FIT FOR PURPOSE?

Are Kiwis getting the government they pay for?

Bryce Wilkinson Foreword by Oliver Hartwich



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About the New Zealand Initiative

The New Zealand Initiative is an independent public policy think tank supported by chief executives of major New Zealand businesses. We believe in evidence-based policy and are committed to developing policies that work for all New Zealanders.

Our mission is to help build a better, stronger New Zealand. We are taking the initiative to promote a prosperous, free and fair society with a competitive, open and dynamic economy. We develop and contribute bold ideas that will have a profound, positive, long-term impact.

ABOUT THE AUTHOR



Bryce Wilkinson is a Senior Research Fellow with The New Zealand Initiative and Director of Capital Economics Limited. He is the author of many articles and reports relating to the performance of the State and how it might be improved. These include: Constraining Government Regulation (2001), Restraining Leviathan (2004), Guarding the Public Purse: Faster Growth, Greater Fiscal Discipline (2014), Capital Doldrums: How Foreign Investment is Bypassing New Zealand (2013), Open for Business: Removing the Barriers to Foreign Investment (2014), and A Matter of Balance: Regulating Safety (2014).

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Foreword



How big should government be (as a share of the total economy)? Few questions lend themselves to more ideological answers.

If you are a committed anarchist, the answer is obviously zero. If you are an avowed communist, values close to 100 percent would not worry you.

If you are a classical liberal, a social democrat or a conservative, your preferred shares would be somewhere in between. That is if you even had a preferred figure.

The preferred size of the state is not only influenced by political leanings. It is also defined by time and place.

John Maynard Keynes is still one of the most popular economists among centre-left politicians. Yet Keynes, writing at the beginning of the 20th century, regarded a government share of 25 percent as the maximum size still tolerable.

By today's standards, that would make Keynes right-wing. But in Keynes' time, government across most developed countries was much smaller than it is today.

For all these reasons of ideology, place and time, there will never be a lasting consensus on the right size of government.

Where there can be consensus, however, is that government should not be wasteful. It should use its resources wisely, and it should aim to achieve the best impact with its given means. Or conversely, it should aim to achieve a set of targets with the least possible resources.

The above follows from the realisation that government is there to serve us, the people. Government is not an end in itself. In a democracy, it derives its legitimacy from the things it does in our interests as we see them and in our name.

For this report, Bryce Wilkinson has done a remarkable task of compiling countless rankings and statistics in search of an answer to one question: How good a job does the New Zealand government do with the resources it commands?

There is no single answer to this question. In some areas, New Zealand handles its public affairs well and better than most, if not all, other countries. It is a finding that should not surprise us since we have become used to being ranked in the top 10 or 20 for issues like transparency, ease of doing business, economic freedom and competitiveness.

However, just because we are doing fine on average, and relative to other countries, does not mean we could not do better. As Bryce also demonstrates, there are material areas of government activity in which New Zealand is not doing well. And we can say this with confidence because we see other countries doing better on some measures.

New Zealand can do better, and it should. And once we are doing better, we will have a choice. We could get a better bang for our constant tax buck. This would mean, for example, better health or education outcomes. Or it could mean maintaining existing outcomes and using the savings for tax cuts.

This choice would once again depend on political leanings exercised through democratic processes, and so this report expresses no preference either way.

But I hope that no matter where you stand on the political spectrum, you will agree that Bryce Wilkinson's report should encourage us all to demand more effectiveness and efficiency from our government.

Dr Oliver Hartwich

Executive Director The New Zealand Initiative Wellington, August 2018

Executive summary

Government plays a big part in our lives, and much of it is necessary and beneficial.

We, the public, have come to entrust it with the control of a major proportion of the nation's income and resources. For example, on the OECD's measure, each year government in all its forms is spending over 40% of gross domestic product (GDP).

We want it to do a good job on our behalf. But we do not make that easy for it.

This report looks at how good a job it is doing in its spending, producing and regulatory roles.

The report does not intend to be controversial. People with very different ideologies should be able to agree that government efficiency matters. Government waste harms wellbeing. Who would not want to see the state achieving better outcomes from its efforts, be they in housing, health, education, welfare, crime, the environment or anywhere else?

Regrettably, the report finds compelling evidence of a lack of focus on productivity in the state sector, and thereby great waste.

One international study by the Fraser Institute assessed that if government spending in New Zealand were as efficient as in South Korea, it could be one third lower for the same outcomes. On that indicative calculation, wasteful government spending is around 13% of GDP. That represents \$20,000 per household, annually.

The wastage is likely much more significant in relation to income than in the distant past. Central government taxes have risen four times faster than incomes since 1900. Taxes are now

around four times greater than the cost of core central government protective and administrative functions. The bulk of central government spending today is redistributive.

Indeed, our tax burden, at 32.8% of GDP for general government in 2016 on the OECD's measure, was among the highest in the world outside Europe. Of 62 prosperous countries with sizeable populations, Botswana was the only non-European country to have a higher tax revenue to GDP ratio than New Zealand on the Heritage Foundation's 2018 database. Among Anglo-Saxon countries, only the United Kingdom came close.

Other researchers have looked at the productivity of health and education spending across countries.

In education, an OECD efficiency analysis found that spending could be cut by around one-sixth in New Zealand without impairing outcomes if international best practice efficiency could be achieved. The government is spending more than \$8 billion a year on school education – a saving of one-sixth could make a big difference to outcomes if wisely spent.

For example, such savings could be used to improve outcomes for the roughly 17% of students who reach age 15 without achieving basic literacy on the PISA scale. Government has likely spent more than \$130,000 each on their schooling.

In health, even officials widely agree about the lack of focus on productivity. International research suggests that perhaps one dollar in four is being wasted compared to best practice. Potentially we could reduce annual health spending by around 2.5% of GDP without impairing outcomes.

The above efficiency calculations are largely motivational. They do not show what New Zealand would need to change or whether such changes are plausible. Their value is in pointing to the potential utility of such an inquiry. We should learn from countries that are doing better.

The productive activities of the state have shrunk since the 1970s but are far from extinct. Underperformance is likely when the public's choice of provider is unnecessarily curtailed. State monopoly is problematic in different ways from private monopoly. Government should not inflict either form of monopoly on the public without a very good reason.

In health, education and several other areas of tax- or levy-funded state provision, there is scope to give the public greater choice of provider through more user-friendly state funding arrangements.

Turning to the Crown's roles as law-maker and regulator, New Zealand ranks very highly indeed overall on many important international measures. This owes much to its colonial institutional heritage and the degree to which the reforms from the mid-1980s expanded citizens' economic freedoms.

Nevertheless, on examination, New Zealand ranks poorly and/or looks well short of international best practice in 20–30 government-dominated areas. These include overseas investment, aspects of labour market laws, infrastructure quality, and something as fundamental to core government as ease of enforcing contracts and the quality of judicial processes.

There seems to be no excuse for our 53rd ranking by the World Bank for the quality of our judicial processes. Gallingly, Australia is ranked first. The Ministry of Justice should be asked to look into our dismal ranking and report publicly. Since no country is perfect, to merely aim to be as good as the best of the rest would be to accept many deficiencies. The Crown's performance as a law-maker and regulator is mixed. There is even considerable dissatisfaction among regulators with the quality of the law. The statute book has become too prescriptive and too detailed for Parliament to hope to keep it up to date and fit for purpose.

It should be easier for law-makers to resist the pressures to pass laws and regulations that are ill justified, complex and overly intrusive on law-abiding citizens. Greater reliance on simpler laws of a more general nature would mean less prescriptive laws that quickly become out of date. Such aspirations will not be realised unless something changes.

In short, there is a compelling case that government could and should be doing a much better job with many of the tasks it is entrusted with. Much of what it is doing is wasteful absolutely and relative to international best practice. It is wasteful for many reasons, but a major symptom is a lack of focus on efficiency.

Were the state to do a better job, the savings could be used to raise New Zealanders' wellbeing by:

- maintaining government outputs while cutting tax revenues; and/or
- increasing government outputs from unchanged government spending.

The discussion of those choices is outside the scope of this report.



CHAPTER 1

Introduction

Government plays a big part in our lives, and much of it is necessary and beneficial. We the public have come to expect a great deal from government.

We want it to do a good job on our behalf. But we do not make that easy.

For instance, we endlessly clamour for government to perform a more expansive role as a provider, owner, spender and regulator. Yet daily news articles highlight or lament shortcomings in one area or another – infrastructure, housing, poverty, health, education, crime, the environment, traffic congestion, mental illness - you name it.

The public's apparently limitless expectations from government induce parliamentary oppositions to promise more largesse. By leading the charge for a 'more generous' state, they hope to embarrass the 'stingy' incumbent government.

In the middle of the 19th century, Frenchman Frederic Bastiat feared the negative consequences of arrangements that encourage groups to lobby to benefit themselves at the expense of others. He wrote: "Everyone will want to participate in making the law, either to protect himself against plunder or to use it for plunder." Civility, social cohesion and overall prosperity are all undermined.

These uncivil impulses have turned general election campaigns into an unseemly lolly scramble of irresponsible pledges aimed at

buying the votes of one faction or another.2 The precipitating situation in the 2017 general election was the opportunity to spend the first large fiscal surplus since the global financial crisis.

Irresponsible pledges cause ongoing problems if implemented. Once in power, politicians are confronted by the reality of scarcity. Money used to subsidise horse racing, student loans or research and development is money that cannot be spent on better housing, health care, education or anything else.

Faced with hard trade-offs, government ministers seek to tamp down the expectations their campaigning fuelled. A natural impulse is to blame their predecessors for spending too much, but to do so would be inconsistent with previously calling them stingy.

This unfortunate cycle of over-promising during election campaigns reduces trust in politicians, but it is largely one of the electorates' making. To blame the politicians is a bit like blaming World Cup soccer players for their on-field 'Hollywoods', faking injury. Referees who reward this cheating behaviour are the ones who fuel it.

Frederic Bastiat, The Law. This monograph was first published in June 1850. The citation is from a translation by Dean Russell published in 1998 by the Foundation for Economic Education, Irvington-on-Hudson, New York, 14.

The National Party's 1975 general election campaign pledge to introduce universal superannuation at age 60 is a stand-out example of an election year bribe. Politicians also regard students as easy prey. "There is a legend about a crisis meeting during the 2005 election campaign when Helen Clark asked the room full of party apparatchiks and ministers to come up with a policy that would stop Don Brash in his tracks. It's said that interest-free student loans was born during that session." The 2017 campaign bribe of a year's free tertiary study is a sequel. Tracy Watkins, "Can Winston do this? Yes, he probably can," Stuff (9 June 2018).

This report takes the existing scope and scale of government activity as a given. The debate about scale and scope is important, but it can quickly become fruitlessly ideological.³

Instead, this report compiles and reviews evidence about how good a job the government is doing with all the tasks set for it. To what degree could it achieve better outcomes for New Zealanders with the same resources, or the same outcomes with fewer resources?

This report does not intend to be controversial. People with very different ideologies should be able to agree that government efficiency matters. Who would not want to see the state achieving better outcomes from its efforts, be they in housing, health, education, welfare, crime, the environment or anywhere else?⁴

Chapter 2 scales the scope of government today from a historical perspective. It looks at the evolution of state spending, provision of goods and services, and regulation. State providers are usually dominant in their fields and some are statutory monopolies.

Chapter 3 compares the current burden on the state with that in other countries. It looks separately at fiscal, commercial and regulatory aspects. Chapter 4 reviews the contemporary wellbeing of New Zealanders. If the state pack-horse is doing a good job New Zealanders should be doing well, absolutely and relatively. Given the endless pressures on government to do more, this chapter also identifies areas of contemporary concern about prospects for future wellbeing.

Chapter 5 reviews research that uses international benchmarks to assess the extent to which government may be spending and regulating wastefully. Given their importance for current and future wellbeing, it includes sections on health and education.

Chapter 6 concludes the report.

^{3.} The constitutional issue concerns how best to make it harder for political majorities to loot political minorities. The author proposed a Regulatory Responsibility Act in 2001 and a Taxpayer Bill of Rights Act in 2004 as options for making it easier for politicians to resist pressures to spend and regulate at the expense of overall wellbeing. The first gave the courts a marginally greater role; the second gave voters a direct say in

^{4.} A referee cautioned that it would not be a good thing if a Stalinist state became more efficient at starving its citizens. Better to have an inefficient tyranny. However, this report is not about state tyranny.

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Your date of birth - it helps get your tax right

CHAPTER 2

Loading up the state pack-horse

As foreshadowed in the Introduction, high public expectations from government impose a heavy burden on the public, politicians, administrators, regulators, spending agencies, and providers. Yet this was not always so.

2.1 Tax and spend from 1900 to today

The tax and spending burden of central government has expanded massively in the last 100-odd years, but not for local government. Table 1 illustrates the difference.5

Central government taxation per capita in 2017 was 24.5 times higher in 2017 than in 1900, inflation adjusted.6 As a percentage of GDP, it was 7.1% of GDP in 1900 and 29.0% in 2017.

The 2017 ratio to GDP is lower than a longer run average. Central and local government taxation combined averaged 32.5% of GDP during the last 31 years.

There is a stark contrast with local government. Rates revenue per capita in 2017 was (only!) seven times higher than in 1900, inflation adjusted. It was 2.1% of GDP in 2017 and 1.8% of GDP in 1900.

Table 1: Government taxation (1900 and 2017)

	1900	2017	Multiple				
Per capita taxation (2017 dollars, CPI)							
Central government	\$677	\$16,602	24.5				
Local government	\$167	\$1,214	7.3				
Total government	\$844	\$17,816	21.1				
Taxation as % of GDP							
Central government	7.1%	29.0%	4.1				
Local government	1.8%	2.1%	1.2				
Total government	8.9%	31.1%	3.5				

Source: Author's calculations, years ended March. Official Yearbooks for 1900 (de facto population). SNZ Institutional Accounts for 2017 (resident population).

Central government income tax revenue grew much faster than local government rates revenue during World Wars I and II, the Great Depression of the 1930s, and the inflationary 1970s.7 Central governments used the additional revenue to expand redistributive spending.

Nobel laureate James Buchanan's protective state and productive state classification might be helpful in interpreting these developments.

The state's protective role is concerned with enforcing largely universally agreed laws and protecting the public peace. This role includes national defence, law and order - including protecting minors and vulnerable adults immigration, land registration, international relations, public health, emergency response capability, and core government administration.

All fiscal figures in this report refer to years ended March, unless otherwise stated.

The 1900 figures were based on consolidated account tax receipts of £2.891 million and rates revenue of £0.714 million for the year ended March 1900. The estimated Maori-inclusive de facto population was 792,501 and nominal GDP was \$80.9 million. Based on the all groups Consumers Price Index, it took \$92.7 in 2017 to buy a basket of goods and services equivalent to that which could have been bought for \$1 in 1900. The fiscal statistics for the year ended March 2017 are from Statistics New Zealand's institutional accounts for central and local government and use its estimated resident population.

During World War II, central government made a virtue of declaring its intention to "tax to the economic hilt." Inflation took off in the 1970s. Inflation increases revenue faster than income under a progressive income tax.

A generic feature of these activities is their collective nature. Economists see the state's core role as ensuring adequate provision of public goods. This is a technical term for goods and services likely to need to be provided collectively. Most of those activities listed above have this characteristic. For example, the control of contagious diseases is a public good.

This protective role is sometimes called the state's 'night watchman' role. We want government to excel in it. Public security and prosperity depend on its performance. We would like public administration to be efficient, competent, non-corrupt and non-partisan.

The benefits to citizens from a state that performs these core protective functions well are easy to appreciate. It is a great blessing to live in a nation where peace, civility and a good system of justice prevail, along with high levels of individual freedom. Prosperity follows naturally.

One need only compare the wealth and prosperity of countries that enjoy these things with that of countries that do not – the large portion of the world with despotic, impoverishing governments, or rife with civil war.

We expect government to ensure that key infrastructure – potable water, sewage, storm water, roads, and other network industries – is up to standard. Importantly, the choice of means – ownership, contracting or regulation – is a matter of detail.

The productive role for the state sees it as a participant in the economic activities of the community, rather than being a 'mere' night watchman. This is more controversial.¹⁰ There are questions of checks and balances on its quantity and cost, and which level of government should undertake which tasks. An unnecessarily expanded productive role politicises more activities. It risks degenerating into the murky redistributive state that Bastiat feared.

In New Zealand, the state's productive role has always been substantial in some areas. Around 1900, public works, post and telegraph, and rail were longstanding substantial state activities along with 'public education,' e.g. schools. Spending on asylums and hospitals was a minor item. The Liberal Government of the late 1890s added a limited old age pension, which materially pumped up government spending.

Local government's spending role was (and remains) a limited productive role focused on local infrastructure provision (e.g. civil defence and fire service capability, local roads, water supply and disposal, storm protection, local ports, and airports).

So what proportion of national income needs to be devoted to such core tasks in the 21st century compared to the early 1900s?

One measure of core government spending today is spending on collective consumption as defined by national income account statisticians. It is defined to be spending that simultaneously benefits all households in a region, all members

^{8.} A good or service is a public good if there is no way of depriving people of the benefit if they refuse to pay for the cost to the community of providing it (i.e. it is non-exclusive) and if the benefit any individual derives is not at the expense of the benefit anyone else derives (i.e. benefits are non-rival). Some argue that the non-rival characteristic alone suffices to define a public good. Changing technologies can alter a good or service's public good status.

The overseeing responsibility does not dictate state ownership, provision or control.

See, for example, this article on Buchanan's thinking. Edward W. Younkins, "James M. Buchanan: Constitutional and Post-Constitutional Political Economy," *Le Quebecois Libre* (16 July 2006).

II. The Crown Financial Statements employ a narrower classification of core government than the collective consumption measure. Its classification excludes law and order.

of a community, or all of a particular section of the community.12

On Statistics New Zealand estimates, combined central and local government spending on collective consumption averaged 7.3% of GDP during the last 31 years. 13 This proportion is much the same as in 1900 (see the 8.9% statistic in Table 1). The average weekly cost per household in the year ended March 2017 was \$207 marginally less than the average weekly cost of household food.14

Today, spending on the productive and redistributive state dwarfs spending on the protective state. In 2017, general government spending on collective consumption per household was \$10,752, whereas taxation per household was \$49,254.15 Almost \$5 is being raised in taxes for each dollar spent on core government responsibilities.

It is not an exaggeration to say government's dominant tax-and-spend role today is to take our money with one hand to return it to our own or someone else's pocket with the other – in kind or in cash.16 Most welfare benefits are transfers in cash. Spending on health and education are transfers in kind.17

Spending on social assistance in kind today exceeds social assistance in cash. Each exceeds spending on collective consumption. In the year

ended March 2017, assistance in kind averaged \$344 per household per week; assistance in cash was \$291.18 Assistance in kind is dominated by state spending on health, education and housing. Assistance in cash is dominated by New Zealand Superannuation and social welfare assistance for those of working age and their dependants.

Spending that takes with one hand to return it with the other has major hidden costs. People rearrange their affairs and activities in costly ways to avoid paying tax and/or obtain a handout. For example, they may work less, turn down a promotion, or invest in an otherwise inferior investment.

Some otherwise beneficial choices are forgone as a result. The technical terms economists sometimes use to refer to these societal costs are deadweight costs, excess burdens, or net welfare loss. They are excess because they are over and above the tax paid.

They cannot be estimated with any precision because of their hidden nature. Moreover, the theory shows that the cost likely depends markedly on the type of tax, the level of the tax rate and the position of the individual within a household structure.19

Treasury's current guidance to analysts is to use 20 cents in the dollar as an illustrative cost of obtaining funding for government spending through the tax system. Expressed differently, the benefit to the community from spending an extra dollar of tax revenue would need to

- 12. See, for example, the OECD's definition at OECD, "Collective Consumption Service" (2001).
- 13. The period is 1987 to 2017 inclusive. The high was 8.9% in 1991 and the low was 6.3% in 2004 (years ended March).
- 14. In the year ended March 2017, general government taxation amounted to \$947 per household per week.
- 15. SNZ's institutional accounts. Social assistance in cash and kind averaged 22% of GDP and net interest paid on public averaged 2.2% of GDP. Other transfer payments (e.g. overseas aid) averaged 2.1% of GDP.
- 16. There is a life cycle aspect to this. We are commonly net taxpayers when of working age and net beneficiaries in retirement and when in full-time education.
- These are international national income account classifications, applied here by Statistics New Zealand.

^{18.} Author's calculations.

^{19.} John Creedy and Penny Mok, "The Marginal Welfare Cost of Personal Income Taxation in New Zealand", New Zealand Economic Papers, published online 10 August 2017, calculate that the marginal welfare cost to the community ranged from "about 5 cents for single men to over six dollars for lowincome single parents". For the total population the marginal welfare cost was 12 cents in the dollar. These results are primarily indicative, being particular to the model used, the input assumptions and the posited increase of five percentage points in all rates of income tax.

exceed \$1.20 to make the community better off.²⁰ Taxing well-off households to give them their own money back in cash or kind for health or education indicatively provides only 80 cents of value per dollar of tax taken.

Note that this illustrative \$1.20 figure does not incorporate the likely costs of the actions people take to make themselves eligible for state largesse, independently of the income tax structure. Depending on their structure, working-age welfare and health care policies potentially reduce incentives to work, sustain marriage relationships, save for contingencies, take education seriously, and care for one's health and safety. Two developments associated with the expansion of the welfare state since the 1960s have been the alarming increase in the proportion of unsafe single parent households with inadequate earned income, and the six-fold increase to 2012 in the proportion of the working-age population on a sickness or invalid's benefit.21

Note that the spending figures for 2017 in Table 1 are for operating spending. Capital spending is additional.²² We expect the state to expand infrastructure capacity, schools, hospitals, state housing, etc. with a growing population. Such spending averaged 3.5% of GDP between 1987 and 2017. It is a call on domestic and/or overseas savings.²³ We also expect the state to advance and fund student loans and much else. State lending also redirects resources.

In short, government taxation now channels much more of national income into politically chosen directions than in the past. That makes the government's fiscal performance more important now.

2.2 State provision

State monopoly provision of market goods and services was markedly reduced from the mid-1980s to the mid-1990s. Most commercial state providers were opened up to competition, and some were privatised.²⁴ Government enterprises contributed only 6% to market sector GDP in 2016.

Overall, general government's contribution to GDP as a provider of goods and services was 18% in the year ended March 2016.²⁵

Government is the dominant provider in five industries out of 17 (see Figure 1). There are potential welfare losses from dominance. The state is the elephant in the room as both an owner and a regulator²⁶ in safety, education, the network industries (excluding telecommunications), health and social assistance. Private providers in these areas must occupy the gaps not filled by the elephant. This may change at the elephant's whim.

^{20.} This may be more an acknowledgment of the principle than a best estimate of its magnitude.

See Bryce Wilkinson and Jenesa Jeram, "Poorly Understood: The State of Poverty in New Zealand" (Wellington: The New Zealand Initiative, 2016), 25.

^{22.} But the 2017 accrual-based statistics do include capital consumption and the 1900 cash-based spending statistics do include some recurring capital spending.

^{23.} Gross savings include capital consumption/depreciation.

^{24.} In 1984, state-owned enterprises accounted for 20% of gross investment in the economy and contributed 12% to GDP. Treasury, "Economic Management" (14 July 1984), 275.

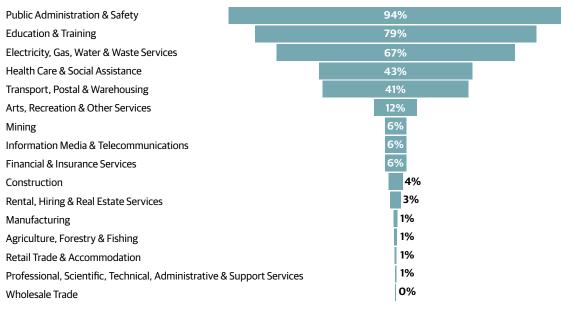
Non-market GDP is only 14% of all-industry GDP. Public sector employment in full-time and part-time jobs combined also constituted 18% of total such employment in September 2017. This is much smaller than government spending as a percentage of GDP because of the importance in spending of transfer payments (which includes interest payments on public debt). General government spending on goods and services (current and capital) was 21.8% of GDP in the year ended March 2017. Spending on overseas goods (e.g. military equipment) and private goods may partly account for why this is greater than the 18% contribution of government to GDP.

^{26.} These two interests conflict form a public interest viewpoint.

Figure 1: Government industry dominance

General government share in industry contribution to GDP in 2016

(across all industries, it was 18%)



Source: Statistics New Zealand

The high level of aggregation in Figure 1 conceals many niches of government dominance. The Crown Financial Statements identify 51 Crown entities and 11 categories of ownership.27

Government is the biggest landlord and landowner in the country. Its universities and seven Crown research institutes dominate scientific research. The Public Trust is one of four autonomous Crown entities.

Three local airports constitute the councilcontrolled trading organisation category. The Accident Compensation Corporation and the Earthquake Commission are Crown statutory monopoly providers. They are the elephants in the room in their fields.

Four energy-related companies are in the mixed ownership model category.

Crown Infrastructure Partners (formerly Crown Fibre Holdings) is a dominant player in telecommunication platforms. It is one of 11 companies in the Public Finance Act Schedule 4A company category.

The 12 state-owned enterprises include dominant entities in electricity (Transpower), rail, post and coal. Air New Zealand is the dominant New Zealand airline. See Appendix 1 for further statistical information.

Government dominance in health is achieved through district health boards (DHBs) and in education through public schools and tertiary educational institutions. In neither case can funding generally follow the citizen.²⁸

Government's performance as a provider in statedominated activities matters. Good performance should be a given, but is not. Everyone in the

^{27.} For a full list see Appendix 1, tables 11 and 12.

^{28.} In contrast, state funding for pre-school education does follow the customer.

Christchurch earthquakes who was insured by the Earthquake Commission or entangled with Southern Response knows that. So do those caught up in Housing New Zealand's purge of amphetamine contamination.

In the case of private monopolies, consumers have little choice if the provider fails to serve their interest well. A private monopolist can hope to profit by pricing above cost. But for the monopoly, a competitor could profitably undercut this behaviour.

This profit incentive is much weaker for a government monopoly.²⁹ But its incentive to control costs is weaker for the same reason.³⁰ It might favour staff privilege over customer service. Costs are likely to be too high as a result. It might under-price at the expense of taxpayers or over-price at the expense of its customers.

These are tendencies rather than inevitabilities. Much depends on political and bureaucratic imperatives in a particular case. In the 1970s, it became politically convenient to increase employment in the government's great postal and rail monopolies. The trade unions became very powerful. Union-led Christmas-holiday strikes on the rail bridge connecting the North and South Islands became part of the New Zealand way of life.³¹

It follows that the performance of state firms in dominant positions is the outcome of conflicting considerations. Not all are healthy for users or taxpayers. Agency design affects incentives. The degree to which customers and users can shop elsewhere greatly affects the ability of a state provider to provide a high cost, poor quality service. Where the service is funded by a levy or tax on users, it may not be necessary or desirable to force people to buy from only one supplier.

A great deal more could be done in New Zealand to empower the users of government-provided services. For example, voucher-style funding mechanisms where funding follows the user could be applied much more widely in health, education and accident insurance. With respect to accident insurance, there is no need to make the Accident Compensation Commission a monopoly state provider. Mandatory cover can apply regardless.

2.3 The regulatory journey from 1908-2017

In 1908 (when central government taxation was only around 6.4% of GDP), the entire body of Public Acts was contained in five volumes. They encompassed 4,221 pages and 208 Acts. That is a mere 20 pages per Act on average.

By the time of the 1908–57 reprint, this had exploded to 14,105 pages and 423 Acts.³² Acts had more than doubled while the number of pages had more than tripled. The state's tasks had become more complex. By May 2018, the number of Acts had more than doubled again – to 1,009 principal Public Acts.³³

^{29.} Except perhaps when governments badly need to increase net revenue. For example, the bulk electricity tariff was increased by 60% in April 1976 and by another 40% in April 1977, when fiscal deficits were large.

^{30.} That is, productive efficiency.

^{31.} Leading trade unionists were so confident of their monopsony power that on occasion they would publicly threaten to 'bring the country to its knees' through strike action in support of their demands.

See Geoff Lawn, "Improving Public Access to Legislation: The New Zealand Experience (So Far)" [2004] UTSLawRw 4; (2004) 6 University of Technology Sydney Law Review 47, and Bryce Wilkinson, "Constraining Government Regulation," NZ Business Roundtable (2001), 34.

^{33.} This is based on a search on 8 May 2018 of the Parliamentary Counsel Office's electronic register.

The vast expansion in the burden and complexity of central government is reflected in the following illustrative comparisons between 1908 and 2018:

- The Land and Income Assessment Act 1908 was 39 pages. The Income Tax Act 2007 is 3,351 pages.34
- There was no 505-page Social Security Act in 1908, but there was a 15-page Destitute Person's Act.
- The Education Act 1908 comprised 70 pages. The Education Act 1989 is 694 pages.
- The Monopoly Prevention Act 1908 was 5 pages long. The Commerce Act 1986 is 270 pages.
- There was no Local Government Act in 1908, but there was a 12-page Town Boards Act. The extant Local Government Acts of 1974 and 2002 comprise 384 and 444 pages, respectively.
- In 1908, there was nothing like the 796page Resource Management Act 1991.

Of course, some (likely small) portion of this increased scale reflects the greater complexity of modern life, rather than a vastly expanded role for the state.³⁵ Two cases illustrate this aspect:

- The Public Works Act 1908 was 98 pages long, whereas the Public Works Act 1981 is 176 pages long.36
- The *Rating Act*, which empowers local authorities to levy rates, was 26 pages long in 1894, 39 in 1925, and 122 in 1967. The Rating Powers Act 1988 was 158 pages long.37

The volumetric expansion in these two cases is extraordinarily modest compared to the Income *Tax Act*. The 20th century was the central government's century.

Snapshots that compare the situation today with that in the distant past conceal major changes in the focus of government regulation during that period.

Much of the new regulation in the 1930s and 1940s was economic. The labour market was heavily regulated and unionised. General wage orders to lift wage rates became commonplace. Producer marketing boards, rail and post were statutory monopolies. Import licensing created de facto monopolies. The Accident Compensation Commission was created in 1972 as a mandatory statutory monopoly insurer. Government owned the largest bank and savings bank, along with the Government Life Office and State Insurance. There were state-owned tourist hotels and even a state shipping line.

Extraordinary state powers over commerce set up during World War II were carried forward into peace-time. The Economic Stabilization Act 1948 permitted the implementation of comprehensive wage, price and interest rate controls in 1982 by Order in Council without prior parliamentary debate or assent.³⁸ Draconian foreign exchange controls added to the restrictive rules and regulatory apparatus.

The foreign currency and public debt crisis of 1984 necessitated urgent and substantial economic deregulation. In 1985, The Fraser Institute considered that 26 countries out of 107 had greater freedom from government regulation than New Zealand. By 1995, it ranked us freest of 158 countries, fractionally ahead of Hong Kong.

^{34.} Tax law is so complex today that Inland Revenue has around 5,500 employees.

^{35.} Some of it will result from the drive to codify the common law.

^{36.} This is the I January 2017 version.

^{37.} Today's version is Local Government (Rating) Act 2002, 1 January 2017 reprint. It is 104 pages long. (The Rating Act 1908 could not be located.)

^{38.} It was repealed in 1987, along with its amendment Acts.

Table 2: Effect of New Zealand's Reforms on Economic Freedom

New Zealand Economic Freedom of the World Score (out of 10)	Summary index	1 Size of Government	2 Legal System & Property Rights	3 Sound Money	4 Freedom to trade internationally	5 Regulation
1985	6.10	3.58	7.34	6.17	6.59	6.88
2015	8.48	6.46	8.74	9.51	8.57	9.12
% change	39%	80%	19%	54%	30%	33%
World Rank						
1985	27	86	9	81	27	24
2015	3	75	3	38	7	2

Source: Fraser Institute, Economic Freedom of the World Index, Panel Dataset 2017, 109 countries in 1985, 159 in 2015.

However, since the 1980s, government regulation has increased in areas such as health and safety, occupational, environmental, security markets, anti-money laundering, and foreign investment. The quality of the supporting regulatory analysis for such measures has commonly been poor.³⁹ Our score for regulatory freedom dropped after 1995, along with our ranking. In 2011, six countries out of 153 had higher freedom scores for regulation. By 2015 we had recovered to second position, behind Hong Kong.

Table 2 illustrates the overall improvement in New Zealand's institutional arrangements between 1985 and 2015 - from the perspective of how much easier it became for people to transact with each other.

2.4 Summary

The quality of the government's performance as a spender is much more important today than in the past.

Our taxes are around four times higher than is needed to fund the core protective and administrative functions of government The costs to the community of unnecessarily funding goods and services through the tax system are potentially very high. No one can quantify them with any precision. Current Treasury guidance is for analysts to assume that an additional \$1 of government spending (e.g. on health or education) might need to benefit the community by \$1.20 to cover the unintended costs of behaviour induced by the desire to avoid paying the last dollar of tax.

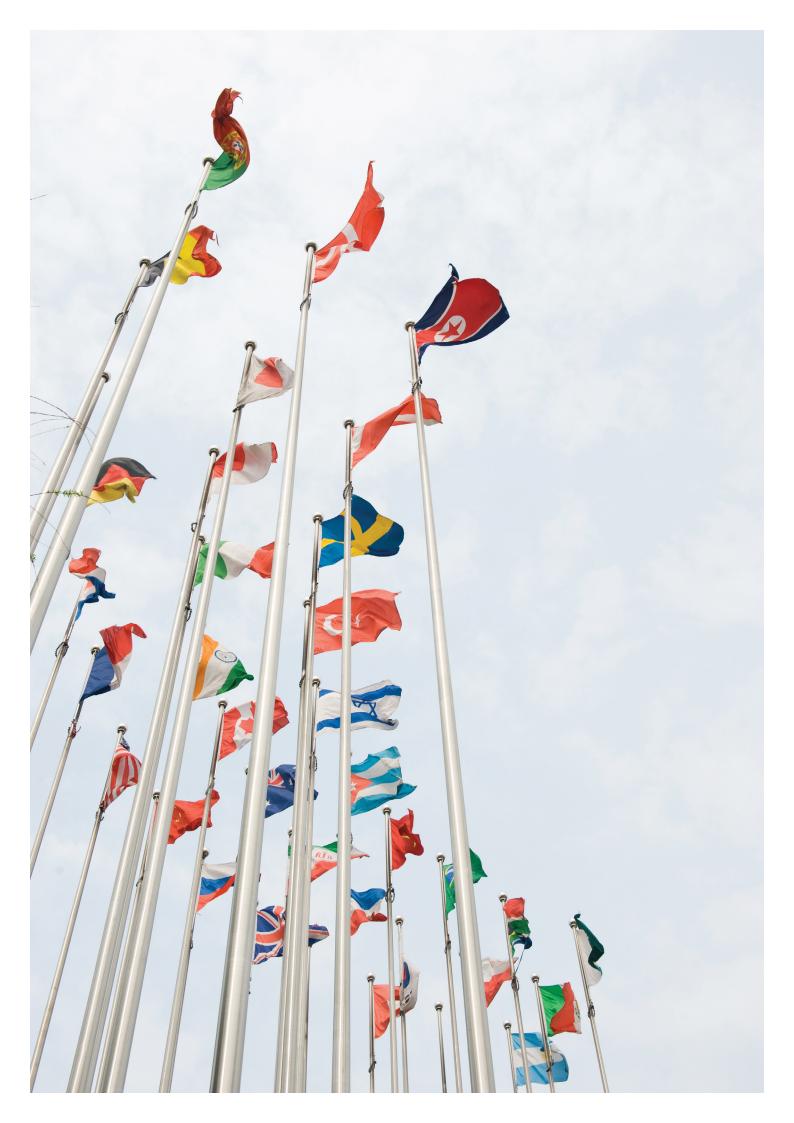
An entirely separate, and perhaps graver, cost may be behind the association between the rise in working-age welfare dependency and the rise in broken and incomplete family units of an unstable nature. The degree to which public policies have contributed to these trends is unclear, but it could be significant.

Issues of state monopoly persist, albeit much less so than in the past. New Zealanders could be given greater choice of provider in some cases, using vouchers, for example.

Central government's regulatory role has burgeoned in the last century in tandem with the growth in its tax-and-spend role.

today. Government's main fiscal role today is redistributive.

^{39.} See, for example, Bryce Wilkinson, "The lack of interest in the public interest," National Business Review (29 June 2018).



CHAPTER 3

New Zealand's pack-horse in international comparisons

3.1 Overall rankings

Several major international agencies rank countries according to the quality of their institutions and fiscal and regulatory structures.

This report particularly looks at indices of potential for prosperity, ease of doing business, global competitiveness, and economic freedom.

New Zealand often ranks very highly overall. For example, we ranked:

- The most or second-most prosperous nation in 10 out of the last 11 years by the UK-based think tank, the Legatum Institute (out of 149 countries).
- The least corrupt nation in the world in the Transparency International's Corruption Perceptions Index for three successive years to 2018 (out of 180 countries).
- Second for peacefulness according to the Institute for Economics and Peace's Global Peace Index for 2017 (out of 163 countries).40
- Fourth for democracy in the 2017 EIU Democracy Index (out of 167 countries).41
- First for ease of doing business in the World Bank's Doing Business 2018 report (out of 190 countries).

- Thirteenth in the World Economic Forum's 2017–18 Global Competitiveness report (out of 152 countries).42
- Third for economic freedom (behind Singapore and Hong Kong) on each of The Heritage Foundation's and The Fraser Institute's measures.43
- Seventh for the rule of law in the World Justice Project's Rule of Law Index 2017–18 (out of 113 countries).
- Thirteenth out of 168 countries for human development in the United Nation's Human Development Index.44

The high perceived overall quality of our core public institutions is also evident in the World Bank's global Governance Rankings. Table 3 shows our ranking for four of the World Bank's governance categories. New Zealand ranks at least seventh highest among 211 countries for the perceived quality of its governance arrangements. Singapore, Hong Kong, Switzerland, and the Scandinavian countries also feature prominently. These rankings are based on survey responses.

These high rankings owe a great deal to the quality of our inherited Anglo-Saxon institutions and to our fiscal and regulatory reforms from the mid-1980s to the mid-1990s.45

^{40.} Wikipedia, "Global Peace Index," Website.

^{41.} EIU = Economist Intelligence Unit. It assesses the degree to which elections are fair and free, uninfluenced by foreign powers, voters are secure, and the civil servants are capable of implementing government policies. Wikipedia, "Democracy Index," Website.

^{42.} New Zealand was ranked behind Switzerland, the United States, Holland, Singapore, Netherlands and Hong Kong.

The 2018 report by The Heritage Foundation; the 2017 report by The Fraser Institute. Hong Kong and Singapore have swapped the top slot in the Heritage Index for the last 24 years.

^{44.} The latest report was released on 21 March 2017 and compiled on the basis of estimates for 2015.

^{45.} Refer to Table 2 for the improvement in our rankings since 1985.

Table 3: World Bank Governance Rankings

Rank in 2016 (214 countries)	Regulatory Quality	Rule of Law	Voice and Accountability	Government Effectiveness
1	Singapore	Sweden	Switzerland	Andorra
2	Hong Kong SAR, China	Norway	Denmark	Hong Kong SAR, China
3	NEW ZEALAND	Finland	Netherlands	Norway
4		Switzerland	Finland	Denmark
5		NEW ZEALAND	Sweden	Switzerland
6			Norway	Singapore
7			NEW ZEALAND	NEW ZEALAND

Source: World Bank Group Worldwide Governance Indicators 2016 (Downloaded 23 March 2018 from http://databank.worldbank.org/data/reports.aspx?source=Worldwide-Governance-Indicators#)

The World Economic Forum's (WEF) global competitiveness reports derive a country's overall ranking from its ranking in 12 pillars.⁴⁶ The report also groups the scores for the 12 pillars into three larger aggregates: basic requirements (pillars 1–4), efficiency enhancers (pillars 5–10) and innovation and sophistication (see Figure 2).

Its ranks are largely based on survey information. The rank for each pillar is in turn derived from scores for pillar subcategories. Scores for pillar subcategories are themselves derived from scores for component variables. The WEF's 2018 scores and ranks for New Zealand are derived from scores for 116 variables.

Some of the components are more clearly a government responsibility in New Zealand than others. Pillars 1–7, which are the focus of this report, are mostly a government responsibility.

Within the basic requirements category, pillar I is derived from separate rankings for public and private institutional quality. Figure 3 shows New Zealand's rankings for the five components that go into New Zealand's third-place ranking for public institutions.

Our 13th ranking for security is derived from survey responses to questions about the business costs of crime and violence and the business costs of terrorism.

The seventh place for government efficiency is the result of a 21st place for the burden of government regulation and an eighth place for the efficiency of government spending.

Some of these seven are more basic than others. The WEF regards the first four of these as being 'basic requirements'. It ranked New Zealand fifth-best out of 152 countries for providing these requirements. Our score was 6.05 out of 7. Switzerland was on top with 6.39, followed by Singapore (6.34), Hong Kong (6.26), and the Netherlands (6.24). New Zealand is in good company.

^{46.} The WEF surveys business executives annually. The 2017–18 report used responses from 12,775 executives in 133 countries. The sample size for New Zealand was 32 in 2016 and 39 in 2017. The scores for the 2017–18 report applied a 47.5% weight to the 2016 responses and a 52.5% weight to the 2017 responses. Appendix C to the report explains the sophisticated statistical techniques used to exclude outlier responses.

Figure 2: The WEF's 12 pillars

NZ Rank in World Economic Forum's Global Competitveness index 2017-18

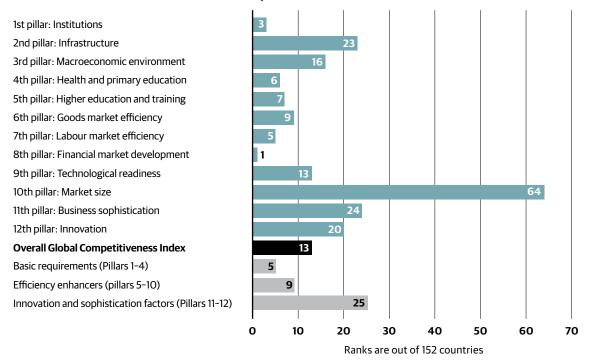
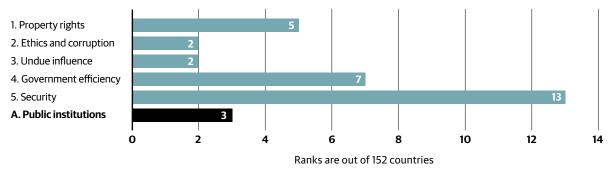


Figure 3: WEF Ranks for Public Institution quality

NZ Rank in World Economic Forum's Global Competitveness index 2017 - Components of Public Institutions



We scored less well than Finland, Luxembourg, Singapore and Switzerland for property rights, with 6.28 out of 7.

On the whole, New Zealand ranks very highly in areas for which government is arguably largely responsible. Of the 116 variables already mentioned, perhaps 72 belong to this category. From these, Table 4 selects 27 variables in which New Zealand's rank is relatively poor.⁴⁷ It groups them somewhat arbitrarily into eight categories openness to trade, burden of taxation, burden of regulation, quality of infrastructure, monopoly or dominance, education, health, and safety.

^{47.} Note that four of them -2. Foreign Competition, B. Electricity and telephony infrastructure, C. On-the-job training and 5. Security – are at a higher level of aggregation than are the remaining items.

Table 4: Government-related areas dragging down New Zealand's ranking

	Areas largely under government control v	where NZ ranks relatively p	oorly		
Item	Series	Top ranked country	lts score	NZ Score	NZ Rank
	Openness to overseas trade and capital				
1	6.10 Trade tariffs, % duty	Hong Kong SAR	0.0	1.6	33
2	9.03 FDI and technology transfer, 1-7 (best)	Ireland	6.1	5.2	22
3	6.11 Prevalence of foreign ownership, 1-7 (best)	United Kingdom	6.1	5.4	21
4	2. Foreign competition	Singapore	6.4	5.2	26
	Burden of Taxation				
5	6.05 Total tax rate, % profits	Brunei Darussalam	8.7	34.3	54
6	7.05 Effect of taxation on incentives to work, 1-7 (best)	Singapore	6.2	4.7	19
	Burden of Regulation				
7	1.09 Burden of government regulation, 1-7 (best)	Singapore	5.6	4.3	21
8	6.12 Business impact of rules on FDI, 1-7 (best)	Singapore	6.1	4.9	55
9	7.02 Flexibility of wage determination, 1-7 (best)	Hong Kong SAR	6.3	5.8	16
10	7.03 Hiring and firing practices, 1-7 (best)	Hong Kong SAR	5.8	4.6	15
	Quality of Infrastucture				
11	2.03 Quality of railroad infrastructure, 1-7 (best)	Switzerland	6.6	3.5	46
12	2.02 Quality of roads, 1-7 (best)	United Arab Emirates	6.4	4.7	40
13	2.05 Quality of air transport infrastructure, 1-7 (best)	Singapore	6.9	5.6	22
14	2.04 Quality of port infrastructure, 1-7 (best)	Netherlands	6.8	5.5	17
15	2.07 Quality of electricity supply, 1-7 (best)	Norway	6.9	6.5	17
16	2.01 Quality of overall infrastructure, 1-7 (best)	Switzerland	6.6	4.8	34
17	B. Electricity and telephony infrastructure	Hong Kong SAR	6.9	6.2	13
	Monopoly/Dominance				
18	6.02 Extent of market dominance, 1-7 (best)	Switzerland	5.9	4.3	27
	Education				
19	5.05 Quality of management schools, 1-7 (best)	Switzerland	6.4	5.3	24
20	12.04 University-industry collaboration in R&D, 1-7 (best)	Switzerland	5.8	4.8	17
21	4.10 Primary education enrollment, net %	China & Singapore	100	99	16
22	5.01 Secondary education enrollment, gross %	Belgium	167	117	15
23	C. On-the-job training	Switzerland	6.2	5.4	13
	Health				
24	4.07 Infant mortality, deaths/1,000 live births	Hong Kong SAR & Luxembourg	1.5	4.7	35
25	4.03 Tuberculosis cases/100,000 pop.	United Arab Emirates	1.6	7.4	21
	Safety				
26	1.14 Business costs of crime and violence, 1-7 (best)	Qatar	6.4	5.3	25
27	5. Security	Finland	6.6	6.0	13

Source: World Economic Forum, Global Competitiveness Index 2017–18. Covers 152 countries, but not for each and every variable.

Table 5: Areas of weakness in overall prosperity index

Pillar rankings for top five countries in the overall prosperity ranking							
2017	Norway	New Zealand	Finland	Switzerland	Sweden		
Overall Rank	1	2	3	4	5		
Pillars							
Economic quality	8	3	14	6	1		
Business environment	8	2	10	9	13		
Governance	2	3	1	5	4		
Education	4	16	3	1	14		
Health	7	17	14	3	6		
Safety & security	3	23	15	8	13		
Personal freedom	8	1	9	19	12		
Social Capital	5	2	12	20	19		
Natural environment	1	13	3	16	8		

Recurring names among the top performers in these 27 items are Hong Kong, Singapore and Switzerland (see the third column in Table 4). These three countries, together with Australia and New Zealand, comprised the five most economically free countries in the world in The Heritage Foundation's 2018 Index of Economic Freedom. See Appendix 3, Table 13 for more details on these five countries from the Heritage's database.

Surveyed business executives evidently do not see us as being as good as many other countries in aspects of infrastructure, tax burdens and openness to foreign investment and regulatory burdens generally. They also see weaknesses in our educational structure, particularly R&D linkages with universities, and (not shown in Table 4) the availability of scientists and engineers. Aspects of the job market also compare relatively poorly.

Delving into the detail behind New Zealand's second place in Legatum's 2017 Prosperity Index also provides insights into the areas in which New Zealand seems to be lagging relative to other countries. New Zealand's overall ranking is an average of rankings that varied between first for personal freedom to 23rd for safety and security (see Table 5).

Our relatively high road toll and crime rates dragged us down on safety.

Poor outcomes in education and health for low income children affected those rankings.⁴⁸

Our lowly 13th ranking for the natural environment was due to over-fishing, and poor marks for waste water treatment and marine preservation efforts.

These lower grades resonate with what we know on the ground. Our road toll tells us we have a problem. Family violence and child abuse and neglect are big issues in New Zealand.

The New Zealand Initiative has published three reports on our over-fishing problem for recreational fisheries and recommended a national association to represent such fishers.

^{48.} Legatum observed that the percentage of secondary school pupils enrolled in technical education in New Zealand had fallen from 21% to 17% since 2007, and had risen from 18% to 32% in the United Kingdom. See "The question for prosperity: How can New Zealand keep living standards rising for all?" Legatum Institute and Chartered Accountants Australia & New Zealand (August 2017), 49.

In all these areas of relative weakness, the greatest burden for achieving better outcomes falls on government agencies.⁴⁹

3.2 How do we compare internationally for tax-and-spend?

New Zealanders have imposed very heavy tax and government spending burdens on ourselves by world benchmarks, but not by European standards.⁵⁰

Switzerland's IMD Business School ranked us very poorly out of 63 countries in 2017 for our corporate tax rate (46th), effective personal income tax rate (42nd), and 15% GST (23rd).⁵¹

As shown in Table 4, rows 5 and 6, the WEF assessed 18 countries to have smaller tax disincentives to work than New Zealand, and 53 to have lower tax rates as a percentage of profits.

The Heritage Foundation's 2018 Index of Economic Freedom assessed citizens in 135 out of 180 countries to have a lower average tax burden than New Zealanders. Expressed differently, 94% of the world's population live in countries with lower ratios of tax revenues to GDP than New Zealand. Government spending ratios to GDP in 138 countries of 182 are lower than in New Zealand. ⁵²

In a similar vein, The Fraser Institute's *Economic Freedom of the World Index 2017*

49. See the previous section for the scope of government in education, health and other areas.

assessed 111 out of 160 countries as spending a lower proportion of GDP than New Zealand on government consumption.⁵³ Out of 149 countries, 111 were spending a lower proportion of GDP than New Zealand on government transfer payments and subsidies.

If we include only countries with populations of at least 2 million and GDP per capita (using purchasing power parity (PPP) exchange rates) of at least US\$15,000, only 18 out of 62 countries have greater tax revenues as a percent of GDP than New Zealand.⁵⁴ Out of these 18, Botswana is the only one that is not European.⁵⁵ (See Figure 4.) Eighty-nine percent of the 3.5 billion people in these 62 countries live in countries with a lower ratio of tax revenue to GDP than New Zealand's.

The 17 European countries with a higher tax ratio than New Zealand do not owe their prosperity to their higher tax burdens. On the evidence, causation runs in the opposite direction.⁵⁶

The heavy fiscal burdens in Europe make that region an outlier internationally.

These poor ratings will reflect to a considerable degree our high need for tax revenue relative to incomes.

^{52.} Heritage uses the OECD's estimates for general government outlays relative to GDP when it can. Its figure for New Zealand is 41%. Its measure of the tax burden is a composite of the top marginal tax rates on personal and corporate income and the overall level of taxation (including direct and indirect taxes imposed by all levels of government) as a percentage of GDP.

The Heritage Foundation and OECD government spending figures include some capital outlays.

^{54.} The statistics used for this purpose all come from The Heritage Foundation's database.

^{55.} New Zealand's tax ratio was 32.8% of GDP, and Botswana's 35.8%. (Diamond mining (de Beers) provides about 85% of Botswana's export earnings and a third of government revenue according to the CIA's online *The World Factbook*.)

For a review of the strong empirical evidence that high distortionary tax rates reduce economic growth, other things being equal, see Norman Gemmell and Joey Au, "Government size, fiscal policy and the level and growth of output: a review of recent evidence", Journal of the Asia Pacific Economy, 18:2, 203-229, DOI: 10.1080/13547860.2013.777535. For readings on the timing of the rise to prosperity in Scandinavia and the growth in their welfare states see for example Daniel Mitchell, "Paul Krugman Learns the Wrong Lesson from Denmark", Mises Institute 21 August 2017, Mises Wire web and the review "Why Scandinavia Isn't Exceptional" Mises Institute, (31 July 2018), (Web) by Per Bylund, Oklahoma State University, of Nima Sanandaji's book, "Scandinavian Unexceptionalism: Culture, Markets and the Failure of Third-Way Socialism", Institute for Economic Affairs, United Kingdom (2015) and Stefan Karlson,: The Swedish Myth" Mises Institute, Mises Daily Articles, (8 July 2000).

50 45 40 35 Tax Revenue, % GDP 30 25 20 15 10 5 Jrited States HOTWAY

Figure 4: Tax Revenue Ratios to GDP for 62 countries

Excludes countries with less than 2 million people and GDP per capita of less than US\$15,000 (PPP) basis. This left 62 countries with 3.5 billion people. Of these 62 countries, 18 had a higher tax revenue ratio than New Zealand and all but one of these was European. (See the columns shaded in light grey). Less than 11% of the 3.1 billion people were in countries with a higher tax revenue than New Zealand. The population-weighted average tax revenue ratio was 23.6.

Source: NZ Rank in World Economic Forum's Global Competitiveness index 2017 - Components of Public Institutions.

Moreover, some have driven themselves in recent decades to reduce their tax ratios.⁵⁷ Nor are the 17 obviously doing better than New Zealand economically in a forward-looking sense. The unweighted average gross public debt ratio for the 17 European countries with a higher tax ratio than New Zealand's is 83%, the average unemployment rate is 9.4% and the average rate of growth in real GDP during the last five years was 1.8% p.a. For New Zealand the respective figures from the same database were 29%, 5.2% and 3.4% p.a.⁵⁸

Against the benchmark of Anglo-Saxon countries, New Zealand and the United Kingdom had the highest burdens, in that order. Australia's tax and spending burdens were 5 percentage points of GDP lower than New Zealand's.⁵⁹ Our burden is twice that of Hong Kong and Singapore, two former British colonies that also retained English institutions and high levels of economic freedom.60

^{57.} Ireland, the Slovak Republic, Sweden, Norway stand out for the degree to which their tax revenue (including revenue from social security contributions) ratios to GDP were lower in 2017 than their maximum value between 1990 and 2005 (on the OECD's database).

^{58.} Net public debt was negative for Norway, Sweden and Finland on average in the five years to 2017 on the OECD's database. For Denmark it was 3.8% of GDP compared to 4.2% of GDP for New Zealand.

Australia's tax revenue ratio was 27.8% of GDP, and its spending ratio was 36% of GDP.

For example, the Heritage Foundation's database for its 2018 Index of Economic Freedom puts New Zealand's general government spending at 41% of GDP, compared to 18% for Hong Kong and 17.7% for Singapore. New Zealand's ratio of general government tax revenues to GDP is 32.8%, compared to 13.9% for Hong Kong and 13.6% for Singapore. Heritage's tax figures include social security contributions. (The OECD's figures for direct and indirect taxation combined exclude social security contributions. That exclusion distorts tax revenue comparisons between New Zealand and European/ Scandinavian countries.)

3.3 Where we fit today internationally for dominance

On The Fraser Institute's measure, in 2015 only 22 countries out of 136 had a lower share than New Zealand for government enterprises and investment.⁶¹

As shown in item 18 in Table 4, the WEF considered that market dominance was more of an issue in New Zealand than in 26 other countries. It was least manifest in Switzerland.

3.4 Where we fit today internationally for regulation

Overall rankings

The World Bank publishes global indicators of

regulatory governance. These assess the quality of rule-making processes across countries.

New Zealand's ranking is not impressive:
21 countries were ranked ahead of New Zealand for the quality of regulatory governance in the World Bank's measure for 2018 (see Table 6).

New Zealand is in the top group for undertaking regulatory impact assessments, but not for the quality of its consultation processes or for reporting on the results of consultations.

Governance aside, New Zealand's regulatory shortcomings are modest compared to those in many other countries. The Heritage Foundation and The Fraser Institute each ranked New Zealand second overall for the quality of government regulation.⁶²

Table 6: Overall World Bank Global Regulatory Governance Score for 2016 (equal weights)

	Countries with	n Consolidate	d Regulatory Gov	ernance Scores f	or 2016 of at leas	st five
	Scores: (Maximum po	ssible is six)				
	6	5.8	5.6	5.4	5.2	5.0
1	Australia	Belgium	France	Malaysia	Germany	Bulgaria
2	Austria	Moldova	Italy	New Zealand	Kenya	Costa Rica
3	Canada	Spain	Taiwan, China	Sweden	Poland	Czech Republic
4	Croatia		Colombia		Ukraine	Denmark
5	Estonia					Finland
6	Greece					Hungary
7	Hong Kong SAR, China					Lao PDR
8	Korea, Rep.					Malta
9	Macedonia, FYR					Netherlands
10	Mexico					Norway
11	Serbia					Vietnam
12	Switzerland					
13	United Kingdom					
14	United States					

Source: World Bank Global Indicators of Regulatory Governance in 2016. Scores are an unweighted sum of scores for six aspects, the maximum score for each aspect being 1. Of the 145 countries with a positive scores, 106 were below 5 and 80 were below two. Three countries scored 0.2.

^{61.} It measured government investment as a percentage of GDP. New Zealand's ratio was 16.7%, Australia's was 12.3%. The ratios for the 22 countries ranged from 9.2% in the Ukraine to 14.6% for South Korea.

^{62.} In its 2017 assessment, The Fraser Institute ranked
New Zealand second only to Hong Kong for overall regulation.
In its 2018 assessment, The Heritage Foundation ranked New
Zealand as being second only to Singapore for the quality of
protection of property rights.

Table 7: WEF burden of government regulation scores (2017)

Country	Value	Rank	Country (ctd)	Value	Rank
Singapore	5.61	1	China	4.38	18
United Arab Emirates	5.35	2	Netherlands	4.33	19
Rwanda	5.29	3	India	4.32	20
Hong Kong SAR	5.28	4	New Zealand	4.30	21
Malaysia	4.83	5	Sweden	4.13	23
Switzerland	4.80	6	Ireland	4.07	26
Germany	4.77	7	Norway	4.05	28
Finland	4.72	8	Taiwan, China	4.02	30
Georgia	4.71	9	United Kingdom	3.96	32
Gambia, The	4.70	10	Japan	3.55	59
Qatar	4.68	11	Denmark	3.50	63
United States	4.68	12	Russian Federation	3.29	79
Bahrain	4.65	13	Australia	3.29	80
Albania	4.64	14	Portugal	2.97	104
Azerbaijan	4.64	15	France	2.73	115
Tajikistan	4.48	16	Italy	2.01	134
Luxembourg	4.41	17	Venezuela	1.65	137

Source: WEF 2016-17, 137 countries (illustrative selection only below rank 21)

Nevertheless, the WEF's 21st ranking for the burden of government regulation (see Table 7) is telling us in practice there are problems. This ranking is based on business executive responses to the following question:

In your country, how burdensome is it for companies to comply with public administration's requirements (e.g., permits, regulations, reporting)? [I = extremely burdensome; 7 = not burdensome at all.]

New Zealand scored 4.30 for responses to this question. Singapore was the top scorer with 5.61. Hong Kong, Switzerland, Germany, Finland and the United States handsomely outscored us. Why are we not up there, too? On the other hand, it is difficult to know what to make of the higher scores of several other countries ranked ahead of us. Perhaps the burden of regulation in relatively corrupt countries can be quite light.

Other Anglo-Saxon countries – Ireland (26th), the United Kingdom (32nd), Canada (38th), and Australia (80th) – also rated poorly, but this is no excuse for New Zealand.

Business and labour freedom

For business freedom, The Heritage Foundation's 2018 report found only Hong Kong, Taiwan and Ireland to be freer than New Zealand. The Fraser Institute found only Hong Kong, Ireland, Qatar, Singapore and the United Arab Emirates to be freer.

For labour freedom, Heritage found only seven countries to be freer than New Zealand. These were Singapore, the United States, Hong Kong and four smaller countries. The Fraser Institute found four countries had greater labour market freedom than New Zealand - Fiji, Hong Kong, Nigeria and the United States.

These overall rankings reflect an average of scores for components within the category. For example, within the business regulation category, The Fraser Institute ranks New Zealand 28th for administration burdens, 29th for licensing restrictions, and 38th for tax

compliance burdens. Within the labour market regulation category, it ranks us 19th for least restrictive for hiring and firing restrictions and 29th if the minimum wage restriction is added to this sub-category.

Minimum wage rates surely most hurt those who are the least employable.

Switzerland's IMD Business School ranked New Zealand very poorly for openness to international investment in 2017 (48th).

The IMD's survey did ask to what extent environmental laws and compliance hinder business. New Zealand ranked 28th in this respect in 2017.

Openness

Small countries have to be open to foreign trade and capital to reap the gains from specialisation, economies of scale, and access to global capital. The Heritage Foundation ranked us only 17th for freedom to trade and 24th for investment freedom.

The Fraser Institute ranked us seventh overall for freedom to trade internationally. Within this category, we ranked only 53rd for the burden of complying with export and import regulations, and 32nd for foreign ownership and investment restrictions. ⁶³

As shown in Table 4, for items 1–4 the WEF assessed 32 countries to have lower tariff barriers to imports than New Zealand and more than 20 countries to be less restrictive on matters related to overseas investment.

The OECD considers us to have the most restrictive regime for incoming foreign direct

investment among its member countries. Its 2017 regulatory restrictiveness index found that only six countries out of 68 were more restrictive. All six were non-OECD countries. They included China.

Product market regulation

Overall, the OECD ranks New Zealand highly for the relative absence of restrictive product market regulation. In 2013, it ranked only Austria, Denmark, Holland and the United Kingdom ahead of New Zealand in this respect. This was out of 47 countries, including all OECD member countries. Within this overall ranking, only one country had fewer state barriers to entrepreneurship, but 21 had fewer state barriers to trade and investment. Only 15 had fewer barriers in its state control category.

3.5 Summary

It is a myth that New Zealand is a low tax country. The myth arises because many European countries are very high tax countries. New Zealand only looks low tax relative to that exceptional benchmark.

The proportion of the world's population in those high-tax European countries is small. The vast majority of the people living in relatively prosperous countries are enjoying lower tax ratios. In 2015, no Anglo-Saxon country had a higher tax ratio, although the United Kingdom was close.

Overall, our regulatory state comes out well in international rankings. But there are weaknesses in specific aspects.

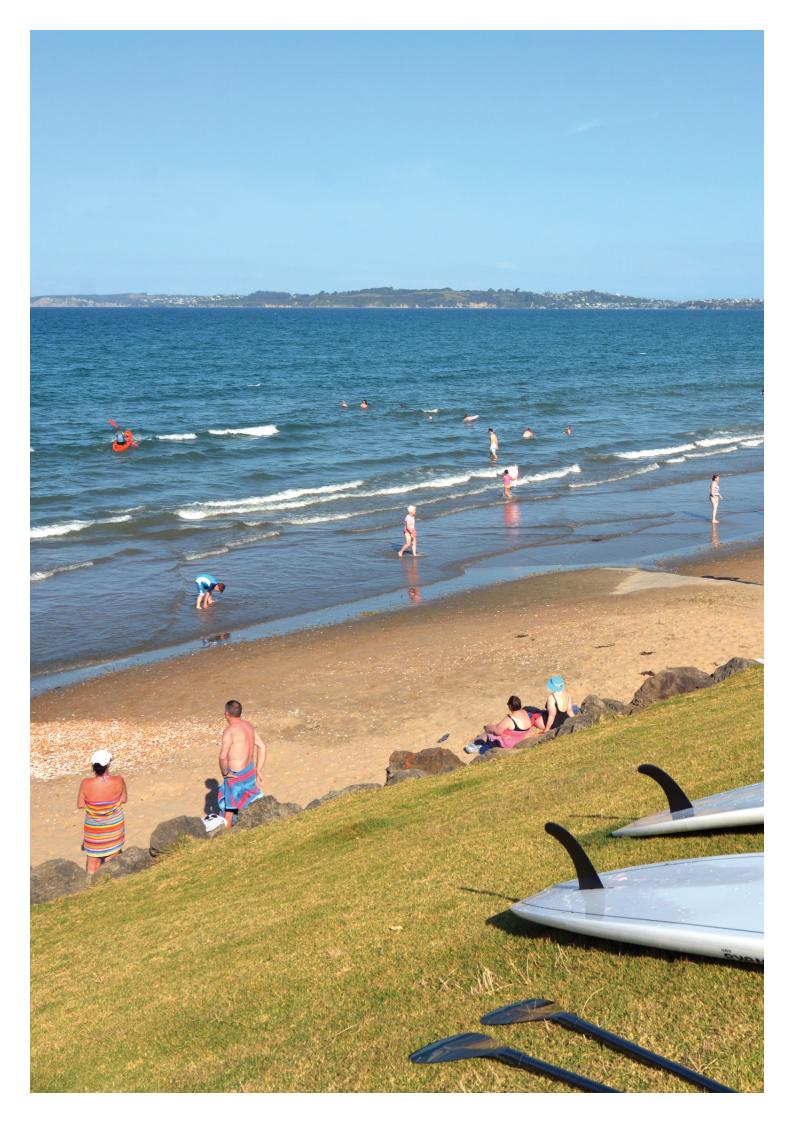
This review has identified 27 points of weaknesses in New Zealand's relative position (see Table 4).

These include hiring, firing and the minimum wage, administrative and compliance costs in

^{63.} Our 53rd ranking here may owe something to biosecurity measures for imports and government-to-government certification for safety for meat and other exports. To this extent it is less of a concern.

importing and exporting, and restrictions on overseas investment. Our rankings for barriers to overseas trade and investment are a particular concern given the importance of overseas trade and investment for our prosperity.

Generally, these items resonate with local concerns, independently of any international considerations. It is useful to know which countries appear to be doing better so we can learn from them.



CHAPTER 4

New Zealanders' wellbeing: A stocktake

4.1 Now and then, no turning back

How has our wellbeing fared as the role of the state expanded during the 20th century?

The short answer is that wellbeing has risen in tandem, on objective indicators. The quality of our core Anglo-Saxon institutions will be a bedrock factor. Whether the growth in the role of the state has helped or hindered is a more difficult question to answer.

Absolutely, we are doing far better than in the past. Living conditions and life expectancy today are much better than in the early 1900s.

Average income per capita has risen five-fold. Life expectancy at birth for females is up from 63.1 years in 1900 to 92.9 years.⁶⁴ Sharp reductions in maternal, infant and child mortality are part of the reason.⁶⁵ The quality and range of consumer durables is vastly greater. We now expect houses to have indoor toilets, electricity, much greater space, washing machines, refrigerators, and appliances that did not exist 100 years ago.66

We have a stable democracy and our governments are changed without bloodshed or civil unrest. We are not plagued by inflation or

crippling public debt.⁶⁷ We are close to being free of corruption, but of course this must always be watched. Above all, we have been spared the recurring civil wars and invasions that plague so many nations in the world.

So how are New Zealanders at large feeling they are doing?

Overall, New Zealanders think they are doing pretty well. Statistics New Zealand, the World Bank, the OECD, and many other institutions are producing and/or compiling indicators of different aspects of citizen's wellbeing.

Statistics New Zealand's most recent published survey of New Zealanders' self-assessed wellbeing was conducted between April 2016 and April 2017. Around 83% of respondents rated their overall life satisfaction as 7 or above on a 0-10 scale.⁶⁸ An even larger proportion said they are finding life worthwhile (see Figure 5).

The distribution is (happily) skewed to upper levels of satisfaction. The median response is of the order of 8.5/10 for overall life satisfaction and 8.7/10 for considering one's life to be worthwhile.

SNZ found that respondents had "a strong sense of belonging to New Zealand, on average rating this as 8.6 out of 10." They also said that freedom,

^{64.} For males it is from 58.2 years to 90.4 for someone born in 2014 and experiencing Statistics New Zealand's 'medium mortality' scenario.

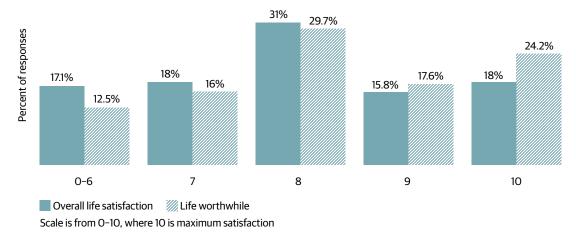
^{65.} The infant mortality rate dropped from 75.2 per 1,000 to 4.7 between 1900 and 2011 according to Statistics New Zealand's long-term time series variable LTD012AA.

^{66.} For a vivid and eloquent elaboration of these comparisons, see Michael Reddell, "Possibilities and (lack of) passion: Lifting productivity for our kids' sake," Presbyterian Support Northern lecture series 17/18 (May 2018).

^{67.} Of countries with populations of at least 2 million people and GDP per capita of at least \$15,000, The Heritage Foundation's 2018 report found only Hong Kong, Kuwait, Turkmenistan and the United Arab Emirates to be in greater fiscal health than New Zealand.

Statistics New Zealand, "Well-being Statistics: 2016," Website.

Figure 5: Life satisfaction and purpose by Statistics New Zealand (2016-17)



Source: SNZ 2016-17 Wellbeing Survey

rights, peace and our natural scenery and environment were the most important characteristics in defining New Zealand, rating each 9.1 out of 10.

SNZ also reported that only "I in 4 Kiwis had good outcomes in all four aspects of well-being (i.e. they had excellent or very good health, more than enough or enough money, had never felt lonely, and had no major housing problems)." There is scope for improvement.

At the other end of the spectrum, around 12.5% of the population are not finding life very worthwhile, registering only 0–6 out of 10. Ill health, disability, mental illness (depression and anxiety), difficulties in adolescence, relationship breakdowns, and abuse inside and outside of the family are all likely contributing factors. So are lack of paid work in the household, an inability to get work at average wage rates, and ridiculously high house prices, particularly in Auckland.

We know that a significant proportion of pupils finish their schooling with grossly inadequate levels of numeracy and literacy.⁷⁰ A few will earn

good incomes despite this grave handicap in today's world; most will not.

In short, most people score themselves favourably, but a sizeable minority are struggling. But to assess causation in relation to the role of the state is beyond the scope of this report.

4.2 Current domestic concerns and issues

High material aspirations, poor productivity growth, welfare dependency

As observed in chapter 1, the relentless pressure on government to do more demonstrates that whatever New Zealanders say about their wellbeing, many want greater material living standards and a better environment. This is somewhat paradoxical in that much of our elite disparage economic growth, and even Treasury seems to be de-emphasising its importance for future wellbeing.

Nurses, bus drivers, teachers and others are clamouring for higher wages. Minimum wages are being cranked up; some professions are clamouring to be paid a living wage regardless of productivity; welfare benefit rates are increasing; tertiary students are being given a year's worth of free tuition; and much else.

^{69.} Ibid.

^{70.} See section 5.2.

Angst about income inequality and poverty are very much at the forefront of public attention and debate. The proportion of the working-age population on welfare has risen roughly five-fold since the 1960s. It is closely associated with the rise in the proportion of single-parent households with dependant children.

There is some evidence of problems for the minority caused by the majority. High house prices obviously favour incumbent owners. The indicated regulatory barriers to employing labour are another. They can be expected to benefit those who have jobs at the expense of the least employable.

The government's current drive is to address all these matters largely independently of economic growth. In practice, that means funding at the expense of other members of the community.

The one thing that can enduringly grow the overall materialistic cake is productivity growth. As Michael Reddell, ex-Reserve Bank and Treasury economist, has repeatedly observed, New Zealand's rate of labour productivity (GDP per hour worked) has been tracking well under 0.5% p.a. since 2012-13.71

Treasury's long-term fiscal projections assume trend labour productivity growth of 1.5% p.a. They show that public debt will spiral out of control by 2038 under existing spending and demographic trends if nothing is done to increase future tax revenue. The implication is that something must give. Taxes must increase and spending must fall relative to projections. If labour productivity growth is only 1% p.a. or 0.5% p.a. the situation is more troubling still.⁷²

Yet government and Treasury interest in policies to raise productivity growth has been minimal since 1998. In 2008, the National Government supported an initiative by the ACT party to appoint a group to advise on how the income per capita gap with Australia might be closed by 2025. The subsequent two reports by the 2025 Taskforce advised that there was no silver bullet, and many changes, large and small, were needed across multiple fronts. Nothing much was done to reduce the persistent gap with Australia, and the question of how it might best be closed has disappeared from the public discourse.

Health and education

The WEF's survey found that many countries ranked ahead of New Zealand in health and education (see Table 4, items 19-25). Section 5.2 looks into these sectors in greater detail.

The regulatory morass

Another concern, also largely out of the public eye, is the sad state of the New Zealand statute book. This was exposed by a survey undertaken by the New Zealand Productivity Commission for a 2014 report.

Almost two-thirds of public sector chief executives who participated in a Commission survey on regulatory regimes either strongly agreed or agreed with the proposition that agencies with regulatory functions "often have to work with legislation that is outdated or not fit for purpose" (Figure 2.6). A further 26% of chief executives neither agreed nor disagreed.⁷³

It also examined 18 official reports into the sources of major disasters.74 Each report stressed the significance of regulatory failures of one sort or another. In all, it identified 10 distinct causes of failure encompassing all facets of the

^{71.} See for example, Croaking Cassandra, "Productivity: Still doing poorly," Blog (6 July 2018).

See Bryce Wilkinson and Khyaati Acharya, "Guarding the Public Purse: Faster Growth, Greater Fiscal Discipline" (Wellington: The New Zealand Initiative, 2014), section 2.5.

^{73.} New Zealand Productivity Commission, Regulatory Institutions and Practices (July 2004), 37.

Eight were in New Zealand, four in the United Kingdom, three in the United States and two in Australia.

regulatory function, from weak governance and lack of role clarity, through lack of capability, accountability, monitoring and oversight to failures of compliance and enforcement.

It made 44 recommendations to the government for improving the situation. The government agreed in whole or in part with all the recommendations.⁷⁵ Perhaps the changes helped scotch the snake, but it is far from dead.⁷⁶

None of this should be a surprise – the weakness in government law-making has been evident for decades. Our electorate seems keener to reward legislators for their good intentions than for their legislative quality. Our regulators are commonly the meat in the sandwich, damned if they do and damned if they don't. The regulatory incentive structure is flawed somewhere.

Part of the problem is that the great volume of laws and regulations on the books today must be continually amended to reflect changing circumstances, new enthusiasms, and past errors. Since 2008, Parliament has enacted more than 100 Public Acts and 250 regulations every year.⁷⁷

Parliament typically sits for 90 days a year. It is obvious parliamentarians can never hope to keep up with the detail of the laws and regulations they are passing and devote time to debating other important policy issues of the day.

Moreover, newly elected governments naturally wish to implement their pledges without the embarrassment of a negative assessment from government departments. Nor do departments have a strong incentive to embarrass a new minister. The safer course for both ministers

and officials is not to provide a competent assessment of the costs and benefits of campaign commitments. That is a pity for both public and parliamentary debate, but the situation is unlikely to change.

Unless incentives are changed, New Zealand cannot hope to achieve a satisfactory fit-for-purpose body of laws and regulations in the foreseeable future. The ministers and public servants responsible for administering it must muddle through as best they can.

How can such a gloomy assessment be reconciled with New Zealand's relatively favourable rankings for many aspects of its regulation, including business and labour freedom? First, many other prosperous countries are in a similar plight. Second, our systemic difficulties in regulation do not make all our laws unsatisfactory. For example, our venerable *Public Works Act* has a compensation principle that respects property rights, but the *Resource Management Act* does not. Nor does our *Overseas Investment Act*.

There is an alternative path but no obvious way to reach it. Former University of Chicago law professor Richard Epstein has eloquently argued that citizens need the law to be clear, permanent and stable and thereby widely understood and predictable rather than constantly in flux, and far beyond the ability of the common person to understand.⁷⁸

We cannot turn the clock back to a much smaller statute book, but we can all surely agree it should be easier rather than harder for law-abiding citizens to be able to knowingly comply with the law. It should also leave law-abiding citizens more rather than less free to pursue their interests.

New Zealand Government, Response to the New Zealand Productivity Commission Report on Regulatory Institutions and Practices July 2015 and September 2016.

^{76.} See Roger Partridge and Amy Thomasson, "Who Guards the Guards?: Regulatory Governance in New Zealand (Wellington: The New Zealand Initiative, 2018).

^{77.} Author's calculations using the NZLII database.

^{78.} Richard Epstein, Simple Rules for a Complex World (Havard University Press, 1995).

4.3 An OECD-wide perspective on **New Zealand's wellbeing outcomes**

The OECD's Better Life Index provides an international perspective on New Zealand statistics. It finds that New Zealanders overall rank highly in many wellbeing respects, compared to other OECD member countries. Specifically, it ranked us:

- top for health status;
- above average for subjective wellbeing including life satisfaction, life expectancy at birth, student literacy (PISA scores), environmental quality, civic engagement, housing, education and skills, jobs and earnings, and social connections; and
- below average for income (26th out of 38 countries) and for wealth (18th), work-life balance and personal security.

We rate top for health status because only 12 OECD member countries have a longer average life expectancy at birth than New Zealand, and only Canada and the United States have a higher proportion of respondents self-assessing their health status as being good.79

It may be a surprise that we rate above average for housing. Delving into the details reveals that our housing costs were the highest in the OECD relative to income. The components that lifted our overall score were rooms per person and the proportion of dwellings with basic facilities. The OECD's measures did not include other aspects of local concern - e.g. building quality and inadequate maintenance.

Of course, these yardsticks are partial, and the choice of relevant considerations and their weights is subjective. In addition, reliance on surveyed perceptions is problematic when sample sizes are small, as they can be for

New Zealand in international surveys. It is desirable to complement such 'soft' data with hard statistical data.

4.4 Summary

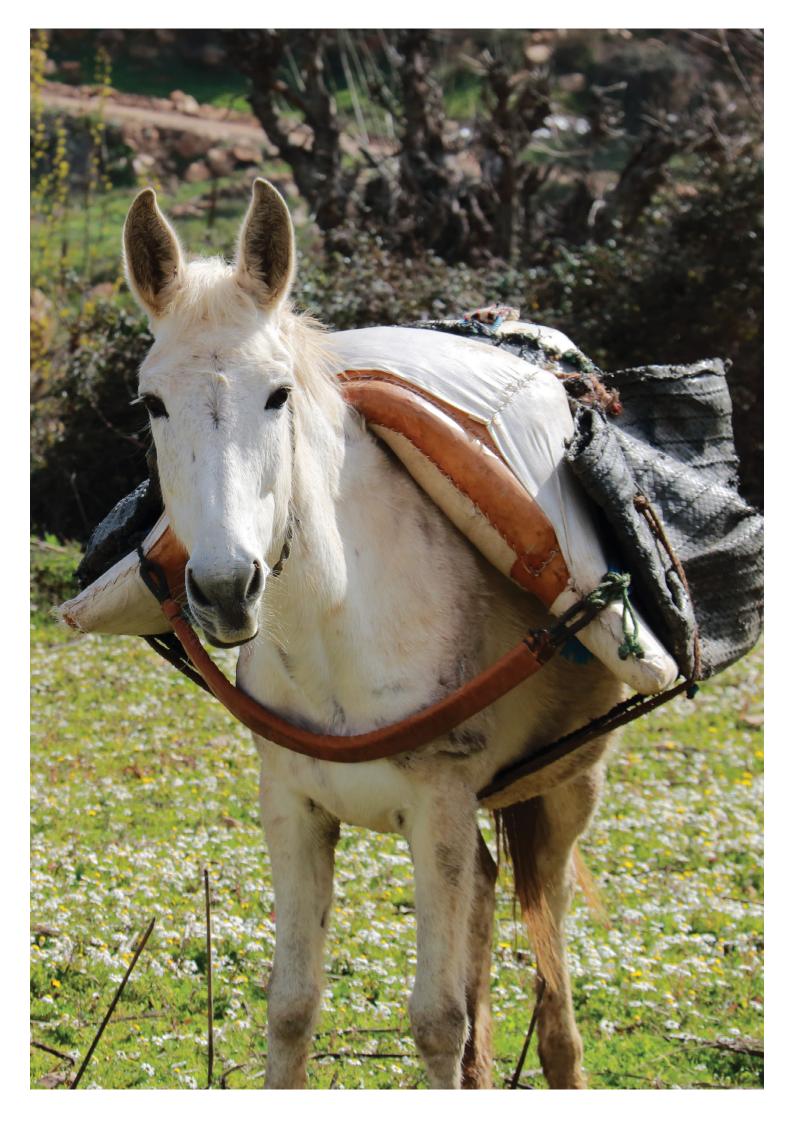
New Zealanders' self-assessed wellbeing is largely above average relative to that in other OECD member countries. This is despite our relatively low income per capita. The quality of our inherited Anglo-Saxon institutions and the institutional reforms in the late 1980s and early 1990s compared to what they replaced will be a factor.

The high average score conceals low wellbeing for a sizeable minority.

There is some evidence of problems for the minority caused by the majority. High house prices obviously favour incumbent owners. The indicated regulatory barriers to employing labour are another. They will benefit those who have jobs at the expense of the least employable.

Issues in health and education are also likely to impinge on the most vulnerable.

Arguably, the biggest elephant in the room for low wellbeing and material hardship is New Zealand's long-standing low rate of labour productivity growth. That is particularly debilitating for future wellbeing. Low national income per capita limits a nation's options.



CHAPTER 5

Scope for improving pack-horse's performance

5.1 The efficiency of government spending overall

There is little regular and systematic review of the value for money from existing expenditure.80

Given that government spending is overwhelmingly determined by political processes, warts and all, it is entirely plausible that money could be spent better under arrangements that make it easier for politicians to reject partisan spending pressures.

In 2013, The Fraser Institute published a substantial analysis of spending efficiency by Livio Di Matteo.81 It estimated the efficiency of government spending across 34 OECD countries.

On Di Matteo's analysis, if our government spending had been as efficient as in South Korea, New Zealand could have cut its spending by a third, without worse outcomes.82 The following paragraphs explain his methodology.

Di Matteo's methodology had two steps. First, he created indices of the overall performance of each country for good economic, health and broader societal outcomes. This combined four macroeconomic indicators. two health outcomes, and 13 societal outcomes relating to education, income inequality, crime, housing, household income and wealth, selfassessed life satisfaction and health status, air pollution, water quality, and voter turnout. Each country was given a score of between o and 10 for each of the 19 variables.

From these, he constructed an overall human welfare performance index for 33 OECD member countries, using available statistics for 2000-II.83 Luxembourg was at the top with 7.5 (out of 10). Norway was very close behind, followed by Switzerland (6.2). There was a four-way tie with 6.1 between Australia, Canada, Sweden and the United Kingdom. Close behind were Iceland, the Netherlands, South Korea and Ireland. New Zealand's score was 5.5. This put it in 14th equal position with Austria, Belgium and Japan. Germany and France were close behind. Italy, Spain and Greece were well down the list. Turkey was at the bottom with 2.5 out of 10.

Given our high rankings in so many measures, it is not pleasing to see us so far down the list. Being so far behind Australia makes it worse for those of us who are a bit parochial.

^{80.} New Zealand Productivity Commission, "Improving State Sector Productivity," Final Report of the Measuring and Improving State Sector Productivity Inquiry, Vol. 1 (Wellington: Productivity Commission, 2018), 25.

^{81.} Livio Di Matteo, "Measuring Government in the 21st Century: An International Overview of the Size and Efficiency of Public Spending" (The Fraser Institute, 2013). He is Senior Fellow at The Fraser Institute and Professor of Economics at Lakehead University in Thunder Bay, Ontario.

^{82.} Over a decade earlier, researchers for the European Central Bank had indicated that if New Zealand could match the best public sector performers, it might be able to achieve the same output by spending 17% less or produce 19% more output from the same spending. António Afonso, Ludger Schuknecht and Vito Tanzi, "Public Sector Efficiency: An International Comparison," Public Choice, Springer 123:3 (2005), 321-347.

^{83.} The difference between 33 and 34 was not explained.

His second step divided the average ratio of each country's government expenditure to GDP between 2000 and 2011 by each country's performance index. The lower this ratio, the smaller the resource share of GDP per unit of the performance index. This is his efficiency measure.

He converted this measure into a cost-effectiveness index for each country. The index takes the value of 10 for the most cost-effective country (South Korea) and zero for the least cost-effective (Turkey). Australia's efficiency index was 9.0, making it fourth overall and behind Luxembourg and Switzerland. New Zealand's score was 7.7, putting it in the 11th position and behind Norway, Chile, Mexico, Canada, the United States and Japan.

Di Matteo next assessed what ratio of government spending to GDP would suffice to produce each country's score on his performance index – were it as efficient as South Korea. South Korea was only spending 27% of GDP to achieve its score of 7.5 on the performance index.

New Zealand was spending 38% of GDP to achieve its performance score of 5.5. With some refinements, 84 Di Matteo considered that New Zealand had the potential to sustain its 5.5 score with a government spending ratio of only 26% of GDP. That is only two-thirds of the 38% ratio to GDP.

For 22 OECD member countries, the potential percentage reduction in their ratio is greater than the one-third reduction for New Zealand. For 11 of them it is over 50%.

This methodology is suggestive, but partial. For a start, government spending is only one factor affecting the chosen outcomes. It is probably not important for inflation, the rate of

Another important qualification is this research does not establish that it is feasible or desirable for New Zealand to do what South Korea is doing. The value of this research and the other efficiency analyses reviewed in this chapter is motivational. We should be able to learn from what other countries are doing, and this type of research helps identify where we might look.

Despite such qualifications, Di Matteo's indices show a steep positive association between the performance score and the government spending ratios in the 20–35% range. As the ratio rises within this range, the performance score rises from about 4 to 5. The gains in performance are much smaller as the spending ratio increases above 35%.

All in all, Di Matteo's findings of the potential for major savings are plausible. We know that much base government spending exists because it is entrenched rather than because it is of proven efficacy. We know that significant new spending (and regulation) is driven by political coalition-forming deals and ill-justified political campaign promises that become sacrosanct.

The difficulty is to find arrangements that might oblige politicians to pay more attention to public welfare considerations and less to short-term political advantage. That consideration falls outside the scope of this report.

5.2 Efficiency of state provision in greater detail

The New Zealand Productivity Commission recently concluded its inquiry into measuring and improving state sector productivity.

unemployment, leisure time, or life satisfaction. More to the point, the observed outcomes will be affected by government regulations. Government can and does use regulation to direct private spending in areas such as health, education, air pollution, and water quality.

^{84.} He adjusts for age structure and population density, but it is not clear how.

It released a draft report in December 2017 and its final report in two volumes in August 2018.85

In December 2017, it also released a research note on understanding the health sector's productivity. Earlier, in May 2017, it published a working paper on school productivity. It has also published case studies on aspects of policing (responses to mental health incidents), the courts, tertiary education, and the Ministry of Social Development's administration of the benefit payment services.

What is not measured is unlikely to be achieved. The commission's inquiry identified a marked lack of focus on agency productivity across "large parts of the public sector." It identified four reasons: weak incentives and inadequate scrutiny; negative attitudes to productivity; misconceptions that it was too hard; and insufficient interest by ministers and agency leaders.86

The commission noted that in 2011, a government-appointed Savings Working Group:

... found that many (but not all) public sector organisations have "no culture of, or commitment to, productivity and continuous improvement" (p.68) and that the public sector in general "has not been particularly successful in developing the systems, processes and culture which enable successful improvement and productivity initiatives" (p. 69).87

The commission's review of the history of attempts since the 1980s to get public sector agencies more focused on their productivity performance pointed if anything to a deterioration in focus.88

Monitoring Crown Entities' performances

The research for this report failed to locate published documents systematically monitoring the annual financial performances of the state-owned enterprises portfolio against a well-established benchmark, let alone the Crown Entity portfolio.89 The research did uncover a 2011 report for Treasury by Ernest and Young. It assessed the return of the state-owned enterprises portfolio against peer benchmarks using an EVA (economic value added) methodology.90 That is seven years ago now.

State commissioning and contracting

The Productivity Commission's 2015 report on state sector social service delivery issues identified many shortcomings in commissioning arrangements. Symptoms of difficulties included a lack of clarity about what was to be measured and achieved, short-termism and a bias for control over innovation.91

^{85.} New Zealand Productivity Commission, "Measuring and Improving State Sector Productivity: Draft Report" (Wellington: Productivity Commission, December 2017); "Improving State Sector Productivity," op. cit.; and "Measuring State Sector Productivity," Final Report of the Measuring and Improving State Sector Productivity Inquiry, Vol. 2 (Wellington: Productivity Commission, 2018).

^{86.} This is from the one-page report summary at The New Zealand Productivity Commission, "Measuring and Improving State Sector Productivity" (undated). Its 2018 report, volume 1, Figure 2.1, p 14 expanded this to seven different types of productivity barriers. Basically, it is not a focus under current arrangements. As a result it is inadequately measured and what is measured may be given little regard.

^{87.} Ibid. 81.

^{88.} New Zealand Productivity Commission, "Measuring and Improving State Sector Productivity: Draft Report," op. cit. 15-16.

^{89.} For example, chapter 2.3: "Commercial Portfolio overview" in New Zealand, "He Puna Hao Pātiki: 2018 Investment Statement Investing for Wellbeing" (Wellington: Treasury, 2018), provides no recognisable portfolio return analysis.

^{90.} Ernst and Young, "SOE Economic Profit Analysis," Report (Wellington: Crown Monitoring Unit, Treasury, 17 November 2011).

^{91.} New Zealand Productivity Commission, "More Effective Social Services" (Wellington: Productivity Commission, August 2015). See in particular findings F4.2 to F4.11, F6.2 and F6.14.

Another example is the failure of government departments to contract effectively for what would have been New Zealand's first social impact bond pilot.⁹²

These problems persist. The Productivity Commission's August 2018 report also found that traditional commissioning approaches were limiting the scope for customer input, innovation and productivity in service delivery.⁹³

In August 2018 the New Zealand Institute of Architects released a report on the quality of State procurement processes for public buildings.⁹⁴ Its accompanying press release asserted that the current "inefficient, inconsistent and ineffective" processes "could be costing New Zealand many millions of dollars a year".⁹⁵

Health

The Productivity Commission's 2017 research note on health sector productivity raised two concerns. One was that the productivity data the health system collects is inadequate. The second was that what is being collected is being under-utilised.⁹⁶

The lack of a productivity focus matters. On Treasury's figures, core Crown operating spending is running at around \$76 billion a year, of which \$16 billion is health spending. It is spending \$1 on health for every \$3.70 it is

spending on everything else.⁹⁷ Health spending represents nearly \$3,500 per person. During the last 10 years, it has averaged 6.1% of GDP. In the previous decade it was 5.5%.⁹⁸ The OECD puts New Zealand's overall health spending in 2016 at 9.2% of GDP, of which it classifies 7.4% of GDP as being "compulsory" spending.⁹⁹

The 2017 edition of the Health Quality and Safety Commission New Zealand's publication - Window on the Quality of New Zealand's Health Care – identified several concerns.

It found "wide and unexplained" differences in access to treatment for individual diseases across the country. Material differences in ethnic outcomes for the same condition could not be fully explained by differences in average socioeconomic status.¹⁰¹

It also reported that medication-related harm is substantial in New Zealand.¹⁰² Use of strong opioids was rising despite "limited evidence of its usefulness for non-cancer pain" and increasing evidence of its enduringly harmful effects. Some DHBs prescribe these opioids at twice the rate of others.¹⁰³

- 92. Fiona Rotherham, "Report on NZ social bonds pilot cites lack of commercial expertise by public officials," *New Zealand Herald* (16 December 2016).
- 93. New Zealand Productivity Commission, "Improving State Sector Productivity," op. cit. finding F2.5, 22.
- Leah Singer, "Improving Government Procurement of Architectural Services," MBA Professional Consulting Engagement Research Report (University of Otago, April 2018).
- 95. New Zealand Productivity Commission, "Understanding Health Sector Productivity," Research Note 1017/08 (Wellington: Productivity Commission, December 2017), iii.
- 96. New Zealand Productivity Commission, "Understanding Health Sector Productivity," Research Note 1017/08 ((Wellington: Productivity Commission, December 2017), iii.

- 97. Treasury reports that no other member country of the OECD devotes a higher proportion of government spending to health. See New Zealand Treasury, "District Health Board Financial Performance to 2016 and 2017 Plans" (February 2017), 11. The OECD's definition of "compulsory" health spending is broader.
- 98. These statistics all come from Treasury's "longtermtimeseries" excel spreadsheets, for which the latest available fiscal year is 2016–17. The profile for the ratio to GDP within the last decades has been in some decline, but this is due in part to strong GDP growth. See New Zealand Treasury, "District Health Board Financial Performance to 2016 and 2017 Plans," op. cit. 13–14. Treasury's long-term fiscal projections anticipate strong future growth in the ratio.
- 99. It is not clear how this term is defined. Presumably it means tax-funded or regulatory-directed spending.
- 100. Health Quality and Safety Commission New Zealand, A Window on the Quality of New Zealand's Health Care (2017),
 3. New Zealand's relatively low income per capita will be one reason why it is spending less on health per capita than more prosperous countries.
- 101. Ibid. 3.
- 102. Ibid. 12. On one survey it involved 8% of those receiving primary care; on another 28% of inpatients.
- 103. Ibid. 15.

Additional harms have occurred in hospitals from not monitoring failures and from poor communication, particularly when one shift hands over to another. Continuity of inpatient care is a problem.

The incidence of avoidable harms while in care is one measure of the quality of that care. To illustrate, falls while in care should be avoidable in principle at least. Inpatient falls are a very costly issue. The commission estimates that each fractured neck of the femur costs \$47,000 to treat and cuts 1.6 years off the average victim's expected remaining years of life of good quality. The statistical value of that loss is \$180,000 per year for a 40-year-old.104

One would hope that our hospitals have strong incentives to eliminate unnecessary falls. Perhaps not as strong as we would like. The commission reports that around a quarter of surveyed DHB health professionals believed that their organisation tolerates patient harm, and 30% did not find it easy to speak up about patient care. 105

The Ministry of Health's 2017 post-election briefing implicitly acknowledges a systemic problem of deficient capability and focus:106

We urgently need new, more cost-effective, ways of delivering care that will meet demand and provide consistent experiences for people using services. To invest well, we need to better understand the pressures on costs in the way we currently deliver services, so that we can better manage those pressures to improve effectiveness, productivity and efficiency, and reduce waste.

The bulk of government health spending funds the 20 DHBs in New Zealand.107 They are responsible for funding both their own hospitals and externally provided services (e.g. primary, tertiary and community care).108

Treasury assessed their financial performance in a 2017 report. It pointed out that there was a potential conflict between the provider and funder roles of DHBs. When incurring fiscal deficits, and under pressure from government to focus on meeting hospital-related targets, DHBs might favour their own hospitals. On the evidence, this might have happened.¹⁰⁹

Treasury's report laments the lack of adequate information about hospital productivity. 110 As best as it could assess, the overall weighted average volume of cases discharged by DHB hospitals grew by 18% between 2009 and 2016, while deflated costs had risen 19%. This ignores the issue of changes in service quality. It also implies that any productivity gains were limited to those captured by real wage rate increases for hospital workers. Unfortunately, it provided no information on this aspect.

In short, Treasury's laments are further evidence of an inadequate focus on getting the best possible outcomes for the community from government spending.

^{107.} The Auditor-General's Briefing to the Health Committee: 2017/18 Year, 7 June 2017, put the proportion at 75.6% of Vote:Health (being \$12.7 billion). (Ministry spending on health and disability was 16.1% of the vote.)

^{108.} In 2016, DHBs allocated 30% of their funding on average to external providers. New Zealand Treasury, "District Health Board Financial Performance to 2016 and 2017 Plans,"

^{109.} Treasury, op. cit. Figure 11, 23. The proportion dropped from nearly 31.4% in 2009 to about 30.2% in 2015.

^{110.} Not in these words. On p. 43, it observes that the Ministry has lead responsibility in this area, and that it can access a large number of performance measures, but it "does not provide information around levels of need, service quality, or productivity levels versus funds employed." It dryly concludes that better metrics "would be valuable." But valuable to whom? Not the government surely, or it would have demanded them.

^{104.} Ibid. 35 and 37.

^{105.} Ibid. 13.

^{106.} Ministry of Health, "Briefing to the Incoming Minister" (2017), 15.

Cross-country comparisons also indicate that New Zealand could get much better health outcomes for the same spending if it got itself better organised and focused. During the last two decades, the OECD secretariat has assembled a major database for comparing health outcomes and inputs among its member countries and across multiple dimensions.

One 2010 assessment concluded that New Zealand might be able to spend around 2.5% of GDP less on health in 2017 for no cost to projected life expectancy gains.¹¹¹ This is IF it were to achieve efficiency gains that the assessment considered to be plausible.¹¹²

To achieve the same wellbeing outcomes while spending even 1% or 2% less of GDP would be a massive gain. The savings could be used to substantially improve health outcomes.

The WHO's Global Burden of Disease initiative is a second major step towards helping nations assess the performance of their health system. One aspect focuses on the incidence in each country of conditions that are known to be amenable to treatment.¹¹³

A 2017 article in the UK medical journal *Lancet* illustrates both the extent of this database and its potential to inform countries about the scope for getting better health-spending related outcomes given their socioeconomic positions.

First, the article constructs a health care access and quality (HAQ) index. It estimates its value for each of the 195 countries. For 2015, New Zealand did not do very well. It ranked 22nd on this index. Plenty of small countries did better. The tiny Principality of Andorra in Spain was first, Iceland second and Switzerland third. Australia filled the sixth position, splitting up three Scandinavian countries.

Second, it constructs an index of socioeconomic status. It estimates a value for each of the 195 countries.

Third, it creates a frontier representing the highest value for the health care access and quality index that a country with a given socioeconomic index value might be expected to achieve.¹¹⁴

Fifty-two countries were so close to the frontier they could be said to be at the frontier within reasonable uncertainty bounds. Iceland was one. New Zealand was not. Neither was Australia or, more surprisingly, Singapore.

New Zealand's HAQ value in 2015 was 86.2. This was short of its frontier by 3.6 index points. Australia's value of 89.8 was short by 1.1 points; Singapore's value of 86.3 was short by 3.3 points. The index value for the United States, at 81.3, was short of its assessed frontier by an extraordinary 10.2 points. It is spending vast sums on health ineffectually.¹¹⁵

In short, New Zealand's health system is not a cot-case from an international perspective, but its fiscal performance is not good, even adjusting for our relatively low socioeconomic status (which reflects in our lagging income per capita).

III. OECD, "Health Care Systems: Getting More Value for Money," OECD Economics Department Policy Notes, No. 2 (2010), Figure 2, 6. New Zealand is far from being an outlier in this respect.

^{112.} A World Health Organization research paper – Ajay Tandon, Christopher Murray, Jeremy Lauer, and David Evans, Measuring Overall Health System Performance for 191 Countries (2001) – formed a cross-country health system efficiency index using 1993–97 statistics. Holding population educational attainment constant it found that New Zealanders could have enjoyed a 20% increase in healthy life expectancy if its health spending was as effective as in France. Forty countries were more efficient than New Zealand on this measure.

II3. WHO, "About the Global Burden of Disease (GBD) project," Website.

^{114.} It uses a bootstrapping process.

II5. Norway had the highest index value in 2015, at 91.6, but this was 8.4 points short of its assessed frontier.

Why are we not doing better? This is a statedominated industry. Existing practices and attitudes reflect the incentives and constraints embedded in current arrangements. The inadequate productivity focus is a telling symptom of dysfunction.

Whether Treasury and/or the Ministry of Health are clear about what needs to be changed is not apparent from the limited number of documents reviewed in this section. There is no reason to think that exhorting the hard-pressed staff at the coal-face to do better will make much of a difference.

Plausibly, the agencies perceive a lack of political will to really make a difference. Deeper thinking about remedies is needed than is evident in the articles reviewed in this section.

Education

New Zealand spends less per student than the OECD average, but, relative to national wealth, public expenditure on education as a percentage of GDP is high, and as a percentage of total public expenditure remains one of the highest in the OECD.116

Despite the growth in educational resources using internet technology, there is disturbing evidence of declining teaching productivity in schools.

The New Zealand Productivity Commission's May 2017 working paper on school productivity found that labour productivity - measured by student numbers compared to the number of full-time equivalent teachers – had fallen by 1.0% per annum between 2002 and 2014. This largely reflects falling class sizes. But there is more to the story. Weighting student numbers by PISA

Higher levels of educational attainment are associated with higher levels of material and non-material wellbeing. Reflecting this, the OECD secretariat has done much to research educational issues. It has built a large database across member countries and is analysing it for insights. This section reviews some of its findings for New Zealand.

One high-level test of the cumulative achievements of a country's education system is the level of literacy, numeracy and higher educational skills of its long-standing product its adult community. The OECD surveys adult skill levels across member countries.119

Its most recent survey was in 2015. 120 Overall, New Zealanders aged 15-65 shaped up well against the OECD benchmark for literacy. Our average adult literacy skill level is at the top end of the OECD countries. Our average PISA score for solving problems in technology

scores increases the decline to 1.1% per annum. So, if anything smaller class sizes are associated with worse PISA scores¹¹⁷ rather than better ones. Weighting student numbers by their earnings potential relative to spending on teacher salaries also produces a decline of 1.1% per annum. 118

^{117.} The OECD's PISA score is a widely used comparative measure of educational attainment. PISA is an abbreviation for OECD's Programme for International Student Assessment (PISA). It surveys 15-year-old school pupils' competence in mathematics, science and reading, including problem solving and cognitive skills. Scores are reported on a scale of 0-1000, where the OECD member-country average is around 500.

^{118.} New Zealand Productivity Commission, "Public Sector Productivity, Quality-Adjusted Sector-Level Data on New Zealand Schools," Working Paper 2017/2 (May 2017), Table 15, 46.

^{119.} This is part of its Programme for the International Assessment of Adult Competencies (PIAAC).

^{120.} In total, 6,177 New Zealanders were surveyed drawn from a representative sample of households. See Ministry of Education and the Ministry of Business Innovation and Employment, "Skills in New Zealand and Around the World: Survey of Skills (IPAAC) (June 2016), 4. Also, see OECD, "Skills Matter: Further Results from the Survey of Adult Skills," New Zealand Country Note (2016).

^{116.} OECD, "How Does New Zealand's Education System Compare? OECD's Education at a Glance 2017" (2017).

rich environments was the fifth highest. (Japan was first.) We compare much less favourably on numeracy – our average adult numeracy is around the average.¹²¹

Of greater forward-looking relevance is how well our schools are doing today. In 2015, New Zealand's 15-year-olds were 12th best in the OECD's list. Of the 11 countries or Chinese cities ahead of New Zealand, only Estonia, Finland and Canada were not from the Asia-China-Japan region. Singapore was first, Japan second.

Unfortunately, such figures in isolation tell us nothing about the proportion of adults or school leavers, who are barely literate or numerate. Experts regard level 3 in the OECD's Adult Literacy and Life Skills Survey to be the minimum "for coping with the demands of everyday life and work in a complex advanced society."¹²²

The OECD's 2014 survey found that 43% of adults in New Zealand aged 15–65 were below level 3 for literacy. That represents a shocking 1.3 million adults.

Employers and post-school vocational training institutions around the country are wrestling with this problem. Industry Training Federation boss Josh Williams says lack of functional literacy is one of the biggest issues raised by the business owners he encounters. Paul Jordan, manager at Juken NZ Mill says young workers with credits at level 3, or even with NCEA level 3, may not have functional literacy and numeracy. Indeed, the Tertiary Education Commission assesses that around 40% of those who have achieved level 2

on NCEA actually lack literacy and numeracy skills.¹²⁴ Students are being deceived.

By 2014, government had spent around \$130,000 per student to educate students in state schools to age 15.¹²⁵ Yet, on the PISA scores for 2015, 17% of them could barely read and 22% were inadequately numerate.¹²⁶ That represents a pipeline of about 6,000 students a year whose future workplace and broader life opportunities are tragically limited. Six thousand students at \$130,000 each is \$78 million.¹²⁷

Something is terribly wrong when the state spends \$130,000 per pupil for not teaching 17% of each age cohort basic literacy and numeracy skills. The problem does not look like one of not spending enough money. It looks more like a problem of money not well spent.

How efficient is the spending on New Zealand schools from an international perspective?

^{124.} Tertiary Education Commission, "Aligning three measures of adult literacy and numeracy," Updated Fact Sheet: 20 August-2013.

^{125.} The OECD's Education at a Glance 2016 country note for New Zealand puts annual primary school spending per pupil at US\$7,354 using its purchasing power parity (PPP) exchange rate figures. For secondary school spending, the corresponding figure is US\$10,198. Assuming eight years of schooling at the primary school cost and three at the secondary school cost and using the OECD's PPP exchange rate for NZ in 2013 of 1.445979 (as at 4 June 2018) gives a total spending figure over the ages 5-15 of NZ\$129,300. As an alternative calculation, the OECD's Education at a Glance 2017 publication puts New Zealand's cumulative school spending between ages 6 and 15 at US\$86,000 in 2014. This was using a PPP exchange rate. The OECD's PPP value in 2014 was 1.44073, implying a New Zealand spending of NZ\$124,000. Add an extra year for spending on five-year-olds and a figure of the order of \$130,000 is on the light side if anything.

^{126.} These figures represent the proportion failing to achieve PISA level 2 scores. The OECD considers that achieving level 2 meets the baseline for proficiency in order to be able to engage in science issues, and participate effectively in modern society. See OECD, "Excellence and Equity in Education," PISA 2015 Results Vol. I (Paris: OECD Publishing, 2016), 320, 373 and 386.

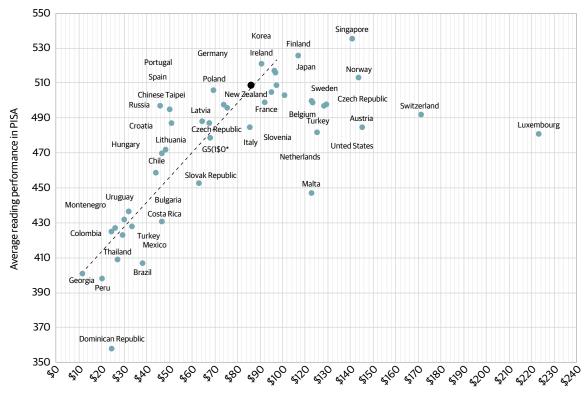
^{127.} Of course, these are likely to include many troubled students, and the state will have spent a lot more on these through truancy, child welfare, mental health, police, and/or youth justice services.

^{121.} Ibid. 6-7.

^{122.} Tertiary Education Commission, "Aligning three measures of adult literacy and numeracy," Updated fact sheet (20 August 2013).

Rob Mitchell, "We are barely functioning, literally," Stuff (18 June 2018).

Figure 6: PISA scores vs. School Spending per pupil



Cumulative School expenditure per student in the age group 6-15 (US\$000)

The (dotted) regression line indicates that PISA scores trend up by 14 points for each additional US\$10,000 of cumulative spending per pupil up to spending of US\$100,000 per pupil. Beyond US\$100,000 per pupil other factors may be more important.

Figure 6 compares average PISA reading scores for 15-year-olds with the OECD's estimates of cumulative spending per pupil between ages 6-15.128 The regression line in the figure shows the trend rate of increase in reading scores as spending per pupil rises. This is only for countries whose cumulative public and private school spending is less than US\$100,000 per student.129

The overall tendency is for the PISA score to rise by 14 points for each additional US\$10,000 of cumulative spending. New Zealand's outcomes relative to spending look respectable on this

measure. Ireland looks like an outperformer,

being above the regression line.

than our average of 521. Many countries spending more than \$100,000 per student are getting a worse average PISA score than New Zealand. Luxembourg is the worst outlier. We are not a cot case.

A qualification is that school pupils in some countries start at age 6 (e.g. in France) and some at age 5 (e.g. in New Zealand and the United Kingdom). Others may start earlier or later. For example, in Ireland children may start before turning 5. So New Zealand's spending on schooling to age 15 may be about the same as the French spending, albeit for a better outcome.

No country spending less than New Zealand on this measure is getting a higher PISA score

^{128.} The data is that behind Figure B1.a in the OECD's Education at a Glance 2017 publication.

^{129.} Calculated using the OECD's 2014 purchasing power parity exchange rates.

Fortunately, more rigorous cross-country analyses of value for money exist.

A 2007 OECD report compared three institutional aspects of the education systems of 26 member countries that related to management efficiency. Compared to the OECD average, New Zealand's system was more decentralised, allowed greater school autonomy in matching resources to needs, and had more managerial autonomy. The decentralisation and autonomy conferred by the *Tomorrows' Schools* reforms will be part of this story for New Zealand.

Less happily, New Zealand's system was not much better for school choice than many other systems and was at the heavily populated abysmal end of the spectrum for lacking a clear outcome focus for schools.

Some education systems did not set clear objectives, failed to benchmark, and did not provide much school choice – and were unlikely to either allocate resources efficiently or apply them efficiently once allocated. New Zealand was below the OECD average in all these respects.

Overall, New Zealand's arrangements were not much better than the OECD median benchmark.¹³¹ The report also showed that this country-median benchmark was well below the best score in each category.

A related 2009 OECD report estimated efficiency frontiers for spending on school education across 28 OECD countries.¹³² Its main finding was that inputs in these countries could be cut by one-sixth on average without any loss in PISA scores. This was if each country could achieve this measure of its potential. New Zealand was around this one-sixth level.¹³³ Alternatively, New Zealand might hope to improve pupils' average PISA score by around 5% if it used existing educational resources better.¹³⁴

The government is spending more than \$8 billion a year on school education – a saving of one-sixth could make a big difference to outcomes if wisely spent.¹³⁵

The efficiency of spending on education matters because money wasted is money not available to help kids' learning. Those with higher levels of learning tend to earn more from greater productivity. An earlier OECD paper estimated that if an education system could increase learning by 10%, GDP might rise in the long run by 3% to 6% in most OECD countries. ¹³⁶ Of course, higher levels of education are widely known to be correlated with improved health and self-assessed wellbeing more generally.

If the state cannot do better than this, options for greater school choice should surely be considered.

^{130.} Frederic Gonand, Isabelle Joumard and Robert Price, "Public Spending Efficiency: Institutional Indicators in Primary and Secondary Education," OECD Economics Department Working Papers No. 543 (Paris: OECD Publishing, 2007).

^{131.} Ibid. Table A3, 35. This table provides three composite measures for overall institutional quality, each based on a different weighting system. New Zealand's score on the first of these puts it in 10th position.

^{132.} Douglas Sutherland, Robert Price and Frederic Gonand, "Improving Public Spending Efficiency in Primary and Secondary Education," OECD Journal: Economic Studies (2009). It treats Belgium as two different countries, so it has 29 data observations for each year, not 28.

Ibid. Figure 5, Panel A, 15. New Zealand is in the bottom half for cost input efficiency.

Ibid. Figure 5, Panel B, 15. New Zealand is in the top half for output efficiency.

^{135.} Ministry of Education, "Annual Report 2016" (Wellington: New Zealand Government, 2017), 5.

^{136.} Frederic Gonand, "The Impact on Growth of Higher Efficiency of Public Spending on Schools," OECD Economics Department Working Papers, No. 547 (2007).

Table 8: Distance from frontier across 10 pillars

	Distance to Frontier (DTF)	New Ze	New Zealand		ralia
Sector	Group Indicator	DTF	Rank	DTF	Rank
1	Ease of registering property	94.5	1	74.2	51
2	Ease of starting a business	100.0	1	96.5	7
3	Ease of getting credit	100.0	1	90.0	6
4	Strength of minority investors protection index	81.7	2	60.0	57
5	Ease of dealing with construction permits	86.4	3	84.4	6
6	Ease of paying taxes	91.1	9	85.6	26
7	Ease of enforcing contracts	71.5	21	79.0	3
8	Ease of resolving insolvency	71.9	32	78.8	18
9	Ease of getting electricity	84.0	37	82.3	47
10	Ease of trading across borders	84.6	56	70.7	95
New Ze	New Zealand's Overall DTF		1	80.1	14

Source: World Bank Doing Business 2018 report: DB18-DRF Calculator (190 countries)

5.3 Ease of Doing Business frontier analyses

As mentioned in section 3.1, New Zealand ranked first in the world in the World Bank's Doing Business 2018 report. Australia was 14th.

These overall rankings arise from averaging country scores for each of 10 component groups. The World Bank's report uses the scores to assess best practice across countries. Typically, the best practice benchmark is set by the highest score any country achieved in the last five years. It then measures how close a country's score is to the score for the relevant benchmark. It calls this measure the Distance to Frontier (DTF).

The World Bank's DTF analysis helps assess the significance of a poor ranking or score.

Table 8 compares the DTF for New Zealand and Australia for each of the World Bank's 10 groups that make up its overall index. There is a correlation between the distance to frontier, ranking and score, but it is far from 1 for 1.137

New Zealand was at the frontier for ease of starting a business and ease of getting credit. It was inside the frontier on the other eight pillars, but to varying degrees.

New Zealand is furthest from the frontier (over 28%) for ease of enforcing contracts and ease of resolving redundancy. There is no obvious good reason for this, and the contrast with Australia is stark. This is a governmentcontrolled aspect that should be researched and reported on.

New Zealand also ranks relatively poorly for ease of getting electricity and ease of trading across borders (although Australia is worse on both counts).

^{137.} For example, New Zealand's DTF for count 4 in the table is 81.7, which is a greater distance from the frontier than its DTF of 84.6 for count 10. But New Zealand's ranking was 2nd for the former and 56th for the latter.

Table 9: Doing Business concerns where New Zealand's DTF rank is worse than 9th

Sector	Category	Measure	New Zealand		Australia	
			DTF	Rank	DTF	Rank
1	Registering Property	Quality of land administration index (0-30)	86.7	15	66.7	51
4	Protecting Minority Corporate transparer	Corporate transparency index (0-10)	70.0	48	90.0	4
	Investors	Shareholder rights index (O-10)	70.0	33	50.0	101
		Ownership and control index (0-10)	70.0	14	40.0	82
5	Dealing with	Cost (% of warehouse value)	88.7	94	95.6	43
	Construction Permits	Procedures (number)	76.0	26	76.0	26
		Time (days)	80.7	32	72.6	67
6	Paying Taxes	Total tax and contribution rate (% of profit)	88.2	76	69.1	138
		Time to comply with corporate income tax audit (hours)	95.4	57	99.5	13
		Time (hours)	85.9	48	91.3	24
		Time to comply with VAT refund (hours)	96.0	17	91.0	28
		Payments (number)	93.3	14	86.7	57
		Postfiling index (0-100)		11		17
7	Enforcing Contracts	Cost (% of claim)	69.5	91	74.0	58
		Quality of judicial processes index (0-18)	52.8	54	86.1	1
		Recovery rate (cents on the dollar)	90.6	15	88.8	16
8	Resolving Insolvency	Strength of insolvency framework index (0-16)	53.1	95	68.8	49
9	Getting Electricity	Procedures (number)	66.7	66	66.7	66
		Time (days)	82.6	54	75.2	86
		Cost (% of income per capita)	99.1	47	99.8	8
		Reliability of supply and transparency of tariff index (O-8)	87.5	30	87.5	30
10	Trading Across Borders	Cost to export: Border compliance (US\$)	68.2	95	29.3	163
		Cost to import: Border compliance (US\$)	69.5	86	56.3	114
		Time to export: Border compliance (hours)	77.4	79	78.3	70
		Cost to import: Documentary compliance (US\$)	88.6	73	85.7	90
		Cost to export: Documentary compliance (US\$)	83.3	69	34.0	168
		Time to import: Border compliance (hours)	91.4	60	86.4	69
		Time to export: Documentary compliance (hours)	98.8	43	96.4	57
		Time to import: Documentary compliance (hours)	100.0	27	98.7	50

Source: World Bank Doing Business 2018 report: DB18-DRF Calculator. Covers 190 countries, the bigger the distance to the frontier the higher the ranking (ie the greater the number of countries that are likely to be closer to the frontier).

Table 9 digs into the details underneath the group rankings in Table 8. It presents the 29 component items for which New Zealand ranks no better

than ninth. No item contributing to sectors 2 and 3 in table 8 had a rank higher than 8.

There is a lot of overlap between the items for which our ranking is relatively poor with those in Table 4, derived from the WEF's Global Competitiveness Index. Our interest in this section is in the scope for doing better on the specifics, as indicated by the DTF column.

Shockingly, New Zealand is furthest from the calculated frontier for our judicial processes. We were only 52.8% of the way to the frontier, leaving us 47.2% below it. Our processes ranked only 54th. More gallingly, Australia was ranked first in the world.

We were also a relatively long way from the frontier for enforcing contracts and ease of resolving redundancy. These are core things that only government can put right, and we should all want it to excel at doing so. Mediocrity here is not good enough.

Can our judicial system really be this bad?

Table 10 looks deeper into the judicial process component. Four aspects of judicial process go into making up the overall scores. The approach to the assessments is very structured. It involves taking a standardised legal dispute and assessing in each country what processes, structures, costs and delays would be likely to occur in each case.

Table 10: Quality of judicial processes New Zealand vs. Australia

Scores for Quality of Judicial Processes						
Category	NZ	Aus				
Structure & proceedings	3	4.5				
Case management	3	5.5				
Automation	1.5	3				
Dispute resolution	2	2.5				
Overall score (max is 18)	9.5	15.5				

Source: World Bank, Doing Business, 2018 Report

Australia scores substantially better than New Zealand in each category. In our view, the Ministry of Justice should be asked to look into the matter and report publicly.

5.4 Summary observations

The weak innovation and productivity performance of the New Zealand state sector is the result of many factors including the capability of its staff, the quality of its internal processes, the ambition of its leaders and the policies and priorities set by ministers. Low state sector productivity growth is a reflection of all these factors. 138

A key symptom of malaise in government spending, provision and regulation is the lack of focus on productivity - outcomes achieved in relation to resources used. It is far easier to waste resources than it is to use them efficiently. What is hard to achieve and inadequately measured is unlikely to be achieved.

The research reviewed in section 5.1 indicates that around a third of government spending might be wasteful. That represented around 13% of GDP or almost \$20,000 per household, annually. Most household would think that was waste on a grand scale.

The material in section 5.2 likewise identified grounds for real concerns about the state's performance as a provider and as a commissioner of services.

In health, there is widespread agreement about the lack of a productivity focus. The government's system is not producing better outcomes for New Zealanders than research shows we could expect from a better

^{138.} New Zealand Productivity Commission, "Improving State Sector Productivity," op. cit. 33.

incentivised system. An indicative figure, of the order of 2.5% of GDP, is being wastefully spent annually, compared to international best practice.

In education, an OECD efficiency analysis found that spending could be cut by around one-sixth in New Zealand without worse outcomes, if best international practice efficiency could be achieved. Appallingly, around 1.3 million working-age adults in New Zealand lack basic literacy proficiency, not achieving level 3 on the relevant scale. Moreover, each year 17% of those reaching age 15 are similarly failing. The state has likely spent \$130,000 on schooling alone for each of them.

We should always be looking at areas of weakness from international comparisons, for these are areas where we can most hope to learn from others. The international comparisons in this report have pointed to the following points of relative weakness:

- Restrictions on hiring and firing workers may be harming the relatively unemployable
- Our relatively high minimum wage is also a barrier to work for the least employable
- Our restrictions on foreign direct investment make us an international outlier

- We rank poorly for ease of enforcing contracts and resolving insolvency
- Our regulations for exporting and importing appear to be particularly costly
- The quality of our judicial processes is remarkably suspect
- Restrictions that raise housing costs are most harming non-owners
- Our high road toll and crime rates lower public safety
- Our infant mortality rate is relatively high. The incidence of avoidable harms in hospitals is a concern
- Aspects of our infrastructure are lacking. These include piped water quality, waste water and the robustness of electricity supply.

The weaknesses in our judicial processes and undue difficulties in getting contracts enforced and resolving redundancy are pervasive and of fundamental concern. Weakness there weakens everything. The contrast with Australia is particularly stark and we see no good reason for New Zealand to be lagging in this area.

Conclusion

The major conclusion in this report is that there is a compelling case for government to be doing a much better job with the tasks entrusted to it. Much of what it is doing is wasteful absolutely and relative to international best practice. It is wasteful for many reasons, but a major symptom is the inadequate focus on productivity.

The comparative efficiency research reviewed in this report indicates that the potential savings if the state were to do a better job would be worth several percentage points of GDP annually.

Such savings could be used to raise New Zealanders' wellbeing in any combination of the following two ways:

- maintaining government outputs, while cutting tax revenues;
- increasing government outputs from unchanged government spending.

The discussion of those choices is outside the scope of this report.

APPENDIX 1

State entities

Table 11: Central government entities (June 2017)

Category	Government classification	Number in Category	Institution
1	Autonomous Crown entity	4	Government Superannuation Fund Authority
			Guardians of New Zealand Superannuation
			New Zealand Lotteries Commission
			Public Trust
2	Council-controlled Trading	3	Christchurch International Airport Limited
	Organisation		Dunedin International Airport Limited
			Hawke's Bay Airport Limited
3	Crown agent	3	Accident Compensation Corporation
			Earthquake Commission
			Housing New Zealand Corporation
4	Crown research institute	7	AgResearch Limited
			Institute of Environmental Science and Research Limited
			Institute of Geological and Nuclear Sciences Limited
			Landcare Research New Zealand Limited
			National Institute of Water and Atmospheric Research Limited
			New Zealand Forest Research Institute Limited
			The New Zealand Institute for Plant and Food Research Limited
5	Mixed Ownership Model	1	Genesis Energy Limited
	Company		Mercury NZ Limited
			Meridian Energy Limited
			Mighty River Power Limited
6	Other company (Crown	1	Crown Irrigation Investments Limited
	entity company)		New Zealand Venture Investment Fund Limited
			Radio New Zealand Limited
			Television New Zealand Limited

Category	Government classification	Number in Category	Institution
7	Public Finance Act	11	City Rail Link Limited
	Schedule 4A Company		Crown Asset Management Limited
			Crown Fibre Holdings Limited
			Education Payroll Limited
			FairWay Resolution Limited
			Ōtākaro Limited
			Predator Free 2050 Limited
			Research and Education Advanced Network New Zealand Limited
			Southern Response Earthquake Services Limited
			Tāmaki Redevelopment Company Limited
			The Network for Learning Limited
8	Publicly Listed Company	1	Air New Zealand Limited
9	State-owned Enterprise	13	Airways Corporation of New Zealand Limited
			Animal Control Products Limited
			AsureQuality Limited
			Electricity Corporation of New Zealand Limited
			KiwiRail Holdings Limited
			Kordia Group Limited
			Landcorp Farming Limited
			Meteorological Service of New Zealand Limited
			New Zealand Post Limited
			New Zealand Railways Corporation
			Quotable Value Limited
			Solid Energy New Zealand Limited
			Transpower New Zealand Limited
10	Statutory Crown corporation	1	National Provident Fund

Source: The Treasury, Crown Financial Statements 2017

Table 12: Central government commercial entities

STATE-OWNED ENTERPRISES Sim Sim Airways Corporation of New Zealand Limited 208 42 92 116 AsureQuality Limited 110 31 59 51 Landcorp Farming Limited 1,814 318 349 1,465 New Zealand Post Limited 1,796 363 514 1,282 Kiwilail Holdings Limited 18,29 288 515 1,314 Transpower New Zealand Limited 15,307 3,497 4,116 1,191 Kiwin Group Holdings Limited 157 19 69 88 Kiwi Group Holdings Limited 20,717 19,224 19,286 1,406 New Zealand Railways 3,523 2-7 29,28 25 3,523 Corporation 358 25 3,523 25 3,523 22 3,523 Corporation 416 146 379 37 3,140 1,040 3,040 1,040 3,040 1,041 3,041 1,041 3,041 1,042 1,	Central government commercial entities	Total Assets	Borrowing	Total Liabilities	Equity
Airways Corporation of New Zealand Limited 208 42 92 116 AsureQuality Limited 110 31 59 51 Landcorp Farming Limited 1,814 318 349 1,465 New Zealand Post Limited 1,796 363 514 1,282 Kiwill Holdings Limited 1,829 288 515 1,314 Transpower New Zealand Limited 1,507 1,99 69 88 Kiwi Group Holdings Limited 1,57 19 69 88 Kiwi Group Holdings Limited 20,777 19,224 19,286 1,406 New Zealand Raliways 3,523 25 3,523 Corporation 35,523 25 3,523 Christate-owned enterprises 416 136 379 37 Air New Zealand Limited 7,634 2,578 5,185 2,449 Gensis Energy Limited 4,186 1,309 2,230 1,956 Meridan Energy Limited 8,622 1,430 3,540 5,082		\$m	\$m	\$m	\$m
New Zealand Limited 110 31 59 51 Landcorp Farming Limited 1,814 318 349 1,465 New Zealand Post Limited 1,796 363 514 1,282 KiwiRail Holdings Limited 1,829 2,88 515 1,314 Tanspower New Zealand Limited 5,307 3,497 4,116 1191 Kiwi Group Limited 157 19 69 88 Kiwi Group Holdings Limited 20,717 19,224 19,286 1,406 New Zealand Railways 3,523 - 25 3,523 Corporation 3,523 - 2,58 3,523 Other State-owned Enterprises 35,877 23,928 25,404 10,473 Air New Zealand Limited 7,634 2,578 5,185 2,449 Genesis Energy Limited 8,622 1,430 3,540 5,082 Mercury NZ Limited 5,995 1,296 2,688 3,307 Total mixed ownership companies 1,759 319 499	STATE-OWNED ENTERPRISES				
Landcorp Farming Limited 1.814 318 349 1.465 New Zealand Post Limited1 1.796 363 514 1.282 KiwiRail Holdings Limited 1.829 288 515 1.314 Transpower New Zealand Limited 5.307 3.497 4.116 1.191 Kordia Group Limited 157 19 69 88 Kivi Group Holdings Limited 20,717 19,224 19,286 1,406 New Zealand Railways 3,523 - 25 3,523 Corporation 3,523 - 25 3,523 Other State-owned enterprises 416 146 379 37 Total State-owned Enterprises 35,877 23,928 25,404 10,473 Air New Zealand Limited 7,634 2,578 5,185 2,449 Genesis Energy Limited 4,186 1,309 2,230 1,956 Mercury NZ Limited 5,995 1,296 2,688 3,307 Total mixed ownership companies 6,637 6,613		208	42	92	116
New Zealand Post Limited 1,796 363 514 1,282 KiwiRail Holdings Limited 1,829 288 515 1,314 Transpower New Zealand Limited 5,307 3,497 4,116 1,191 Kordia Group Limited 157 19 69 88 Kiwi Group Holdings Limited 20,717 19,224 19,286 1,406 New Zealand Railways 3,523 - 25 3,523 Other State-owned Enterprises 416 146 379 37 Total State-owned Enterprises 35,877 23,928 25,404 10,473 Air New Zealand Limited 7,634 2,578 5,185 2,449 Genesis Energy Limited 4,186 1,309 2,230 1,956 Mercury NZ Limited 5,995 1,296 2,688 3,307 Total mixed ownership companies 26,437 6,613 13,643 12,794 Contral mixed ownership companies 1,759 319 499 1,260 Total SOE segment 60,555 <th>AsureQuality Limited</th> <th>110</th> <th>31</th> <th>59</th> <th>51</th>	AsureQuality Limited	110	31	59	51
KiwiRail Holdings Limited 1,829 288 515 1,314 Transpower New Zealand Limited 5,307 3,497 4,116 1,191 Kordia Group Limited 157 19 69 88 Kiwi Group Holdings Limited 20,717 19,224 19,286 1,406 New Zealand Railways 3,523 - 25 3,523 Corporation 416 146 379 37 Total State-owned Enterprises 35,877 23,928 25,404 10,473 Air New Zealand Limited 7,634 2,578 5,185 2,449 Genesis Energy Limited 4,186 1,309 2,230 1,956 Meridian Energy Limited 8,622 1,430 3,540 5,082 Mercury NZ Limited 5,995 1,296 2,688 3,307 Total mixed ownership 26,437 6,613 13,643 12,794 companies Intra-segmental eliminations -1,759 -319 -499 -1,260 Total State-compania 6,613	Landcorp Farming Limited	1,814	318	349	1,465
Transpower New Zealand Limited 5,307 3,497 4,116 1,191 Kordia Group Limited 157 19 69 88 Kiwi Group Holdings Limited 20,717 19,224 19,286 1,406 New Zealand Railways 3,523 25 3,523 Corporation 416 146 379 37 Other State-owned enterprises 416 146 379 37 Total State-owned Enterprises 35,877 23,928 25,404 10,473 Air New Zealand Limited 7,634 2,578 5,185 2,449 Genesis Energy Limited 4,186 1,309 2,230 1,956 Meridian Energy Limited 8,622 1,430 3,540 5,082 Mercury NZ Limited 5,995 1,296 2,688 3,307 Total mixed ownership companies 1,759 -319 499 -1,260 Total SOE segment 60,555 30,222 38,548 22,007 CROWN ENTITIES Accident	New Zealand Post Limited1	1,796	363	514	1,282
Limited Kordia Group Limited 157 19 69 88 Kiwi Group Holdings Limited 20,717 19,224 19,286 1,406 New Zealand Railways 3,523 - 25 3,523 Corporation 416 146 379 37 Total State-owned Enterprises 35,877 23,928 25,404 10,473 Air New Zealand Limited 7,634 2,578 5,185 2,449 Genesis Energy Limited 4,186 1,309 2,230 1,956 Mercury NZ Limited 5,995 1,296 2,688 3,307 Total mixed ownership companies 26,437 6,613 13,643 12,794 Intra-segmental eliminations -1,759 -319 4.99 -1,260 Total SOE segment 60,555 30,222 38,548 22,007 Crown Fibre Holdings Limited 448 - 11 437 Crown Fibre Holdings Limited 448 - 11 437 Crown Fibre Holdings Limited	KiwiRail Holdings Limited	1,829	288	515	1,314
Kiwi Group Holdings Limited 20,717 19,224 19,286 1,406 New Zealand Railways Corporation 3,523 - 25 3,523 Other State-owned enterprises 416 146 379 37 Total State-owned Enterprises 35,877 23,928 25,404 10,473 Air New Zealand Limited 7,634 2,578 5,185 2,449 Genesis Energy Limited 4,186 1,309 2,230 1,956 Meridian Energy Limited 8,622 1,430 3,540 5,082 Mercury NZ Limited 5,995 1,296 2,688 3,307 Total mixed ownership companies 26,437 6,613 13,643 12,794 Intra-segmental eliminations 1,759 -319 499 -1,260 Total SOE segment 60,555 30,222 38,548 22,007 CROWN ENTITIES 39,944 143 1,212 1,268 Crown Fibre Holdings Limited 448 - 11 437 Crown Research Institutes <t< th=""><th></th><th>5,307</th><th>3,497</th><th>4,116</th><th>1,191</th></t<>		5,307	3,497	4,116	1,191
New Zealand Railways Corporation 3,523 - 25 3,523 Other State-owned enterprises 416 146 379 37 Total State-owned Enterprises 35,877 23,928 25,404 10,473 Air New Zealand Limited 7,634 2,578 1,855 2,449 Genesis Energy Limited 4,186 1,309 2,230 1,956 Meridian Energy Limited 8,622 1,430 3,540 5,082 Mercury NZ Limited 5,995 1,296 2,688 3,307 Total mixed ownership companies 26,437 6,613 13,643 12,794 Intra-segmental eliminations 1,759 -319 499 -1,260 Total SOE segment 60,555 30,222 38,548 22,007 CROWN ENTITIES 39,944 143 41,212 -1,268 Crown Fibre Holdings Limited 448 - 11 437 Crown Research Institutes 827 2 21 614 Callalghan Innovation 160	Kordia Group Limited	157	19	69	88
Corporation Corporation 416 146 379 37 Total State-owned Enterprises 35.877 23,928 25,404 10,473 Air New Zealand Limited 7,634 2,578 5,185 2,449 Genesis Energy Limited 4,186 1,300 2,230 1,956 Merciury NZ Limited 8,622 1,430 3,540 5,082 Mercury NZ Limited 5,995 1,296 2,688 3,307 Total mixed ownership companies 26,437 6,613 13,643 12,794 Intra-segmental eliminations -1,759 -319 -499 -1,260 Total SOE segment 60,555 30,222 38,548 22,007 CROWN ENTITIES Accident Compensation corporation 39,944 143 4,1212 -1,268 Crown Fibre Holdings Limited 448 - 11 437 Crown Research Institutes 827 2 213 614 Callaghan Innovation 160 - 100 60	Kiwi Group Holdings Limited	20,717	19,224	19,286	1,406
Total State-owned Enterprises 35,877 23,928 25,404 10,473 Air New Zealand Limited 7,634 2,578 5,185 2,449 Genesis Energy Limited 4,186 1,309 2,230 1,956 Meridian Energy Limited 8,622 1,430 3,540 5,082 Mercury NZ Limited 5,995 1,296 2,688 3,307 Total mixed ownership companies 6,613 13,643 12,794 Intra-segmental eliminations 1,759 -319 -499 -1,260 Total SOE segment 60,555 30,222 38,548 22,007 CROWN ENTITIES CROWN ENTITIES Accident Compensation 39,944 143 41,212 -1,268 Corporation 448 - 11 437 Crown Fibre Holdings Limited 448 - 11 437 Crown Research Institutes 827 2 213 614 Callaghan Innovation 160 - 100 60 District He		3,523	-	25	3,523
Air New Zealand Limited 7.634 2.578 5.185 2.449 Genesis Energy Limited 4.186 1,309 2,230 1,956 Meridian Energy Limited 8.622 1,430 3,540 5,082 Mercury NZ Limited 5,995 1,296 2,688 3,307 Total mixed ownership companies 6,613 13,643 12,794 Intra-segmental eliminations 1,759 -319 -499 -1,260 Total SOE segment 60,555 30,222 38,548 22,007 CROWN ENTITIES Accident Compensation 39,944 143 41,212 -1,268 Corporation 39,944 143 41,212 -1,268 Corporation 39,944 143 41,212 -1,268 Corporation 448 - 11 437 Crown Research Institutes 827 2 213 614 Callaghan Innovation 160 - 100 60 District Health Boards 7,857 78 <th>Other State-owned enterprises</th> <th>416</th> <th>146</th> <th>379</th> <th>37</th>	Other State-owned enterprises	416	146	379	37
Genesis Energy Limited 4,186 1,309 2,230 1,956 Meridian Energy Limited 8,622 1,430 3,540 5,082 Mercury NZ Limited 5,995 1,296 2,688 3,307 Total mixed ownership companies 26,437 6,613 13,643 12,794 Intra-segmental eliminations -1,759 -319 -499 -1,260 Total SOE segment 60,555 30,222 38,548 22,007 CROWN ENTITIES Companion 39,944 143 41,212 -1,268 Crown Fibre Holdings Limited 448 - 11 437 Crown Research Institutes 827 2 213 614 Callaghan Innovation 160 - 100 60 District Health Boards 7,857 78 2,353 5,504 Earthquake Commission 1,147 - 1,917 -770 Housing New Zealand Fire Service Commission 8 1,404 8 119 795 New Zealand Fire Service Com	Total State-owned Enterprises	35,877	23,928	25,404	10,473
Meridian Energy Limited 8,622 1,430 3,540 5,082 Mercury NZ Limited 5,995 1,296 2,688 3,307 Total mixed ownership companies 26,437 6,613 13,643 12,794 Intra-segmental eliminations -1,759 -319 -499 -1,260 Total SOE segment 60,555 30,222 38,548 22,007 CROWN ENTITIES SEA 20,007 CROWN ENTITIES SEA 20,007 Accident Compensation Corporation 39,944 143 41,212 -1,268 Crown Fibre Holdings Limited 448 - 11 437 Crown Research Institutes 827 2 213 614 Callaghan Innovation 160 - 100 60 District Health Boards 7,857 78 2,353 5,504 Earthquake Commission 1,147 - 1,917 -770 Housing New Zealand Tree Service Commission 914 8 119 795 New Zealand Fire Service Commission	Air New Zealand Limited	7,634	2,578	5,185	2,449
Mercury NZ Limited 5,995 1,296 2,688 3,307 Total mixed ownership companies 26,437 6,613 13,643 12,794 Intra-segmental eliminations -1,759 -319 -499 -1,260 Total SOE segment 60,555 30,222 38,548 22,007 CROWN ENTITIES STAND STAND 41,212 -1,268 Corporation 39,944 143 41,212 -1,268 Corporation 448 - 11 437 Crown Research Institutes 827 2 213 614 Callaghan Innovation 160 - 100 60 District Health Boards 7,857 78 2,353 5,504 Earthquake Commission 1,147 - 1,917 -770 Housing New Zealand Commission 1,412 - 8 1,404 Museum of New Zealand Fire Service Commission 914 8 119 795 New Zealand Lotteries Commission 158 1 133	Genesis Energy Limited	4,186	1,309	2,230	1,956
Total mixed ownership companies 26,437 companies 6,613 loss 13,643 loss 12,794 loss Intra-segmental eliminations -1,759 loss -319 loss -499 loss -1,260 loss Total SOE segment 60,555 loss 30,222 loss 38,548 loss 22,007 loss CROWN ENTITIES Use of the compensation corporation Crown Fibre Holdings Limited 448 loss 11 loss 437 loss Crown Research Institutes 827 loss 213 loss 614 loss Callaghan Innovation 160 loss 100 loss 60 loss District Health Boards 7,857 loss 2,353 loss 5,504 loss Earthquake Commission 1,147 loss 1,917 loss -770 loss Housing New Zealand Comporation 1,412 loss 8 loss 1,404 loss Museum of New Zealand Fire Service Commission 914 loss 8 loss 1,404 loss New Zealand Lotteries Commission 158 loss 1 loss 33,948 loss New Zealand Transport Agency 35,393 loss 967 loss 1,445 loss 33,948 loss Otakaro Limited 348 lo	Meridian Energy Limited	8,622	1,430	3,540	5,082
companies Intra-segmental eliminations -1,759 -319 -499 -1,260 Total SOE segment 60,555 30,222 38,548 22,007 CROWN ENTITIES Accident Compensation Corporation 39,944 143 41,212 -1,268 Crown Fibre Holdings Limited 448 - 11 437 Crown Research Institutes 827 2 213 614 Callaghan Innovation 160 - 100 60 District Health Boards 7,857 78 2,353 5,504 Earthquake Commission 1,147 - 1,917 -770 Housing New Zealand Comporation 1,412 - 8 1,404 Te Papa 8 1,404	Mercury NZ Limited	5,995	1,296	2,688	3,307
Total SOE segment 60,555 30,222 38,548 22,007 CROWN ENTITIES Accident Compensation Corporation 39,944 143 41,212 -1,268 Crown Fibre Holdings Limited 448 - 11 437 Crown Research Institutes 827 2 213 614 Callaghan Innovation 160 - 100 60 District Health Boards 7,857 78 2,353 5,504 Earthquake Commission 1,147 - 1,917 -770 Housing New Zealand Corporation 1,412 - 8 1,404 Te Papa 1,412 - 8 1,404 Te Papa 914 8 119 795 Commission 158 1 133 25 New Zealand Lotteries Commission 35,393 967 1,445 33,948 Ötäkaro Limited 348 148 226 122 Public Trust 510 451 459 51 </th <th></th> <th>26,437</th> <th>6,613</th> <th>13,643</th> <th>12,794</th>		26,437	6,613	13,643	12,794
CROWN ENTITIES Accident Compensation Corporation 39,944 143 41,212 -1,268 Crown Fibre Holdings Limited 448 - 11 437 Crown Research Institutes 827 2 213 614 Callaghan Innovation 160 - 100 60 District Health Boards 7,857 78 2,353 5,504 Earthquake Commission 1,147 - 1,917 -770 Housing New Zealand Corporation 25,900 2,070 4,305 21,595 Museum of New Zealand Fire Service Commission 914 8 119 795 New Zealand Fire Service Commission 158 1 133 25 New Zealand Transport Agency 35,393 967 1,445 33,948 Otākaro Limited 348 148 226 122 Public Trust 510 451 459 51	Intra-segmental eliminations	-1,759	-319	-499	-1,260
Accident Compensation Corporation 39,944 143 41,212 -1,268 Crown Fibre Holdings Limited 448 - 11 437 Crown Research Institutes 827 2 213 614 Callaghan Innovation 160 - 100 60 District Health Boards 7,857 78 2,353 5,504 Earthquake Commission 1,147 - 1,917 -770 Housing New Zealand Corporation 25,900 2,070 4,305 21,595 Museum of New Zealand Tree Service Commission 914 8 119 795 New Zealand Lotteries Commission 158 1 133 25 New Zealand Transport Agency 35,393 967 1,445 33,948 Otākaro Limited 348 148 226 122 Public Trust 510 451 459 51	Total SOE segment	60,555	30,222	38,548	22,007
Corporation Crown Fibre Holdings Limited 448 - 11 437 Crown Research Institutes 827 2 213 614 Callaghan Innovation 160 - 100 60 District Health Boards 7,857 78 2,353 5,504 Earthquake Commission 1,147 - 1,917 -770 Housing New Zealand Corporation 25,900 2,070 4,305 21,595 Museum of New Zealand Fire Service Commission 914 8 119 795 New Zealand Lotteries Commission 158 1 133 25 New Zealand Transport Agency 35,393 967 1,445 33,948 Ötäkaro Limited 348 148 226 122 Public Trust 510 451 459 51	CROWN ENTITIES				
Crown Research Institutes 827 2 213 614 Callaghan Innovation 160 - 100 60 District Health Boards 7,857 78 2,353 5,504 Earthquake Commission 1,147 - 1,917 -770 Housing New Zealand Corporation 25,900 2,070 4,305 21,595 Museum of New Zealand Te Papa 1,412 - 8 1,404 New Zealand Fire Service Commission 914 8 119 795 New Zealand Lotteries Commission 158 1 133 25 New Zealand Transport Agency 35,393 967 1,445 33,948 Ötäkaro Limited 348 148 226 122 Public Trust 510 451 459 51	•	39,944	143	41,212	-1,268
Callaghan Innovation 160 - 100 60 District Health Boards 7,857 78 2,353 5,504 Earthquake Commission 1,147 - 1,917 -770 Housing New Zealand Corporation 25,900 2,070 4,305 21,595 Museum of New Zealand Fire Service Commission 914 8 119 795 New Zealand Lotteries Commission 158 1 133 25 New Zealand Transport Agency 35,393 967 1,445 33,948 Ötäkaro Limited 348 148 226 122 Public Trust 510 451 459 51	Crown Fibre Holdings Limited	448	-	11	437
District Health Boards 7,857 78 2,353 5,504 Earthquake Commission 1,147 - 1,917 -770 Housing New Zealand Corporation 25,900 2,070 4,305 21,595 Museum of New Zealand Tree Service Commission 914 8 119 795 New Zealand Lotteries Commission 158 1 133 25 New Zealand Transport Agency 35,393 967 1,445 33,948 Ötäkaro Limited 348 148 226 122 Public Trust 510 451 459 51	Crown Research Institutes	827	2	213	614
Earthquake Commission 1,147 - 1,917 -770 Housing New Zealand Corporation 25,900 2,070 4,305 21,595 Museum of New Zealand Tre Papa 1,412 - 8 1,404 New Zealand Fire Service Commission 914 8 119 795 New Zealand Lotteries Commission 158 1 133 25 New Zealand Transport Agency 35,393 967 1,445 33,948 Ötäkaro Limited 348 148 226 122 Public Trust 510 451 459 51	Callaghan Innovation	160	-	100	60
Housing New Zealand Corporation 25,900 2,070 4,305 21,595 Museum of New Zealand Te Papa 1,412 - 8 1,404 New Zealand Fire Service Commission 914 8 119 795 New Zealand Lotteries Commission 158 1 133 25 New Zealand Transport Agency 35,393 967 1,445 33,948 Ötākaro Limited 348 148 226 122 Public Trust 510 451 459 51	District Health Boards	7,857	78	2,353	5,504
Corporation Museum of New Zealand Te Papa 1,412 - 8 1,404 New Zealand Fire Service Commission 914 8 119 795 New Zealand Lotteries Commission 158 1 133 25 New Zealand Transport Agency 35,393 967 1,445 33,948 Ōtākaro Limited 348 148 226 122 Public Trust 510 451 459 51	Earthquake Commission	1,147	-	1,917	-770
Te Papa New Zealand Fire Service Commission 914 8 119 795 New Zealand Lotteries Commission 158 1 133 25 New Zealand Transport Agency 35,393 967 1,445 33,948 Ötäkaro Limited 348 148 226 122 Public Trust 510 451 459 51		25,900	2,070	4,305	21,595
Commission New Zealand Lotteries Commission 158 1 133 25 New Zealand Transport Agency 35,393 967 1,445 33,948 Ōtākaro Limited 348 148 226 122 Public Trust 510 451 459 51		1,412	-	8	1,404
Commission New Zealand Transport Agency 35,393 967 1,445 33,948 Ōtākaro Limited 348 148 226 122 Public Trust 510 451 459 51		914	8	119	795
Ōtākaro Limited 348 148 226 122 Public Trust 510 451 459 51		158	1	133	25
Public Trust 510 451 459 51	New Zealand Transport Agency	35,393	967	1,445	33,948
	Ōtākaro Limited	348	148	226	122
Schools 3,274 177 875 2,399	Public Trust	510	451	459	51
	Schools	3,274	177	875	2,399

Central government commercial entities	Total Assets	Borrowing	Total Liabilities	Equity
Southern Response Earthquake Services	495	-	670	-175
Tāmaki Regeneration Limited	1,967	-	8	1,959
Tertiary Education Commission	680	27	554	126
TEIs	11,972	-	-	11,972
Television New Zealand	290	1	64	226
Other	1,484	75	491	993
Total Crown entities	135,180	4,148	55,163	80,017
Intra-segmental eliminations	-393	-66	-277	-116
Total Crown entities segment	134,787	4,082	54,886	79,901
SOEs and Crown Entitites combined	195,342	34,304	93,434	101,908

Source: The Treasury, Crown Financial Statements 2017

Statistics New Zealand valued the net capital stock owned by central government at 31 March 2017 at \$124.8 billion, with local government owning another \$79.6 billion. Central and local government combined owned 26% of the net capital stock in New Zealand. Within this it owned 11% of the market sector net capital stock and 94% of the (much smaller) non-market sector capital stock.

APPENDIX 2

New Zealand's Global Rankings

A2.1 Where New Zealand scores in the top 10 of the world

Ease of Doing Business Index – ranked 1st overall in the World Bank's 2018 report out of 190 countries; 1st in the sub-categories of Ease of Starting a Business, Registering Property, and Getting Credit; 2nd for strength of minority investors protection index; 3rd for ease of dealing with construction permits; and 9th for ease of paying taxes

Legatum Global Prosperity Index – Ranked 2nd most prosperous country in the world (2017)

Political freedom ratings – Political rights and civil liberties both rated 1 (the highest score available)

Press freedom – Ranked 8th for press freedom in 2018 out of 180 countries

Global Peace Index – 2nd in 2018 at 1.192

Corruption – Least corrupt of 180 countries in the Corruption Perceptions Index 2017

Economic Freedom – 3rd freest at 82.1 on the Heritage Foundation's Index of Economic Freedom 2018, and 3rd also at 8.48 on Fraser Institute's Economic Freedom of the World index

A2.2 Where New Zealand scores less well

The (Swiss) IMD Business School's 2018 World Competitiveness Ranking report (16th out of 63 countries).

GDP per capita – 34th highest (Heritage 2018, PPP basis), at US\$37,294

Income Equality – 25th most equal out of 34 OECD countries and a post-tax and transfer basis in the late 2000s (Gini Index)

Unemployment rate – 61st highest rate, at 5.2% (Heritage Foundation's 2018 database)

APPENDIX 3

Heritage Foundation's top five countries for economic freedom in 2018

Table 13: Top five countries for economic freedom (2018)

	Now Zooland	Australia	Hong Kong	Cingapaya	Curityouland
Background statistics	New Zealand	Australia	Hong Kong	Singapore	Switzerland
Population (millions)	4.75	24.28	7.37	5.61	8.33
·					
GDP per capita (PPP)	\$37,294	\$48,899	\$58,322	\$87,855	\$59,561
FDI inflow per capita	\$483	\$1,985	\$14,677	\$10,986	-\$3,163
Tax revenue (% of GDP)	32.8	27.8	13.9	13.6	27.9
Govt Spending (% of GDP)	41.0	36.0	18.0	17.7	34.0
Economic Freedom Scores (2018 report)					
2018 Overall Score	84.2	80.9	90.2	88.8	81.7
Property Rights	95.1	78.7	92.5	98.4	84.2
Judicial Effectiveness	88.4	93.4	84.3	90.9	82.1
Government Integrity	95.7	77.4	82.8	91.2	82.8
Tax Burden	70.5	63.0	93.1	90.4	70.5
Government Spending	49.5	61.2	90.2	90.6	65.4
Fiscal Health	98.3	84.3	100	80	95.9
Business Freedom	91.5	89.1	96.3	90.9	75.7
Labor Freedom	84.4	79.7	89.4	92.6	73.9
Monetary Freedom	90	87.4	84.3	85.2	85.2
Trade Freedom	87.4	86.2	90	90	90
Investment Freedom	80	80	90	85	85
Financial Freedom	80	90	90	80	90
Ranks for Economic Freedom (2018 Report,	187 countries)				
2018 Overall Rank	3	5	1	2	4
Property Rights	2	25	4	1	15
Judicial Effectiveness	4	2	7	3	13
Government Integrity	1	15	8	4	8
Tax Burden	136	158	16	27	136
Gov't Spending	139	112	18	13	104
Fiscal Health	14	71	1	89	29
Business Freedom	4	12	1	6	43
Labor Freedom	8	14	3	1	30

	New Zealand	Australia	Hong Kong	Singapore	Switzerland
Monetary Freedom	2	8	35	22	22
Trade Freedom	17	51	1	1	1
Investment Freedom	24	24	2	9	9
Financial Freedom	4	1	1	4	1

Source: Heritage Foundation database: 2018 Economic Freedom report

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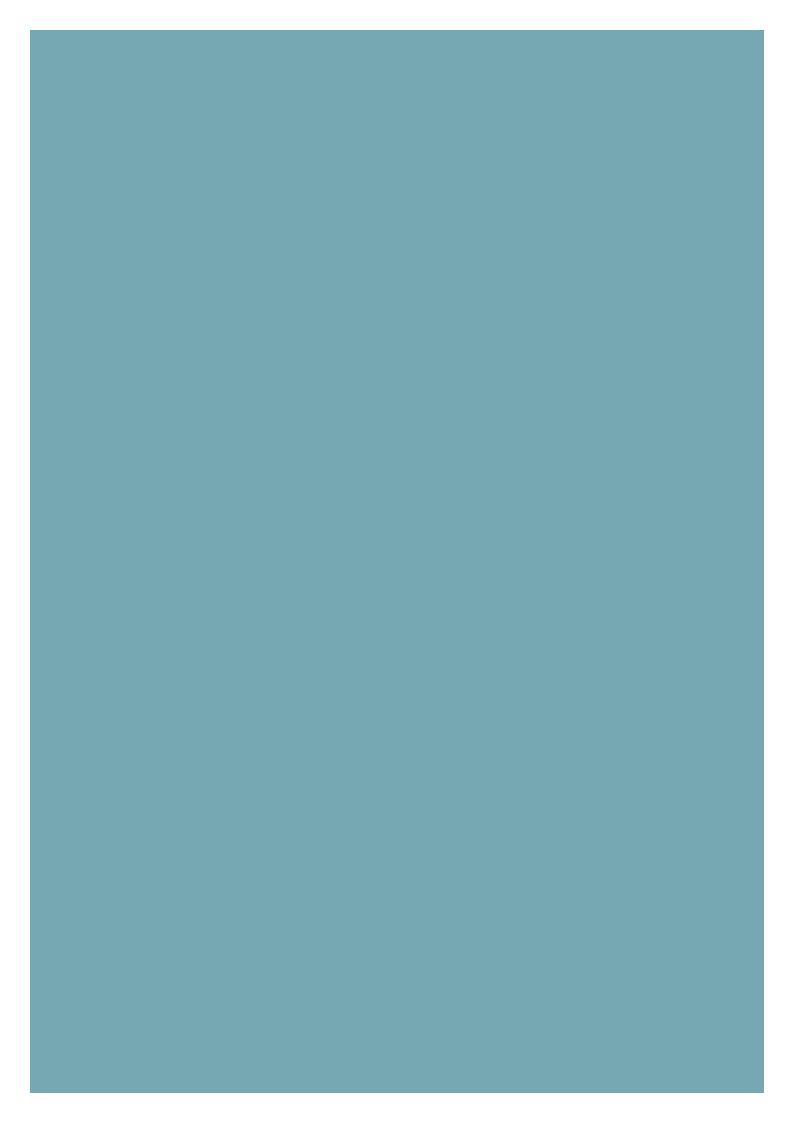
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New Zealanders have come to rely a great deal on government. The proportion of national income taken by taxes more than quadrupled in the 20th century and the number of Parliamentary Acts increased 50-fold.

We notably rely on it for health, education and welfare. We rely on it more broadly to allocate national income and other resources wisely. We rely on it to regulate well for safety, the environment and much else.

It is not doing a great job. Productivity is not a focus. On the evidence reviewed in this report, the State could be achieving much the same results using fewer resources, or a great deal more from unchanged resources. One international study indicated that of the order of one third of government spending is wasteful.

A pervasive symptom is an inadequate focus on outcomes relative to resources employed. For example, by age 15, the government will have spent over \$130,000 on the average pupil's schooling. Yet about 17% will have failed to achieve basic numeracy and literacy. Why should taxpayers and parents have to accept that outcome?

Much of the report delves into detailed international rankings to ascertain where New Zealand appears to be most lagging compared to the best performances. Around two dozen areas are identified.

One surprising and disappointing finding is that New Zealand ranks far below Australia for the quality of judicial processes. There seems to be no good reason or excuse for this result.

The message is not all gloom. New Zealand ranks very highly indeed on many important fronts. Yet there is endless daily pressure on the government to do more. Doing better where we are not doing well would be a good start.

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