20	0.1
Wellington	9,574	7,380	7,172	6,367	5,483	4,841	6,803	14.9
West Coast	40	13	10	7	5	4	13	0.4
<i>average</i>	2,421	1,758	1,238	962	876	793	1,341	2.1

The heaviest debt burden per person is seen the capital region of Wellington, where the average real interest was \$15 per person. Auckland's burden was less than half of that, at \$6.5, followed by Bay of Plenty with \$1.7 average real interest payment per capita. All this points to a relatively low use of debt financing by regions other than Auckland and Wellington. With the importance of debt financing for capital improvement projects, question could arise about undercapitalization of the less populous regions.

## Depreciation Expenditures

Depreciation expenditures are a function of the capital stock in the region, as well as the level of investment undertaken in any particular year. Aggregate data for regions as well as territorial authorities in Figure 7 show a rise in total depreciation expenditures in 1998 and 1999 followed by a gradual decline from then on. Looking only at the regions, Table 22 shows that the aggregate real expenditure followed a different pattern. Between 1999 and 2002, there was a drop as in Figure 7 but the last two years of the sample saw an aggregate increase in real expenditures on capital allowances.

**Table 22: Real Depreciation Expenditures (thousands, 1999\$)**

	1999	2000	2001	2002	2003	2004	average	per capita
Auckland	4,177	4,166	4,161	3,904	3,950	4,798	4,193	3.2
Bay of Plenty	1,798	1,731	1,615	1,487	1,774	1,869	1,712	6.7
Canterbury	1,170	1,209	1,107	1,131	1,425	1,317	1,227	2.4

Hawkes Bay	1,161	969	961	948	926	939	984	6.6
Manawatu Wanganui	1,963	2,203	1,954	2,093	2,017	2,016	2,041	9.0
Northland	846	636	586	692	827	830	736	5.0
Otago	1,054	691	695	652	581	734	735	3.8
Southland	349	306	293	267	278	293	298	3.2
Taranaki	585	608	535	531	606	654	586	5.6
Waikato	4,453	4,345	4,033	3,647	3,812	3,870	4,027	10.5
Wellington	6,695	7,570	7,428	7,450	7,391	7,448	7,330	16.0
West Coast	86	82	101	106	93	86	92	3.0
<i>average</i>	2,028	2,043	1,956	1,909	1,973	2,071	1,997	6.2

The table further shows this trend was not shared by all regions. Wellington, Manawatu-Wanganui saw leveled capital depreciation expenditures while West Coast region had depreciation expenditures that reached a peak in 2002. Overall, however, there was little apparent trend in real depreciation expenditures across regions.

In terms of the size, Wellington had by far the largest average real depreciation expenditure followed by Auckland, Waikato and Manawatu Wanganui. When population size is taken into account, the order stays unchanged with the exception of Auckland dropping to near bottom. The lowest level of per-capita real depreciation expenditures are in Canterbury and West Coast.

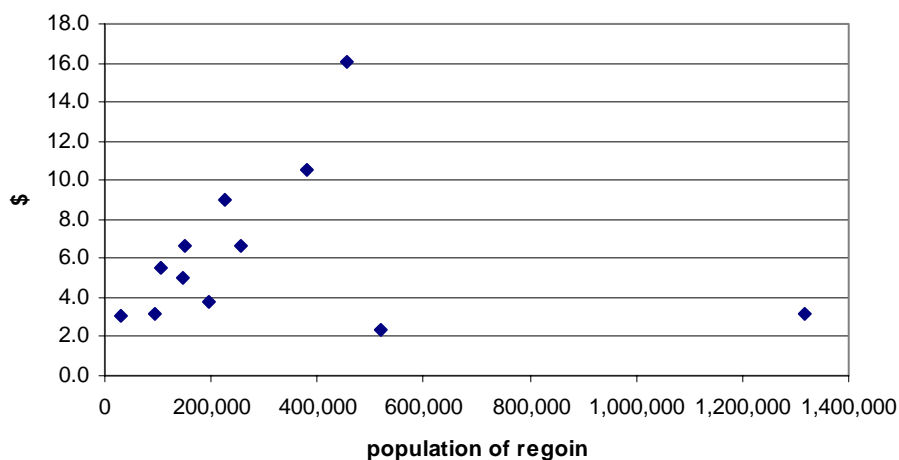
Table 23 shows the average importance of depreciation in regions' budgets is declining uniformly over the period of 7 years. The largest part of regions budget is allocated to depreciation in Waikato and Manawatu Wanganui. On the other hand, Southland and West Coast have the smallest share of depreciation expenditures in total expenditures.

**Table 23: Share of Depreciation Expenditures in Total**

	1999	2000	2001	2002	2003	2004	<i>average</i>
Auckland	4%	4%	4%	3%	3%	3%	3%
Bay of Plenty	9%	10%	8%	7%	7%	7%	8%
Canterbury	3%	3%	2%	2%	3%	2%	3%
Hawkes Bay	8%	7%	7%	6%	5%	5%	6%
Manawatu Wanganui	10%	10%	9%	9%	8%	8%	9%
Northland	9%	7%	6%	7%	9%	7%	8%
Otago	7%	5%	5%	5%	4%	5%	5%
Southland	3%	2%	2%	2%	2%	2%	2%
Taranaki	7%	7%	7%	6%	7%	8%	7%
Waikato	11%	12%	12%	9%	9%	8%	10%
Wellington	7%	8%	7%	7%	8%	7%	7%
West Coast	2%	2%	2%	2%	2%	1%	2%
<i>average</i>	6%	6%	6%	5%	5%	5%	6%

With the exception of Auckland and Wellington regions, there is a strong positive relationship between region's size and the per-capita average real depreciation expenditures (Figure 11): larger regions spend more than proportionately on capital allowance. This could again be taken as evidence of the relative undercapitalization of the smaller regions in New Zealand.

Figure 11: Per Capita Real Avg. Depreciation Expenditure (1999\$)



## Grants and Subsidy Expenditures

Regional governments are using subsidies and grants more pervasively than they did in the past. A large part of these are presumably used to finance various cultural and sports events that increase the attractiveness of the region for visitors as well as investors. Three regions dominate this category: Auckland, Wellington and Manawatu Wanganui, claiming an average of 96% of total expenditures of all regions in this category.

Auckland, Manawatu Wanganui and Bay of Plenty show a strong growth in real expenditures on grants and subsidies. Other regions also show impressive growth in this expenditure category in the most recent years: noteworthy is the real 25-fold increase in grants and subsidies in Canterbury in 2004. Wellington region appears to lack a trend in this category, again possibly due to the saturation of the large cultural market in the region.

Table 24: Real Grants and Subsidy Expenditures (thousands, 1999\$)

	1999	2000	2001	2002	2003	2004	average	per capita
Auckland	41,705	41,743	44,690	50,280	55,387	67,794	50,266	38.2
Bay of Plenty	58	128	228	907	1,315	2,014	775	3.0
Canterbury	0	0	0	597	158	4,119	812	1.6
Hawkes Bay	0	0	0	0	181	186	61	0.4
Manawatu Wanganui	92	87	1,234	1,426	1,371	1,790	1,000	4.4
Northland	200	96	94	177	212	269	175	1.2
Otago	0	0	0	0	18	0	3	0.0
Southland	37	51	739	256	250	322	276	2.9
Taranaki	0	0	0	0	110	0	18	0.2
Waikato	0	0	0	0	0	0	0	0.0
Wellington	31,900	30,459	35,791	37,503	36,136	37,739	34,921	76.4
West Coast	0	4	0	0	0	4	1	0.0
<b>average</b>	<b>6,166</b>	<b>6,047</b>	<b>6,898</b>	<b>7,595</b>	<b>7,928</b>	<b>9,520</b>	<b>7,359</b>	<b>10.7</b>

The per capita burden of these expenditures is the highest in Wellington (\$76), more than double that of the second highest of Auckland (\$38). On the other hand, Wakiato does not use grants and subsidies at all, and other regions such as West Coast and Otago have used it only to a minimal extent.

## Purchases of Goods and Services

Last but certainly not least, we move to the largest expenditure category amongst all regions: purchases of goods and services and other operating expenditures. There is a clear upward trend in this expenditure category in the aggregate real data of the regions, with a growth of 41% over a period of 7 years. This trend is shared by most regions but is strongest in Auckland and Canterbury, the two regions with the largest average real expenditure on purchases of goods and services (Table 25). Most non-capital and non-employee development expenditures would fall into this category, which may therefore be seen as a good indicator of region's growth. West Coast, Taranaki and Northland regions spent on average least in this category. However, on a per-capita basis, numbers look different. West Coast spends most per person, about 5 times as much as the lowest spender on a per-capita basis, Auckland region. West Coast is followed by Southland, Waikato and Wellington.

**Table 25: Real purchases of goods and services, and other operating expenditure (thousands, 1999\$)**

	1999	2000	2001	2002	2003	2004	average	per capita
Auckland	24,992	26,610	31,153	33,387	38,032	47,269	33,574	25.5
Bay of Plenty	8,142	7,492	8,646	11,604	10,943	13,270	10,016	38.9
Canterbury	24,395	25,239	30,605	34,877	35,820	38,282	31,536	60.6
Hawkes Bay	6,750	6,515	7,710	7,919	10,388	12,183	8,577	57.5
Manawatu Wanganui	8,748	10,373	9,587	11,683	14,745	11,647	11,130	49.0
Northland	3,604	4,107	4,078	5,253	4,055	4,932	4,338	29.4
Otago	8,569	7,588	7,545	7,916	8,027	7,754	7,900	40.5
Southland	7,587	8,987	7,875	8,614	11,165	9,263	8,915	95.2
Taranaki	3,245	4,307	3,251	3,805	3,780	3,422	3,635	34.5
Waikato	23,938	22,293	19,379	24,435	27,043	30,685	24,629	64.5
Wellington	28,885	27,161	30,700	29,934	27,849	32,300	29,471	64.5
West Coast	3,234	3,415	3,119	2,986	3,702	3,968	3,404	111.2
<i>average</i>	<i>12,674</i>	<i>12,840</i>	<i>13,637</i>	<i>15,201</i>	<i>16,296</i>	<i>17,915</i>	<i>14,761</i>	<i>56</i>

From the point of view of the importance of the category for regions' budgets, Canterbury, Southland, West Coast and Waikato spend the largest fractions of their budgets in this category, all above 60%. The expenditure category is least important in Auckland and Wellington at not more than 30% of the total (Table 26).

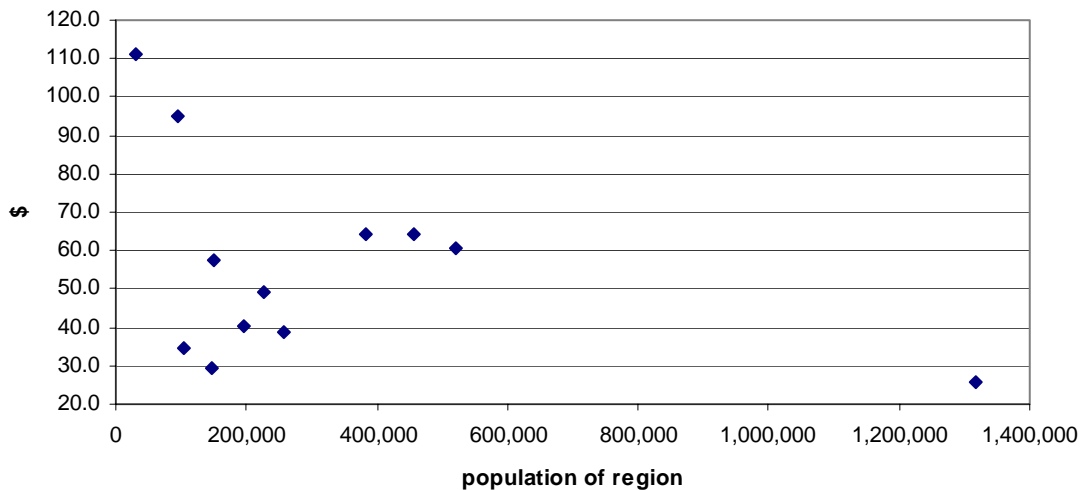
**Table 26: Share of purchases of goods and services in total expenditure**

	1999	2000	2001	2002	2003	2004	average
Auckland	22%	24%	28%	28%	30%	31%	28%
Bay of Plenty	42%	41%	45%	52%	43%	47%	45%

Canterbury	60%	62%	66%	69%	67%	63%	65%
Hawkes Bay	46%	46%	55%	54%	59%	63%	54%
Manawatu Wanganui	43%	48%	44%	48%	58%	46%	48%
Northland	39%	46%	45%	50%	42%	45%	44%
Otago	58%	57%	59%	62%	60%	58%	59%
Southland	61%	65%	61%	65%	68%	63%	64%
Taranaki	39%	48%	41%	46%	43%	40%	43%
Waikato	59%	60%	56%	61%	62%	65%	61%
Wellington	30%	30%	30%	29%	29%	32%	30%
West Coast	63%	65%	63%	60%	63%	64%	63%
<i>average</i>	38%	40%	41%	43%	44%	44%	42%

It is therefore not surprising that a weak negative relationship exists between the population of the region and the average real per capita expenditure on purchases of goods and services, as Figure 12 documents. The relationship is weak because it is driven by Auckland, West Coast and Southland regions; without them, it would be a positive relationship. This is clearly a very broad category which includes operating expenditures on a vast array of services. More detailed data would be needed to study the relationship between sizes of regions and their per-capita purchases of goods and services.

**Figure 12: Per Capita Real Avg. Purchases of Goods and Services, Other oper. Exp (1999\$)**



## ***Other Issues***

This section highlights two ways in which the performance of local government in New Zealand affects the performance of the national economy: that of distorting national effects of local government's taxation (rates) and one of potentially suboptimal investment levels due to tedious and non-uniform procedural requirements in interpretation of the Resource Management Act 2002 by local government.

### **Local taxation further distorts allocative efficiency of New Zealand's tax system**

Local taxation provides an interesting example of magnifying the problem of inefficient taxation generated at the central government's level. Household saving rates in New Zealand are among the lowest in the OECD countries. To some extent, the source of this problem lies in the fact that mortgage interest is not exempt from tax, unlike in many other countries (this is only one facet of the general absence of taxation at the consumption, rather than at the time income is earned, of various forms of retirement savings). The optimal savings strategy is then to quickly repay the mortgage on the house, rather than to save for retirement. This is suboptimal for the economy because return to housing investment is generally lower than return to other types of financial investments. Investment is then diverted from its most profitable uses, creating a social economic cost. This problem is further magnified by the fact that local taxes further lower return on household investment.

### **Risks related to the frame of operation of local government**

Uncertainty about the legal framework surrounding the operation of local government can have a negative effect on investment spending in the regions. Studies show that this may be particularly visible in the case of electricity industry where investment in infrastructure has to conform to the requirements of Resource Management Act 2002 (Murray and Stevenson, 2004). The act lengthens the planning of a project by requiring elaborate approval process by all parties affected by the project. In the case of (hydro-) electricity generation this is primarily the question of possession of rights to usage of water in the regions. Moreover, variations in approaches by various local authorities which are affected by the proposed project increase the costs and lengthen the timeline of project planning and implementation.

## ***Conclusion***

This paper describes the nature in which regional councils are funded in New Zealand. It starts with an overall description of local government in New Zealand, highlighting the role of central government's reforms in 1980s and further in 2002 played in shaping local government's functions. Some detail is given to the functional division of local government into regional councils and territorial authorities, the latter comprising district

and city councils. The legal structure of the local government is described in order to facilitate understanding of roles regions play in New Zealand. The paper then analyzes disaggregated cash flow data of all 12 regional councils according to basic accounting categories. To the extent allowed by the data, determinants of regions' performance are linked to their financial positions. Overall, Auckland and Wellington regions appear to have special status throughout the analysis, for different reasons. Auckland is an outlier because it is the only large city in New Zealand, while Wellington is an outlier due to being the capital city with a large network of related services and requirements. Interestingly, a lot of the revenue as well as expenditure components across regions depend on region's population sizes, even when measured on a per-capita basis. These findings beg for a more detailed analysis and explanation, beyond the scope of this descriptive paper.

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