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The Myth of the Shrinking State?

What does the data show about the size of the state in New Zealand, 1900–2015

As every student knows, the economic reforms of the fourth Labour government after 1984 reduced the size of the state. One of the elements of the government's programme of economic liberalisation was to exit from state trading activities by first corporatising and then privatising the activity. The trading activities in question ranged from telecommunications and banks to hotels, a printing business and a shipping line. In 1984 government spending was about 40% of GDP, and the government employed 31% of the workforce. As former Treasury secretary Graham Scott put it, a key objective of the reforms was 'to get the government out of activities it was inherently poor at managing and to improve those functions which remained the core responsibilities of government' (Scott, Ball and Dale, 1997). Successive National administrations have maintained the 'small state' rhetoric under the banner of fiscal prudence.

If shrinking the state was a core aim, then, one would expect to see the shrinkage in the data. But, as we show in this article,[1] the truth of the matter is more complicated. If you are expecting to find a shrinking state, and you look in the right place, you can just discern it, but in many ways the state is no smaller now than it was in 1984, when New Zealand's 'quiet revolution' began (James, 1986). It all depends on where you choose to look and what you look for.

In this article we present the data using a variety of lenses – the state as taxer,

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spender, producer, employer, investor and steward – to assess how the size and shape of the state has changed. We would have liked to be able to present data on the state's role as a regulator, but no comprehensive time series are available.[2] We focus on historical trends in New Zealand, as international comparisons are already available with the OECD's, *Government at a Glance,* and David Rea's 2009 article in *Policy Quarterly*. Almost all the data and graphs used in this article are available on a public website, https:data1850.nz.

Getting and spending

To begin, we will consider the government's role as taxer and spender. How have various ratios of tax revenue and public expenditure to GDP varied over time? The size of government expenditures, E, and its revenues, R, are perhaps the most commonly cited indicators of government size. E and R are typically presented as ratios to GDP. This is a useful measure of size, but it is misleading in one respect: such ratios are not *shares* of GDP. That is, they do not represent the government's share of total real or nominal resources in the economy. The E/GDP ratio is not bounded by 0 and 1, because E, the numerator, includes transfer payments that are not included in GDP. Likewise, tax revenues, a component of R, are transfers from taxpayers to the state, and also not a component of GDP.

With that in mind, then, what does the data tell us? Figures 1A and 1B show the ratio of central government expenditure to GDP from 1876 to 2015 and from 1972 to 2015 respectively. These data show central government spending, which comprises the government's use of real

Figure 1A: Central government as spender (as percentage of GDP) 1876–2015

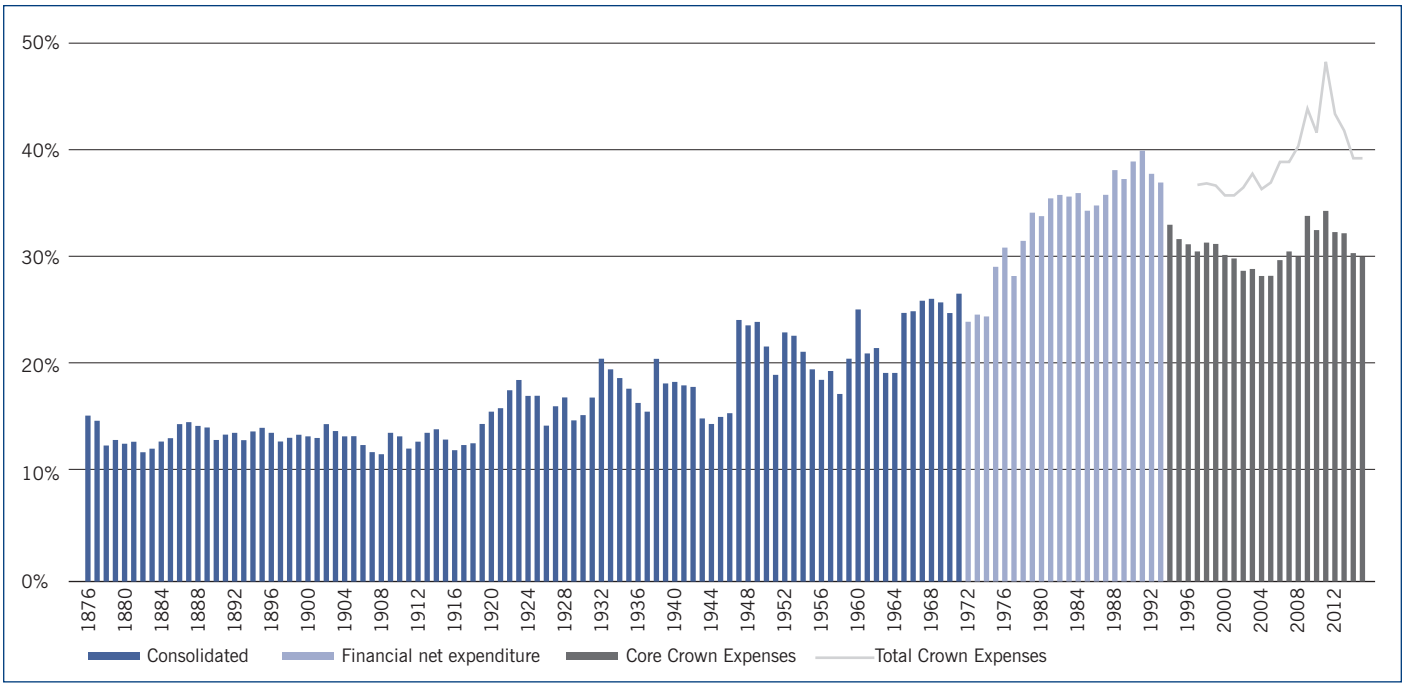


Figure 1B: Central government as spender (as percentage of GDP) 1972–2015

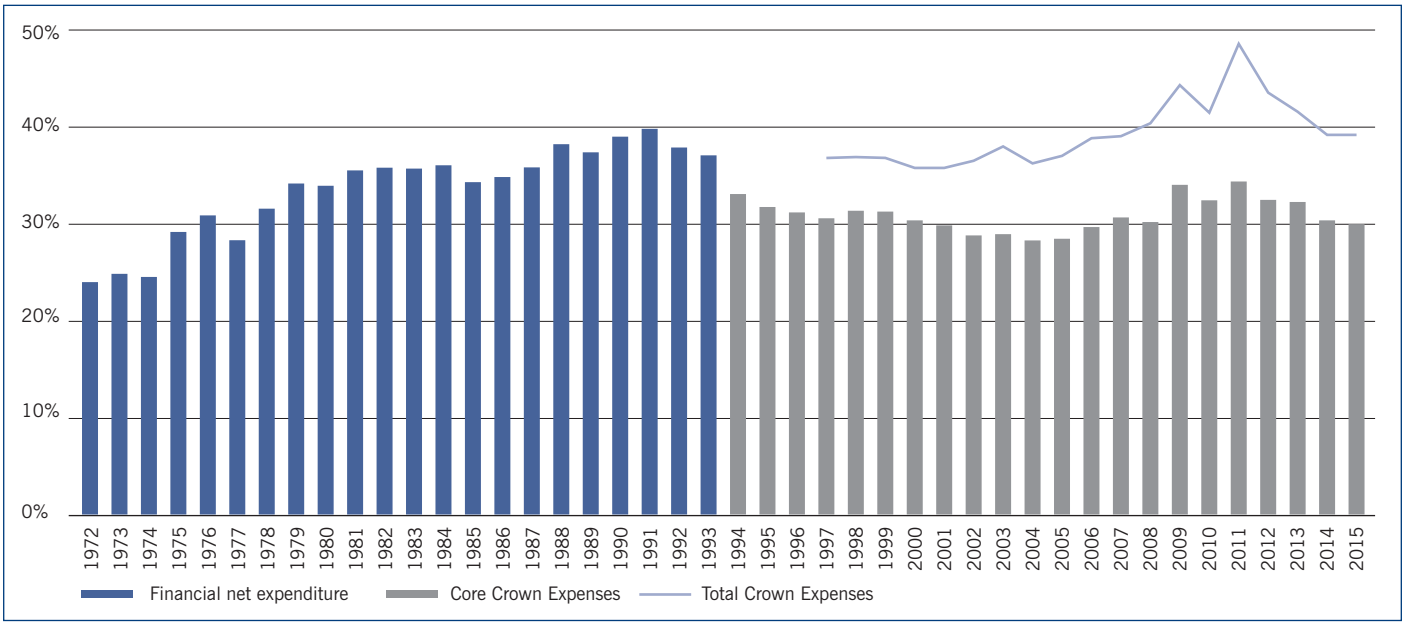


Figure 1C: Components of government spending (as percentage of GDP) 1972-2015

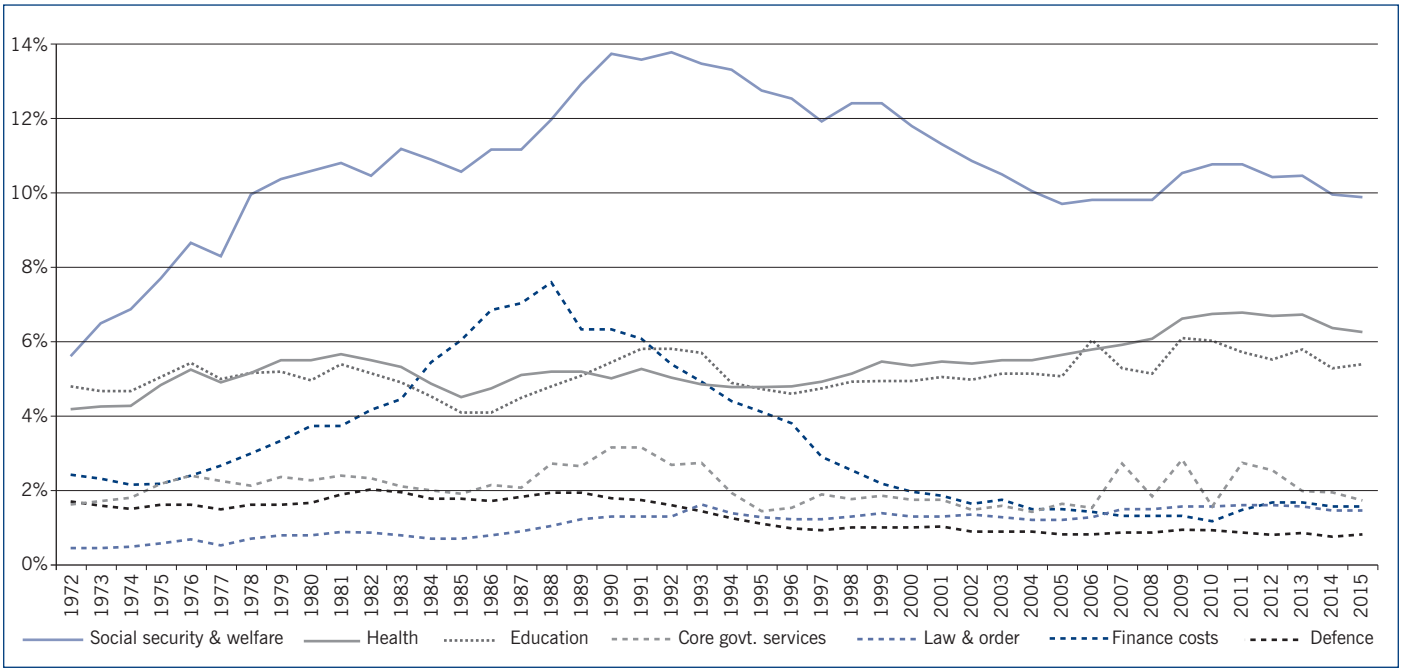
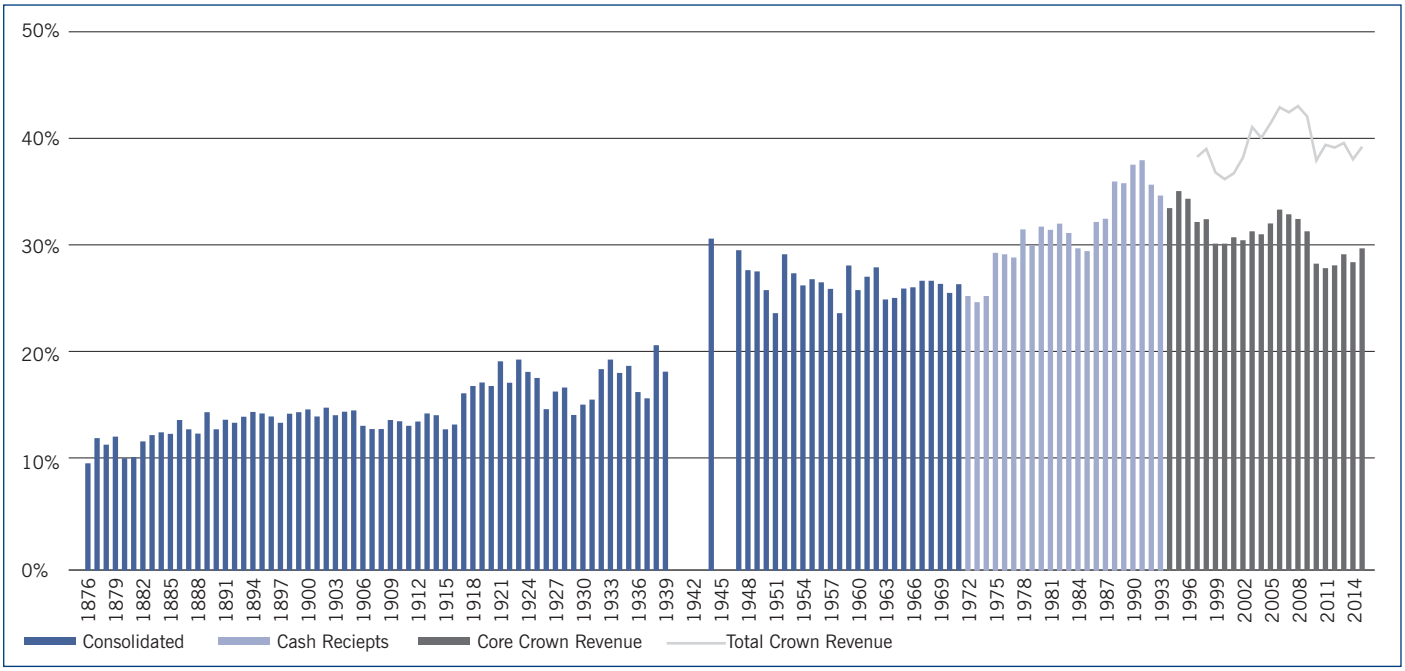


Figure 2A: Central government as taxer (as percentage of GDP) 1876-2015



resources along with subsidies, transfer payments, debt servicing and other expenditures.[3] We observe that overall government expenditure stayed constant at around 15% from 1876 to 1947, with higher values during the Great Depression of the 1920s and 1930s and during the Second World War. Expenditure ticked upwards to 24% in 1948,[4] marking the start of a general expansion that was to last until 1990, when it reached 39% of GDP. Spending trended downwards after the 'mother of all budgets' of 1991 and has stayed around 30% ever since, apart from recent upticks in response to the global financial crisis and the Canterbury earthquakes. But despite these shocks, so close together, expenditure stayed below 35% of GDP, and is now back down to 30%.

Case proved, perhaps? Not when we look harder at what the government has been spending on. It is apparent from Figure 1C that most of the big-ticket items have stayed remarkably constant or even increased since 1972. Health spending has grown steadily, from just over 4% of GDP in 1972 to just over 6% in 2015, and law and order has seen even steeper growth. Spending on early, school and tertiary education has also grown over the same period, though it has fallen back from its high point of just over 6% in 2010. But what of core government services? Here spending has been more volatile, but nonetheless it is a fraction higher in 2015 than it was in 1972. The two items that initially rose and have subsequently fallen over the period are social security and welfare. Social welfare spending rose by 4% of GDP in the 1970s, associated with the introduction of New Zealand

Figure 2b: Components of government taxation (as percentage of total revenue), 1903-2015

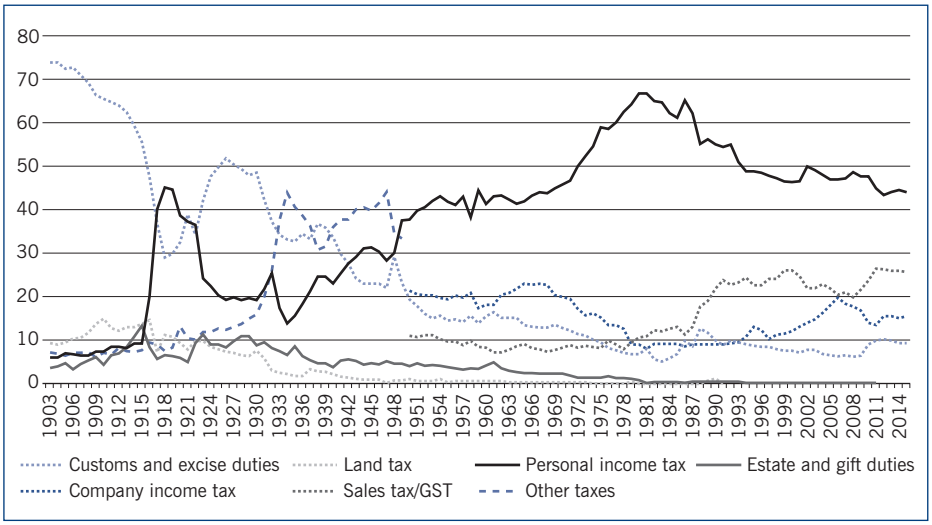


Figure 3a: General government production (as percentage of GDP), 1972-2013

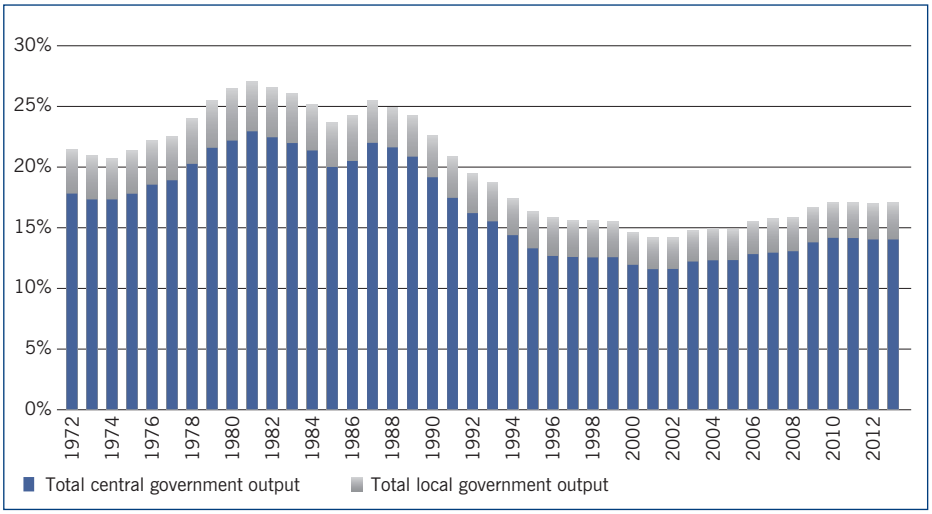
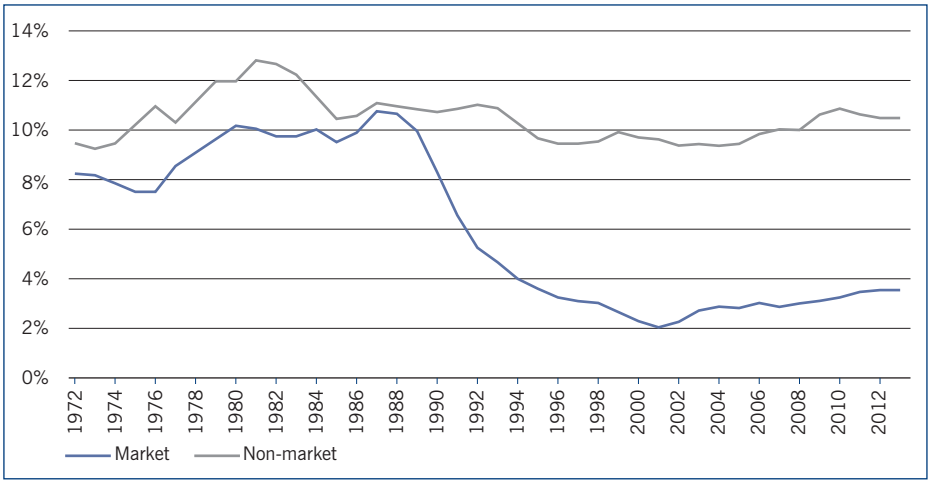


Fig. 3b: Central government market & non-market production (as percentage of GDP) 1972-2013



Superannuation (NZS), and further increased in the 1980s with the growth in numbers on benefits, to reach nearly 14% of GDP in the late 1980s; it has fallen since to 10% with the increase in the age of eligibility for NZS. Debt servicing costs, which exploded to nearly 8% in 1988, were brought below 2% by 2000, where they have stayed ever since.

What of the outlook for expenditure? The Treasury projects the growth in health spending to continue and even accelerate, thanks to the ageing population (Treasury, 2013). So, at least from this source, one could expect the state to expand in the coming decades.

What about government revenue? The story about tax broadly mirrors the spending story, with tax revenues pretty flat from 1876 to 1916, at 10–15%, rising to 15–20% in the decades before the Second World War. The data for 1940–45 are unreliable or missing, but, as Figure 2A shows, the wartime tax rate of around 30% persisted in the post-war decades. By the early 1970s it was down to 25%. Central government taxation rose steadily from then on, peaking at nearly 40% of GDP in 1990, before falling back to the long-term average of 30%. Was the global financial crisis the cause of the dip below 30% around 2010? Perhaps, but the 2010 tax reforms are also part of the story. The global financial crisis can be seen in the minor decrease in 2009, indicating that it had only a minor initial impact on New Zealand. By contrast, local government rates have been relatively stable at around 2% of GDP over the whole period since 1993.

But looking at total tax as a percentage of GDP obscures the big changes in tax composition since 1900. Governments collect taxes for different purposes: to pay for public services, to promote income or wealth distribution, and to encourage or discourage certain activities. Customs and excise revenue accounted for the lion's share of tax revenue at the beginning of the 20th century, with land and estate taxes making up the balance. Personal income tax took over from customs and excise revenue during the First World War, before falling back for another 30 years; since 1950 it has been the principal source of tax revenue, peaking at 67% in 1980, but staying under 50% since the early 1990s. Sales tax, introduced in 1951, accounted for around 10% of the total until October 1986, when GST was brought in. GST was much broader based than the sales tax it replaced, and now accounts for around 25% of the tax take, so the proportion coming from income tax has fallen steadily since 1987. Company tax was introduced in 1951. It has never amounted to more than 25% of the total, and is currently around 15%. In 2011 the company tax rate was reduced to 28%, the top personal income tax

rate was reduced to 33% and GST was increased to 15%.

Producing, consuming and investing

Another useful way to look at the size of the state is to consider its other roles. The state is both a producer and a consumer, an investor and also an employer. When thinking about how big the state is, it is instructive to look at these functions too. Aside from employment, they can all be measured as a percentage of GDP, in order to reveal the long-term trends.

Government production is made up of two components, market and non-market. Market production is the value added by government-owned organisations which sell their output, such as coal or electricity. (Value added is the difference between the sales revenue and the cost of production, such as labour, raw materials and capital depreciation.) Non-market production refers to the services produced by the government (such as defence, law and order, or regulations) that consume real inputs (labour, raw materials and capital depreciation) but for which there is no market price and no arm's-length sales transaction for the outputs. (Note that total government spending, as described above, includes transfer payments such as pensions and benefits; government production *excludes* transfers. That also means that the ratio of government output to total output, GDP, is bounded by 0 and 1.)

The data on general government production from 1972 to 2013 do show a shrinking state. As Figure 3A shows, government production of all kinds (central and local, market and non-market) peaked in 1982 at 27% of GDP, and fell steadily from 1988 to 2002, rising a little over the next decade but staying well under 20%. Disaggregating the data into central government market and non-market production reveals just where the shrinkage came from. The changes were in market production (Figure 3B). In 1972 it was a shade over 8%, and it peaked in 1987 at just under 11%; thereafter the range of privatisations by successive administrations meant that, by 2000, market production had fallen to as low as 2%.

Figure 4: Government final consumption expenditure (as percentage of GDP) 1972–2015

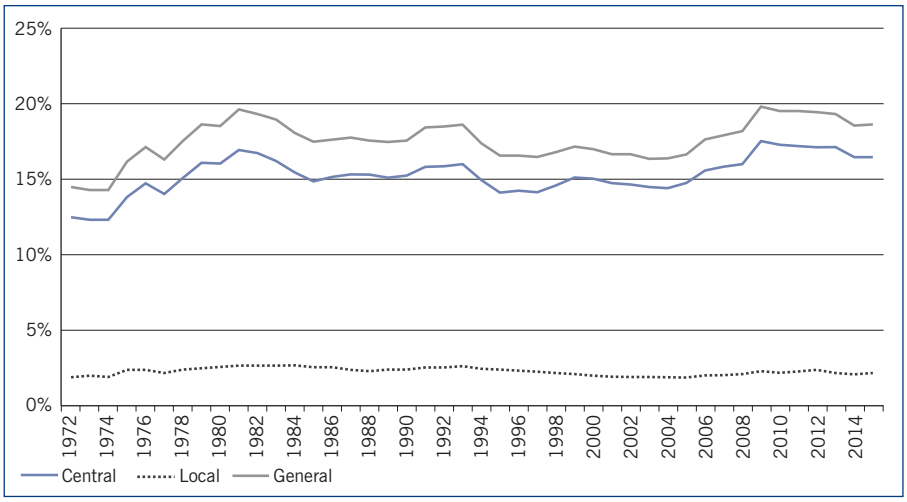


Figure 5A: Government as an investor (GFCF as percentage of GDP) 1972–2015

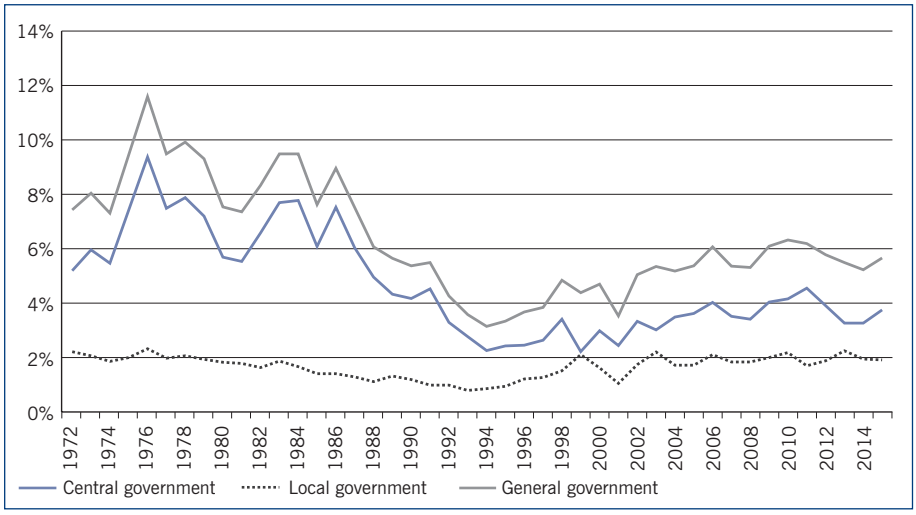
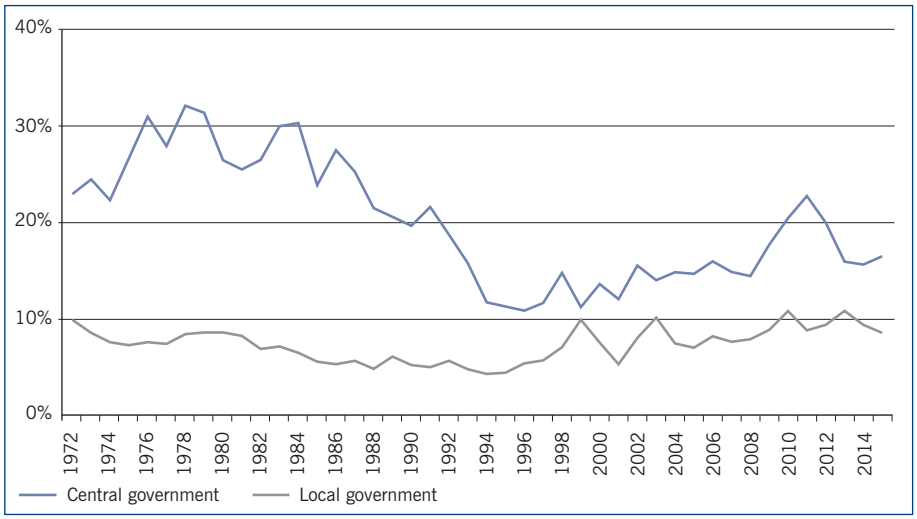


Figure 5B: Government GFCF (as percentage of total GFCF) 1972–2015

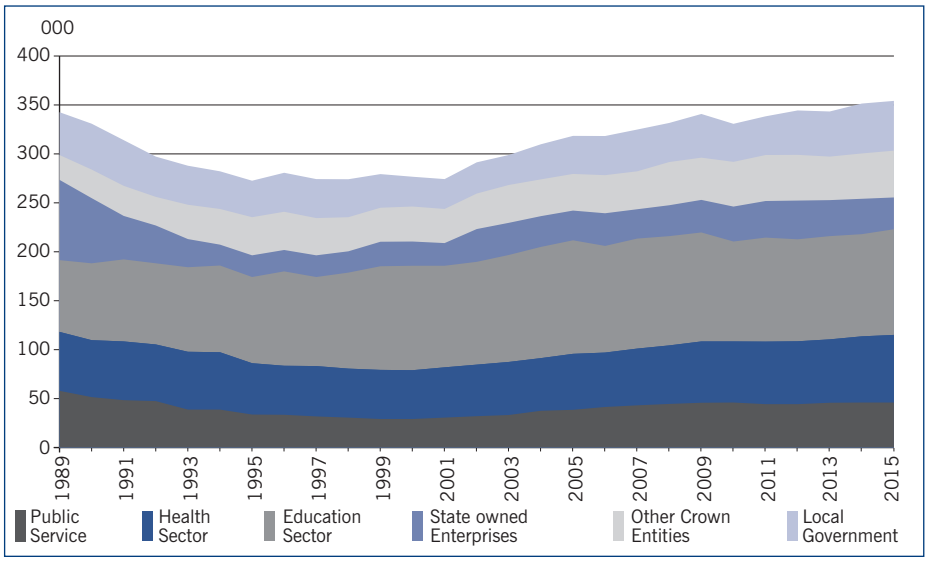


Interestingly, non-market production has come down as well, but with different inflexion points. It peaked earlier, easing back from 1981 to 1985 and again from 1993 to 1997. But overall the fall in government production is attributable to the wave of privatisations from 1987 to 1999, begun under Labour and continued under National. A similar pattern can be seen in local government production, which, although modest in size compared with central government, peaked in 1980 and has fallen pretty consistently ever since.

Table 1: Public sector employment change (as percentage of start year), 1989–2015

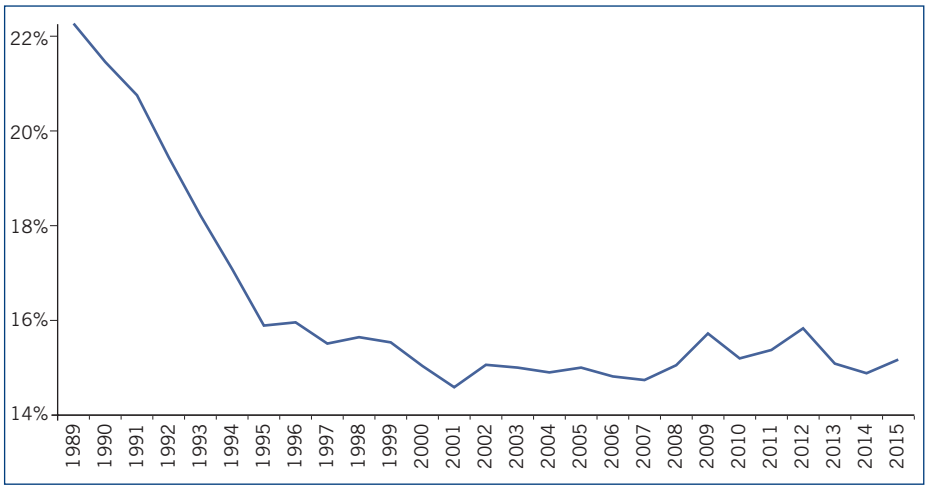
	Public service	*Health sector*	*Education sector*	*State-owned enterprises*	*Other Crown entities*	*Local government*	*Public sector*
1989–2015	80%	115%	149%	40%	185%	115%	103%
1989–2001	60%	87%	133%	36%	117%	67%	83%
2001–2015	150%	134%	104%	140%	137%	164%	129%

Figure 6: Government as an employer by category type (FTE), 1989–2015



Source: State Services Commission and Statistics New Zealand

Figure 7: Government as an employer (as percentage of total employment) 1989–20015



Source: State Services Commission and Statistics New Zealand

Case closed? Perhaps not. The consumption figures tell a different story.

Government final consumption refers to the non-market services that the government produces (such as law and order, defence, regulations) that consume real inputs (labour, materials, capital depreciation) in order to produce non-market outputs. 'Consumption' means the consumption of real resources, less any fees or charges, so it excludes transfer payments and capital spending. In New Zealand, central government spending on consumption is much larger than that by local government, which has stayed flat since 1972. As Figure 4 shows, central government consumption had fallen to 15% *before* the reforms of the 1980s took effect. It rose markedly in 2008, with a minor reduction since.

So what of government investment? Investment or gross fixed capital formation (GFCF) measures all investment in physical fixed capital assets (including new investment replacing worn out or depreciated capital stock). The results are interesting (Figure 5A). Once again, total government GFCF peaked (at 12% of GDP) in 1975, fell sharply from 1987, and bottomed out in 1994, then growing modestly to 5.5% by 2014. Local government's share of the total has stayed about 2% for the whole period; all the changes have been in central government investment.

Another way of looking at investment is to compare it, not with GDP but with private sector investment – that is, total gross fixed capital formation – for the same period. Central government investment fell from 1988 to a low of a little over 10% of total GFCF in 1996, but rose to around 15% through the 2000s, with a sharp rise from 2009 to 2013, peaking at more than 20% in 2011. This would appear to be the product of two quite short-term effects: a fall in private sector investment after the global financial crisis, and a rise in central government investment related to the Canterbury earthquakes.

The government as employer

What do the employment figures tell us about the size of the state? The employment data set covers a shorter period than the other time series, because comparable data are only available from 1989.

In absolute numbers, total public sector employment declined from 1989 to 2001, recovered slightly under Labour to 2007, and finished very slightly higher (103%) in 2015 than in 1989. But these are gross figures. As Table 1 shows, education (49%) and health (15%) employment have grown during the period, and Crown entities have almost doubled in size (85% higher), while the core public service has indeed shrunk, to 80% of the 1989 figure. Local government has expanded from 31,000 employees in 2001 to 51,000 in 2015.

The breakdown by category for the period 1989–2015 is shown in Figure 6, using QES data supplied by the State Services Commission. While public sector employment has grown overall, so has the overall labour force. Figure 7, which shows public sector employment as a percentage of total employment, illustrates a dramatic fall, thanks to strong job growth in the private sector. The government employed more than one in five people in 1989, but the proportion

fell dramatically over the next five years, and is today less than 15%.

The government as fiscal steward

Finally, what about the government's role as a fiscal steward? 'Stewardship' is the management of the government's overall fiscal position, including the Crown balance sheet. This is an important consideration, because focusing solely on taxes paid and current government services produced ignores whether the services are funded from taxes or debt and whether the government is building or depleting its stock of assets.

Over the last 40 years the Crown's net debt and net worth positions have fluctuated markedly.[5] As Figure 8 shows, the central government net debt/GDP ratio went through three distinct phases. There was a rapid deterioration in net debt after the mid-1970s, when the growth in tax revenue was insufficient to match the rapid growth in pension spending, other benefit spending and debt servicing. There was a steady improvement after 1991, with growing fiscal surpluses, GDP and population growth all reducing the ratio of net debt to GDP. After 2008, the global financial crisis and the earthquakes of 2010 and 2011 pushed the government's finances back into a temporary deficit.

Table 2 shows the changes since the first Crown balance sheet was produced in 1992. What is notable is the rapid growth in the stock of fixed investments and the value of financial assets, such as the Cullen Fund, and with the full funding of ACC.

Governments can shift resources between generations by running primary fiscal surpluses which can then be used to bequeath future generations lower debt, a stock of financial assets (such as the Cullen Fund), or an increased stock of fixed assets. In essence, what the analysis of the Crown's balance sheet shows are massive indirect transfers between generations through the change in the Crown's fiscal balance and net worth.

Figure 8: Government as borrower – Crown net debt (as percentage of GDP), 1972–2015

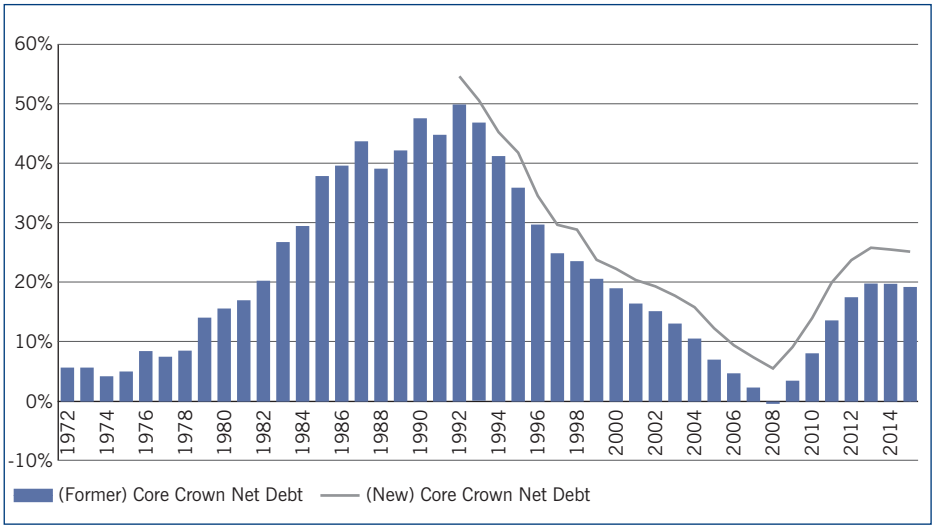
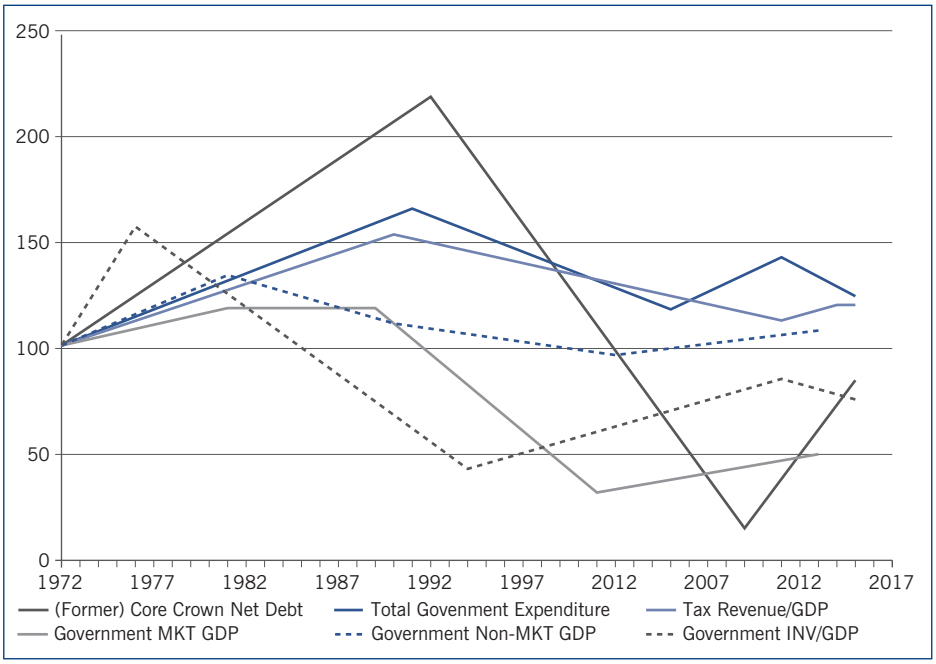


Table 2: Crown balance sheet – selected assets and liabilities

($billion)	*1993/94*	*2002/03*	*2012/13*	*2015/16 (forecast)*
Financial assets	8	16.5	44.0	45.2
Fixed assets	21	52.7	110.0	117.3
Total assets	54	100	244.4	260.5
Gross debt	30.9	38.2	100	110
Net worth	(5.6)	23.8	70	83
Net worth (% GDP)	-3.8%	17%	32%	33%

Note: 1993/94 data is not strictly comparable with subsequent years shown in the table due an accounting change in the way Crown entities and state-owned enterprises were consolidated in the Crown accounts.

Figure 9: The shape of the state 1972-2015



Plus ça change, plus c'est la même chose

In conclusion, then, there is clear evidence that the state's role as a producer of market outputs has shrunk since the 1980s and with that its role as employer, but for a range of other measures the state's relative role has stayed the same. The overall Crown balance sheet shows the greatest variation, with a rapid deterioration until 1991/92 and then strengthening remarkably thereafter. Which measures should you focus on? It all depends on which question you want to answer, and hence what lens you look through. Most of the data series show that various downward trends began just before the reforms came into effect in 1988, or soon afterwards. Furthermore, the relative size and role of the state have remained pretty stable over many decades. The exception is the state's role in market production and investment, which was greatly reduced by the privatisations in the 1980s and 1990s.

Figure 9 summarises – in stylised form – changes in the main lenses that varied over the post-1972 period, picking out the key turning points but removing other fluctuations. The figure also anchors all of the indices at 100 in 1972 so that relative changes in each can readily be compared. It serves to highlight our conclusion that the lens you focus on will influence the conclusion that you draw.[6]

Despite the rhetoric, there is little sign in the data of the hollowing out or shrinking of the state, though some changes following the 1980s reforms have persisted. Instead, we see in the data some signs of a 'quiet revolution' in the significant changes in the *shape* of the state.

1 A more detailed technical paper which documents the data sources and methods used is available at www.nzpublicfinance.co.nz. The authors are grateful for the research assistance provided by Loc Nguyen with the graphs and data in this paper.

2 The time series that are available on the size of the regulatory state in New Zealand have only partial coverage. The OECD product market regulation indices cover three decades, but the coverage is limited to the services sectors (transport utilities, etc.): http://www.oecd-ilibrary.org/content/workingpaper/362886816127. There is survey data that can be used to estimate the costs businesses face complying with the government's regulatory requirements. No data has been collected on the administrative costs incurred by government.

3 Comparable linked data is not available on spending by local authorities, but local government is included in the discussion of taxing, investing, producing and stewardship in this article. Almost all the data and graphs used in this article are available on a public website, https:data1850.nz. The data in Figures 1A and 1B amalgamate several data series: the 'consolidated series' of central government expenditure from Statistics New Zealand's long-term data series (1876–1972); expenditure on a 'net financial' basis (1972–93); and for 'Crown expenses' (1994–2015). The 1994–2015 series is shown for both 'core' and 'total' Crown; the latter also includes arm's-length public bodies such as Crown entities and state-owned enterprises.

4 See the discussion by Matthew Gibbons (Gibbons, 2015) about the concerns with the quality of the consolidated fiscal series before 1972 which suggests that peacetime central government expenditure was higher in the 1930s, 1940s and 1950s.

5 Local government, by contrast, has experienced very small swings, as discussed by Nicholls and Gill (2012).

6 If you are interested to learn more about the trends, a more detailed technical paper is available at www.nzpublicfinance.co.nz. To check out the trends yourself by graphing and exploring the data using the different lenses in this paper, go to https://data1850.nz/

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