

Government expenditure in New Zealand since 1935: A preliminary re-assessment

By Matthew Gibbons, Masters student in the Economics Department at the University of Waikato

mgibbons@students.waikato.ac.nz or mlgibbons86@hotmail.com

Draft paper for New Zealand Association of Economists Conference, July 2015

Abstract

This paper draws together the best available data, largely from published but overlooked sources, to produce a more accurate depiction of New Zealand central government expenditure since 1935. Most publications, including an important economic history text (Briggs, 2003, 110), and a *Policy Quarterly* article (Rea, 2009, 58-67) use a “consolidated” expenditure series for the period before 1972 that is hosted, albeit with strong disclaimers, on Statistics New Zealand’s website, and is part of an excel file that was compiled by university students working at Treasury. This dataset has also been cited, sometimes without disclaimers, in reports. However, more comprehensive and consistent expenditure series that have been published for most years since 1935 show that New Zealand peacetime central government expenditure was higher in the 1930s, 1940s and 1950s than the consolidated series suggests, and has grown much less over time than is sometimes thought. This paper discusses why the alternative data is more accurate and consistent, and considers what the data, which can be disaggregated by function, shows about changes in the role of the state in New Zealand. As well as enabling comparisons with changes in government expenditure in other countries, the paper considers how we should treat electronic datasets and the need to robustly test the accuracy of data using primary sources such as the *AJHR* and *Yearbooks*, rather than accepting statistics uncritically.

Disclaimer and acknowledgement

This is a work in progress based on the author’s PhD thesis on election manifestos (Politics Department, University of Waikato, 2000). Government expenditure is an extremely complex topic, and the paper and data has not been subject to review. There are undoubtedly many limitations to the results. When the author first collected the data he was receiving a University of Waikato PhD scholarship.

Introduction

Debate over the optimal size of government has long been a central political issue in New Zealand, and was a key motivation for many of the economic reforms of the 1980s and early 1990s (Douglas & Callan, 1987, pp. 15, 81-85; Richardson, 1995, pp. 60,79). However, no long-term government expenditure series for New Zealand has official standing. As a result, New Zealand is often a missing case in comparative studies that include government expenditure (Castles, 1998), and discussion of total government expenditure is absent from key economic history texts. Although government expenditure data is available since 1972 on the New Zealand Treasury's website (New Zealand Treasury, 2015), the most widely used data for before 1972 is a "consolidated" long-term data series, currently hosted on Statistics New Zealand's website, which uses data from a number of sources and carries strong disclaimers.

This paper draws together alternative data, primarily from published official sources, to show that better quality data is often available through collating data from different printed sources. This paper discusses why the alternative printed data is more accurate and consistent, and considers what the data, which often can be disaggregated by function, shows about changes in the role of the state in New Zealand.

Section one of this paper outlines how government expenditure can be defined, and other ways in which governments affect people's behaviour and purchasing power. Section two then outlines the best available expenditure series, while section three examines changes in government expenditure over time. Section four discusses how New Zealand's tax expenditures statement omits some tax breaks considered tax expenditures in other countries, and how difficult it can be to make international comparisons of government expenditure. Section five then explains the weaknesses of New Zealand's most widely used expenditure dataset, and considers why this series has been used despite its weaknesses.

1. Defining government expenditure

Government expenditure can be measured in a number of ways but is often defined as economic activity that is in some way subject to public expenditure budgetary or management processes. Governments can directly provide goods and services, and fund their provision. Some types of government expenditure, however, such as payments to pensioners, primarily involve people buying

private goods and services of their choice, rather than economic activity taking place in the public sector (Wanna, Kelly, & Forster, 2000, pp. 7-8). Indeed, transfers and interest expenditure are not part of GDP, which is the value added of all producers in the economy. Nevertheless, it is common practice by many economists, but not by statisticians, to report government expenditure over long time periods as a percentage of GDP (Gemmell, 1993, pp. 2-3, 6-8; New Zealand Planning Council, 1979, p. 33). This practice has been continued in this report.

As noted, GDP is the market value of all final goods and services produced within a country in a given time period. GDP therefore excludes intermediate consumption, and instead measures value added by firms to goods and services in the economy (Briggs, 2007, p. 34). It excludes home production of goods and services and the level of environmental degradation, but does include imputed income on owner occupied housing (Fiorramonti, 2013, pp. 12-15, 56, 110). Treasury's Living Standards framework recognised that there are a broad range of material and non-material determinants of living standards that go well beyond GDP (Gleisner, Llewellyn-Fowler, & McAlister, 2011). Although GDP has been part of New Zealand's National Income and Expenditure series since 1938/39, earlier GDP statistics have been estimated by economic historians.

As well as directly purchasing good and services and paying transfers, which is the focus of this paper, governments can also affect people's behaviour, the distribution of income, and economic outcomes through taxes, regulations, procurement policies, asset sales, and by expenditure mandates (Hofferbert & Budge, 1996, p. 26). Some countries, such as Australia, Singapore and the United States have particularly large mandated expenditure programmes. For example, in Australia employers and employees are required to make compulsory contributions to pensions schemes, while accident cover is through employer funded insurance. There is also a growing literature on tax expenditures, which are loopholes or breaks, such as deductions, preferential tax rates, deferrals or complete exclusion of some types of income from the tax system (Howard, 1997, p. 4; OECD, 2010, p. 13). Using tax breaks can be politically advantageous when there is pressure to reduce reported government expenditure, because many people do not consider these concessions to constitute government expenditure. Recipients also often escape the conditionality and are subject to less scrutiny than those receiving appropriated government expenditure. Relatively little data on tax expenditures exists for New Zealand, although a brief tax expenditures statement was first included in the 1984 budget (New Zealand Treasury, 1984, pp. 20-30). Since 2010 Treasury has produced an annual tax expenditures statement, although by international standards this remains very short and excludes some tax arrangements that would be considered tax expenditures in other countries.

2. New Zealand expenditure data

2.1 State Expenditure Account (Treasury, 1935-1938)

During the 1920s New Zealand governments increasingly put the Crown's accounts on "commercial lines" (Forbes, 1931, p. 10) that followed contemporary scientific management thinking, and separately identified, sometimes in minute detail, the costs of different activities (Ashwin, 1935). From 1930 a consolidated state Balance Sheet of assets and liabilities was published by Treasury, and from 1935 Treasury added an accrual State Income and Expenditure Account. By bringing together expenditure from all departmental accounts, the State Expenditure Account provided the first official whole of government expenditure data. Although this account excluded the purchase of fixed assets, it included capital charges on such assets (New Zealand Treasury, 1935, p. 88).

The State Expenditure Account series was published for just four years, and was never resumed after being "discontinued until after the conclusion of the war" (Statistics Department, 1941, p. 494). Indeed, after the Second World War there was a further decrease in the resources committed to reporting and auditing departments' finances using commercial practices, and detailing the costs of their individual activities.

2.2 National Accounts (Statistics Department, refined by Planning Council, 1939, 1944, 1950-1979)

For 1939 and 1944, however, there are "preliminary estimates" of government expenditure, calculated on the new United Nations and government favoured National Accounts functional basis, by the Statistics Department (Statistics Department, 1950, p. 604). From 1947, this series became permanent, and was continued on a consistent basis for total expenditure and for key types of expenditure until 1979. Although expenditure by government departments was on a cash basis, trading departments, such as the post office, operated on an accrual basis. This series was net, and included capital formation by state trading enterprises (New Zealand Planning Council, 1979, p. 8).

Because it took a National Accounts approach, the Statistics Department reported the cost of government provided goods and services separately from cash transfers such as pensions, benefits and interest on the national debt (Statistics Department, 1953, p. 595). However, when data from this series since 1950 was published in a 1979 New Zealand Planning Council document, central government expenditure included current expenditure on goods and services (public consumption), gross capital formation (public investment) and transfers and other current expenditure such as

interest and subsidies, while hospital board expenditure was also reclassified as central government expenditure for the entire time period (New Zealand Planning Council, 1979, pp. 8, 26-27). This practice has been followed by this paper.

2.3 Financial Net Expenditure (Treasury, 1963-1972 (retrofit) and 1973-1994)

By the late 1950s Treasury was seeking to improve reporting of government expenditure by creating a new summary budget table showing income and expenditure by function. Although Treasury's proposed new Table 2 was not approved in 1962 by Harry Lake, who was Minister of Finance, in 1967 Robert Muldoon, who had just become Minister of Finance following Lake's death, was considerably more receptive (McKinlay, 1983). After further refinement, Treasury included a ten-year retrospective functional table of government expenditure in the 1973 budget that included eight broad categories of expenditure and 18 more detailed categories (New Zealand Treasury, 1973). This series was often referred to as Table 2, although increasingly it was not Table 2 in the budget. Treasury continued its financial net expenditure series until 1994, and data from 1972 to 1993, with a slight downward adjustment downwards in early years and a substantial upward adjustment from the late 1980s to allow for net lending less repayments, is published on Treasury's website (New Zealand Treasury, 2015). However, Treasury's archives indicate staff were calculating net lending before 1972. Using the only readily identifiable series on net lending for New Zealand before then, which was printed in an IMF publication, this series has been included in section 3 of this paper since 1963. Although the financial net expenditure classification was not based on an internationally recognised framework, Treasury staff sometimes sought to isolate the differences compared to statistics reported to international organisations such as the IMF (McKinlay, 1983).

The financial net expenditure series was based on government appropriations, after allowing for departmental receipts (Shand, 1979, p. 353), and included the Consolidated Fund, the Loans Account, and the National Roads Fund (Preston, 1980, pp. 41-42). Net expenditure was a financing concept, which showed the level of funds that needed to be raised by taxes and borrowing (Shand, 1979, p. 354). Although cash-based, some departments sought to spread capital purchases across years (Preston, 1980, pp. 57, 61), while in the 1950s and 1960s governments transferred money into war accounts to fund military expenditure events for which the final costs were uncertain.

For his PhD thesis Matthew Gibbons worked out how some of the functional categories (law and order, defence, foreign affairs, education, social services, and health) were calculated for the 1960s, and extended them back to 1950. He has subsequently extended back land use and transport, but not all

functional areas.¹ However, total government expenditure in this series is often almost identical to total expenditure in the Statistics Department's National Accounts series, although expenditure was often categorised by Treasury and the Statistics Department in different ways, and a reconciliation was made in 1981 (Tan, 1981). Splicing these two series together provides information on changes in total government expenditure since 1947 (and also for 1939 and 1944), although not for all functional areas for the entire period.

Nevertheless, there are some changes to financial net expenditure over time. Although some of these changes are difficult to quantify, the 1986 budget noted that changes from 1987 would increase net expenditure by approximately 4.3% of total expenditure, "without adding to the government's claim on total resources" (New Zealand Treasury, 1986, p. 33). These changes include categorising Family Support tax rebates as expenditure, adding GST onto expenditure by government departments, not reducing Trade and Industry expenditure by the amount of revenue from import licensing, and for equity and efficiency reasons grossing up most remaining untaxed benefits and making them subject to income taxation (New Zealand Treasury, 1986, p. 33). Budgets also often revised statistics from past years.

2.4 Core Crown Expenses (Treasury, 1994-) and Total Crown Expenses (Treasury, 1997-)

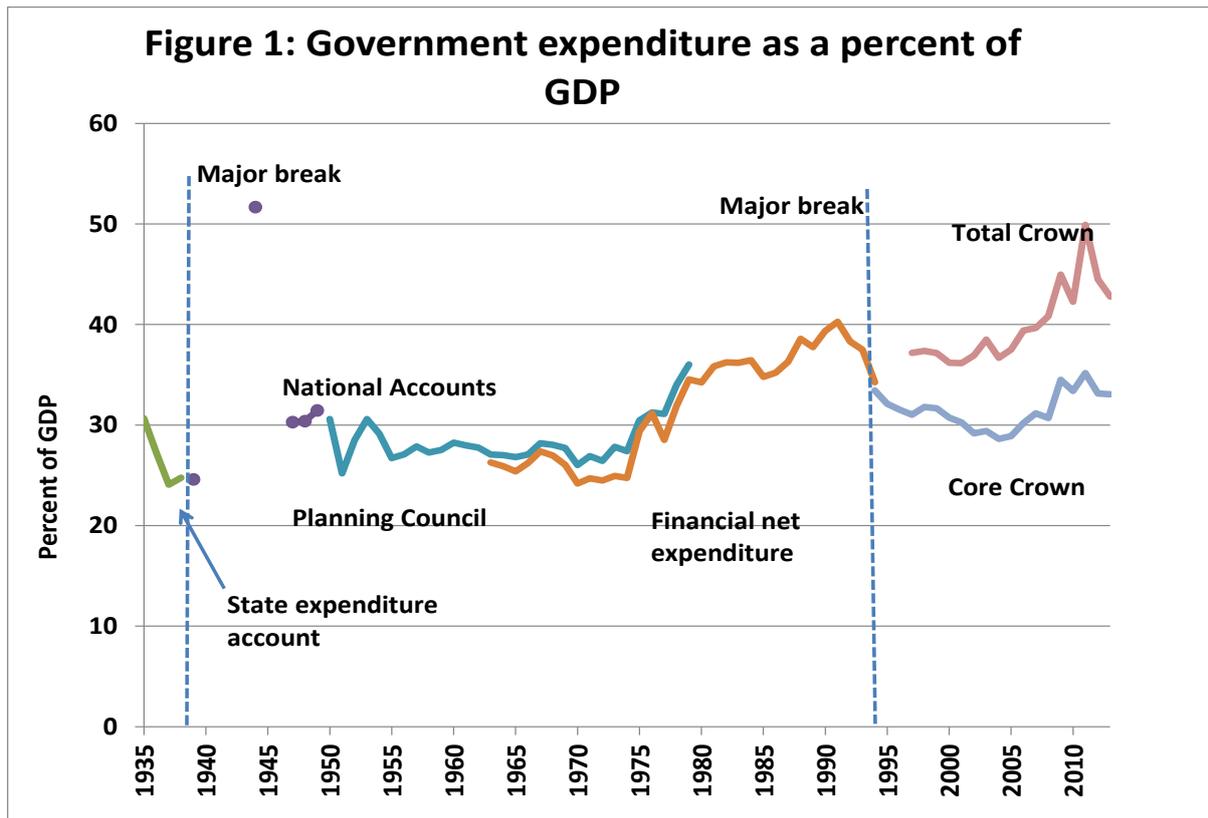
The 1994 Budget was the first prepared under New Zealand Generally Agreed Accounting Practice (GAAP) and switched from a predominantly cash based expenditure system to an accrual system. Capital expenditure by governments departments was no longer included, but depreciation on physical assets was included. Furthermore, whereas since 1939 functional classifications had shown net expenditure, Core Crown expenditure was on a gross basis. In addition, the functional classification used changed to Classification of Functions of Government (COFOG) used by the International Monetary Fund, while GAAP expenses included the Reserve Bank (New Zealand Treasury, 1994, pp. 170-175). Another change was that whereas between 1987 and 1993 GST was included in appropriations, since 1994 GST has been excluded from departmental and non-departmental output classes. These changes created a "fundamental break" in the fiscal time series (New Zealand Treasury, 1994, pp. 33, 75; 2008, p. 7). Treasury nevertheless published a reconciliation between the operating balance (GAAP) and the previous financial balance, but not for individual expenditure areas.

¹ Sometimes over 20 columns of numbers are needed to reproduce the net expenditure statistics. If anyone can provide further information on how the 1973 retrofit was done I'd be very grateful.

From 1997 government expenditure has been reported using International Financial Reporting Standards. However, by subtracting net foreign exchange gains and losses from the 1994-1996 data it is possible to control for the major change (New Zealand Treasury, 2008). Furthermore, from 1997 statistics for Total Crown Expenses, which include all expenses of Crown entities and State Owned Enterprises, thus including both commercially operated businesses and social service providers such as ACC and the Housing Corporation, have also been reported.

3. Analysing government expenditure in New Zealand

The State Expenditure Account provides the first four years of data in Figure 1, with the first year of data preceding the election of New Zealand's first Labour government in late 1935. The State Expenditure Account shows government expenditure subsequently falling between 1935 and 1938 as a proportion of GDP. This largely reflects a buoyant economy – in nominal terms and real terms there had been a considerable increase in government expenditure by 1938. Furthermore, the First Labour Government used savings on relief payments, which had grown very quickly during the Great Depression to become New Zealand's biggest welfare programme, to fund considerable expansion of other social services (Gibbons, 2001, pp. 5-6). Because total revenue and expenditure from commercial enterprises was included, the series has some conceptual similarities to Treasury's Total Crown series that has been published since 1997, although there are probably also considerable differences.



The National Accounts data show government expenditure declined from a peak in 1944, when New Zealand’s war effort was greatest, although it was still higher than the 1939 pre-war level. Nevertheless, government expenditure was slightly lower in the 1960s under National than it had been under Labour in the late 1940s. Internationally this was unusual (Castles, 1998, p. 100), and may in part reflect National preferring tax expenditures rather than direct expenditure on particular groups to advance its policy goals. For instance, National made private health insurance tax deductible, reduced taxes on land and on selected consumer and producer goods purchased by voters it was targeting, and used the tax system to encourage particular types of investment (Goldsmith, 2008, p. 236).

During the second half of the 1970s there was a considerable increase in appropriated New Zealand government expenditure as a proportion of GDP, with government expenditure increasing from 25% of GDP in 1974 to 34% in 1980. This fuelled debate over whether public sector overload was occurring (New Zealand Planning Council, 1979; Pope, 1978). Government expenditure peaked at 38% of GDP in 1991, before beginning a period of decline. Core Crown expenditure fell from 34.4% of GDP in 1994 to 29.5% of GDP in 2004, before slowly increasing to a peak of 35.1% in 2011. Since then it has decreased to 31.2% in 2014. In Figure 1, Total Crown expenditure has also been included as a proportion of GDP, although some of this expenditure is not a component of GDP, and other

expenditure is transfers that individuals personally spend. Indeed, the government sector probably accounts for between a fifth and a quarter of the economy (Easton, 2007).

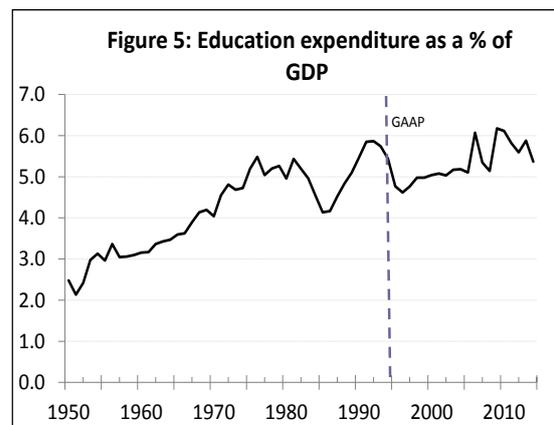
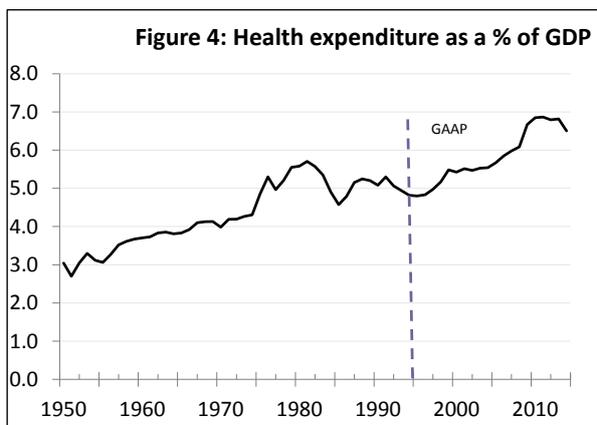
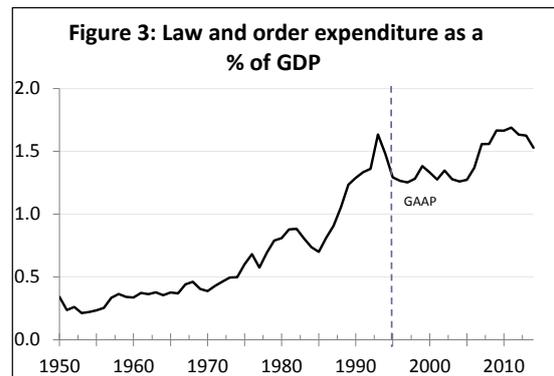
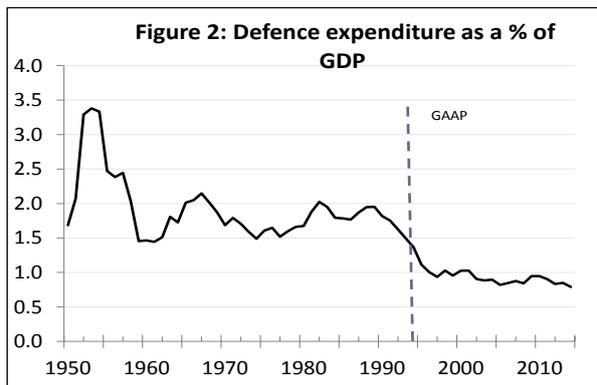
For the period since 1950 a functional breakdown of many areas of government expenditure is available, with the pre-1963 data having been created for the author's PhD thesis, and this provides valuable insights (Figures 2-11) into trends in different types of government expenditure. The results show defence expenditure trending downwards after a peak during the Korean War. However, law and order expenditure has sharply increased, reversing the trend for the first half of the century (Gibbons, 2001), as reported crime rates and concern about crime have increased. Although generally there is a strong statistical relationship between political parties' manifesto emphases on different topics and subsequent government expenditure trends, this relationship is particularly strong for law and order (Gibbons, 2000, p. 289). Health and education expenditure have both increased, although in both these areas evidence of the retrenchment instigated by the Muldoon government during the early 1980s can be seen.²

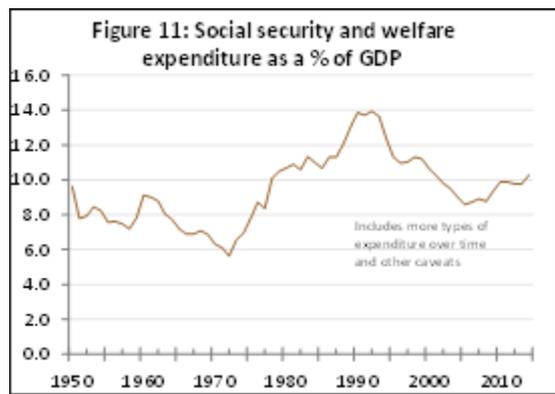
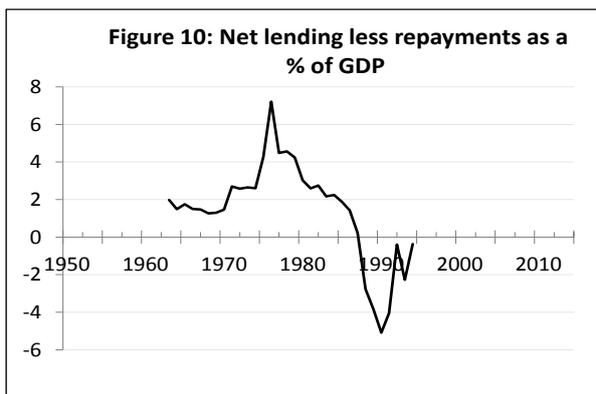
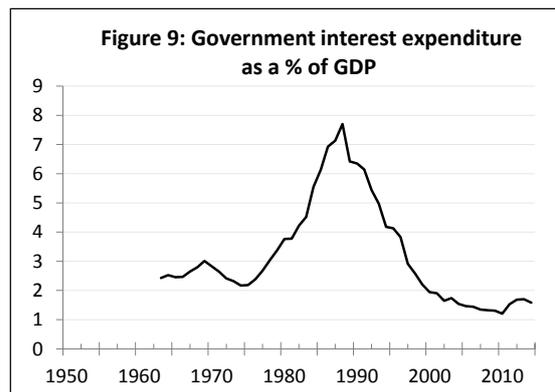
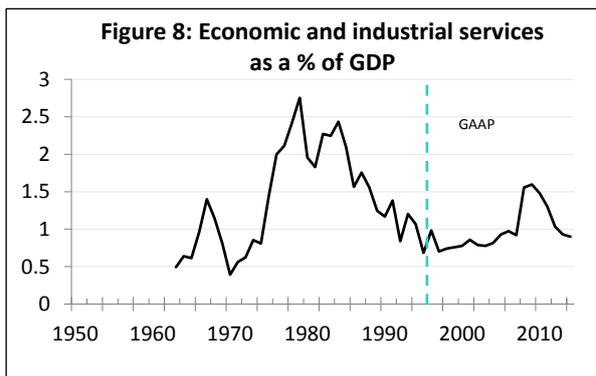
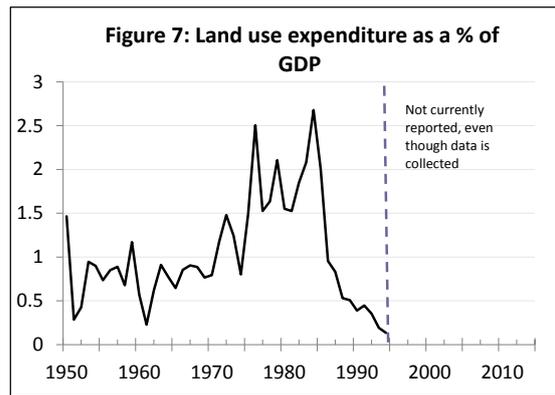
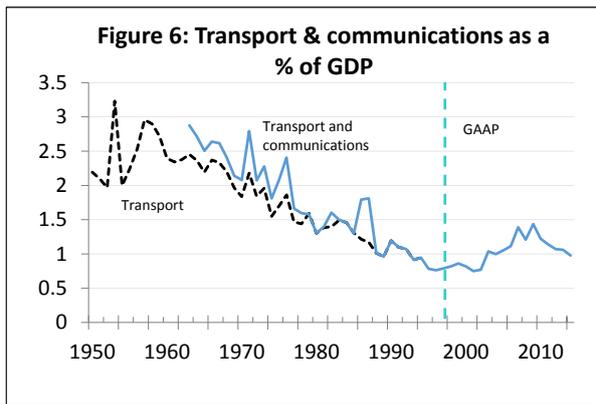
Transport and communications expenditure has trended downwards since the late 1950s, and there has been no expenditure appropriated as communications since the late 1980s. There was a sharp increase in expenditure on both land use and on other industrial services and energy by the third National government, which was then reversed after 1984 by the third Labour government (Rudd, 1991, p. 155). For instance, appropriated land use expenditure was 2.7% of GDP in 1984 compared to less than 1% during the 1960s and most of the 1950s. In addition, economic and industrial services expenditure was often a percent of GDP higher in the early 1980s than during the 1960s. This indicates Muldoon was much more willing to directly support the private sector during a sustained economic downturn when he was Prime Minister and Minister of Finance (1975-1984) in the third National government than during the low economic growth period when he was Minister of Finance (1967-1972) for the second National government. Payments for past major industrial projects and for producer board refinancing were significant contributors to government expenditure between 1987 and 1990, with these costs peaking at 5.8% of GDP in 1987, although in accordance with accepted practice these have been excluded from total government expenditure and are not graphed here. The data shows government expenditure to support the business sector has substantially increased since 1997, although not to the levels of the early 1980s. Although the COFOG accounting framework New Zealand currently uses includes a code for Primary Services, Treasury unfortunately does not report specifically expenditure on this category. However, government irrigation subsidies have increased

² Caution is needed for health because in the early 1950s Hospital Boards were still receiving some funding from local property taxes. It would be desirable to check that this funding was channeled through the central government before placing too much reliance on this statistic.

under the current government, despite Treasury querying their economic worth (New Zealand Treasury, 2010).

The New Zealand government's interest costs (Figure 9) increased sharply from 2.2% of GDP in 1975 to 7.7% in 1988. However, some of these interest payments were to compensate for the effect of inflation reducing the value of borrowed money, although the government's debt also increased in real terms. The government's interest costs have since fallen as assets have been sold, nominal interest rates have declined, and there have been periods of fiscal surpluses. Since Treasury subtracted net lending (Figure 10) from government expenditure, this reduced total government expenditure up to 1988, and increased net expenditure substantially thereafter. The late 1980s and early 1990s are also a period when expert judgements about the treatment of net lending less repayments have a particularly large effect on total government expenditure (Rudd, 1991, p. 147), and some of the expert judgements could in future be examined in more depth.

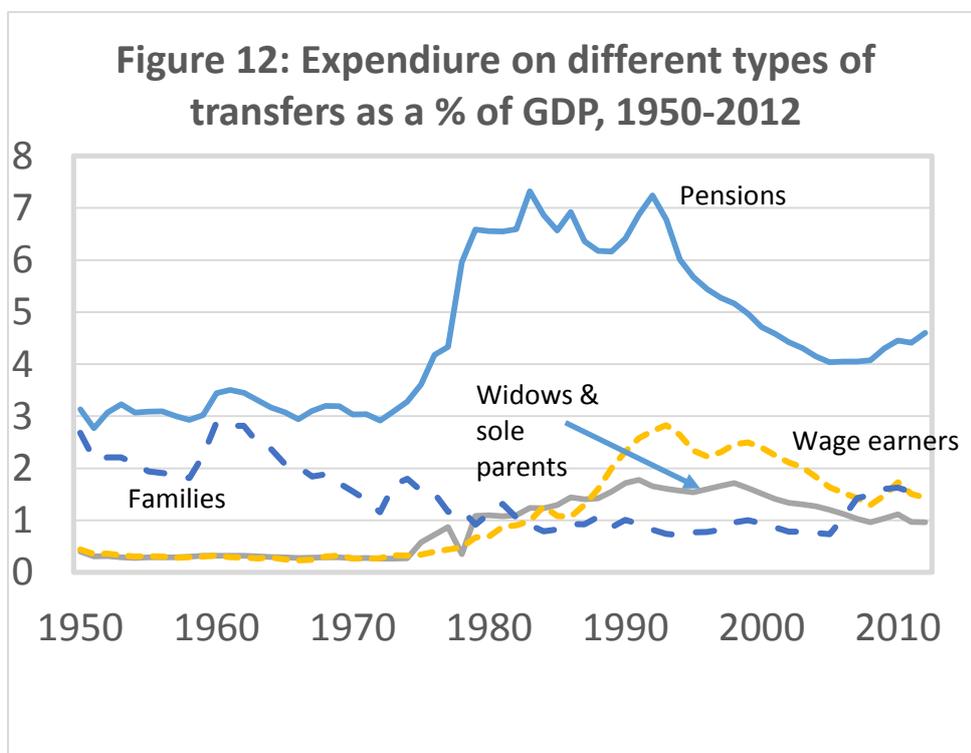




From the mid-1970s there was also considerable growth in expenditure on social security and welfare. Figure 12 shows changes in transfers expenditure on pensions, wage earners, widows and sole parents, and family support.³ The results indicate that the increase in government expenditure during

³ Pensions expenditure includes the old age pension and superannuation, but not pensions for civil servants. Wage earners benefits are the unemployment, sickness and invalid benefits. Widows and sole parents includes the DPB and orphans' benefits. Family support includes the Family Benefit and since the 1980s appropriated expenditure on Family Care, Family Support, Working for Families and, more recently, Paid Parental Leave. Accident insurance is excluded because it is not part of Core Crown expenditure, while expenditure on housing and on veterans' pensions has been excluded due to definitional changes. More work on the data would obviously be desirable. The source is the LTDS plus supplementary data from the AJHR and SNZ's Infoshare. The LTDS gets most of the data from the Yearbooks and repeats the double counting of expenditure in the

the 1970s was partly due to higher social welfare expenditure, particularly on making superannuation more generous. Indeed, as has been discussed by David Preston, superannuation expenditure increased from about 3% of GDP in the early 1970s to almost 7% by 1980, and accounted for almost half of the 9% increase in government expenditure as a proportion of GDP over this period. However, Figures 11 and 12 do not show how some of the cost of ending means testing for those aged between 60 and 65 and of more generous benefit rates was partly clawed back by making a formerly means tested pension subject to income taxation (Preston, 2008, p. 14) at a time when marginal tax rates for high income earners were high. Due to an increase in the age of eligibility and demographic changes, superannuation spending is now considerably lower than in the early 1990s, but is still higher than before the mid-1970s.



During the 1970s and 1980s expenditure on benefits for single parents also increased due to growing numbers of domestic purposes benefit recipients. In addition, payments to wage earners also steadily increased during the 1970s and 1980s, particularly after 1986, due to increasing unemployment, and peaked at 2.8% of GDP in 1994. In contrast to the other expenditure areas, family support payments have declined over time, after peaking at 2.6% of GDP in 1961, and were 1.4% of GDP in 2012. Indeed, the universal Family Benefit was abolished in 1991 in favour of more targeted assistance, with 89% of

Yearbook in the late 1980s that results from including accommodation subsidies to beneficiaries both in the main benefit payments and as a separate total based on a weekly sample. Compare the social welfare sections in the 1982 *Yearbook* and the 1988/89 *Yearbook* for an example.

Working for Families expenditure in 2010 going to families in the bottom half of the income distribution when household income is equalised for family size (Aziz, Gibbons, Ball, & Gorman, 2012, p. 33).

More expenditure on families has become appropriated over time, with the decision in 1973 to increase Family Benefit but abolish a long-standing tax exemption for families with children increasing appropriated family support expenditure, as can be seen in Figure 12, without significantly changing the distribution of income (New Zealand Planning Council, 1979, p. 10). During the 1980s tax credits specifically for low income families, which had grown since the late 1970s, also became appropriated expenditure. Then during the 1990s formerly unquantified income related rent subsidies to state housing tenants became funded, first in 1991 through an expanded accommodation supplement, and then after 1999 by the re-introduction of income related rents for those with incomes below the rate of New Zealand superannuation. Furthermore, although the net fiscal expenditure series allocated contributory pensions for retired government employees to functional expenditure areas, under COFOG similar expenditure has been allocated to the welfare and social security classification. Although Figure 11 shows social security and welfare expenditure being slightly above the levels of the early 1950s, adding on consumer subsidies on perceived necessities would considerably increase expenditure, particularly during the 1950s, but also during the 1960s and some years in the 1970s (New Zealand Planning Council, 1979, pp. 27-30; Rose, 2014, p. 12).

4. Tax expenditures and international comparisons

International comparisons of levels of government expenditure are difficult, partly because some countries make heavy use of tax expenditures and mandatory private sector expenditures to achieve policy goals instead of direct government expenditure (OECD, 2011, p. 64). Tax incentives and breaks are often popular with voters because they are seen as tax cuts rather than increases in expenditure and there is less oversight of them. They also tend to benefit higher income earners most (Burman, Geissler, & Toder, 2008; Faricy, 2011). For instance, tax expenditures for education, housing, and healthcare are equivalent to one-fifth of appropriated government expenditure in Australia, and amount to almost half the level of appropriated welfare state expenditure in the United States (Howard, 1997, pp. 18, 27; Stebbing & Spies-Butcher, 2010, pp. 593-595, 597). While tax expenditures usually benefit middle and high income households most, in the United States the Earned Income Tax Credit, which is aimed at low income families with dependent children, is also an estimated tax expenditure rather than appropriated expenditure. In Australia there has been a political consensus

on keeping reported government expenditure low, with a Liberal government passing Australia's Charter of Budget Honesty Act (1998) at the same time it was keeping GST revenue out of the central government's accounts (Wanna et al., 2000, p. 282). Differences in welfare spending also tend to shrink when the decision by the United States and Australia to not tax most cash transfers and to keep sales tax off perceived necessities and merit goods is taken into account (Howard, 2007, pp. 14-16D). A further complication is that national data from different levels of government has to be merged and adjusted for international expenditure comparisons, and this process can be complex and involve considerable judgements by the person making the adjustments (Cook, Schousboe, & Law, 2011, p. 20)

In New Zealand since the mid-1980s there has been an emphasis on appropriating more tax expenditures on social services, and on making these payments more targeted, time-limited and conditional, while having a broad based tax system with lower marginal tax rates on higher income earners than in the past. The New Zealand Treasury first published a tax expenditures statement in the 1984 budget, which listed, and where possible quantified, 112 tax concessions and tax expenditures (New Zealand Treasury, 1984, pp. 20-30). As a "first step" to improving its financial reporting Treasury reintroduced a short tax expenditures statement that quantified nine tax expenditures statement in 2010. The biggest items were for charitable donations (\$235 million) and the independent earner credit (\$212 million) introduced in 2009 for middle income workers who do not receive tax credits or cash benefits and missed out on the reduction in the top income tax rate. However, Treasury's brief 13 page report noted that work on identifying appropriate benchmarks for tax expenditures remained on-going, making its list incomplete (New Zealand Treasury, 2014, p. 3).

Indeed, the New Zealand tax system has features not reported in its tax expenditure statement that in other countries are counted as tax expenditures. For instance, interest tax exemptions on residential property are recorded as a tax expenditure in the United States (Howard, 1997, pp. 21-22), but the reduction in tax revenue from losses on residential property rentals is not recorded as a tax expenditure in New Zealand. Current tax arrangements for rental properties in New Zealand enable providers to build retirement wealth, while allowing some groups to rent accommodation at a lower cost than if these concessions did not exist (Coleman, 2009), and are sometimes justified on this basis (King, 2014) . However, a disadvantage of not recording or monitoring these expenditures is that providers do not face the contestability and the requirement to efficiently provide quality services, with annual improvements in the quality and quantity of services provided, that occurs for other social service providers. For instance, the interest expense deduction is available for all landlords,

irrespective of whether or not they are providing new accommodation services, when potentially this deduction could be restricted to newly built housing of a required density.

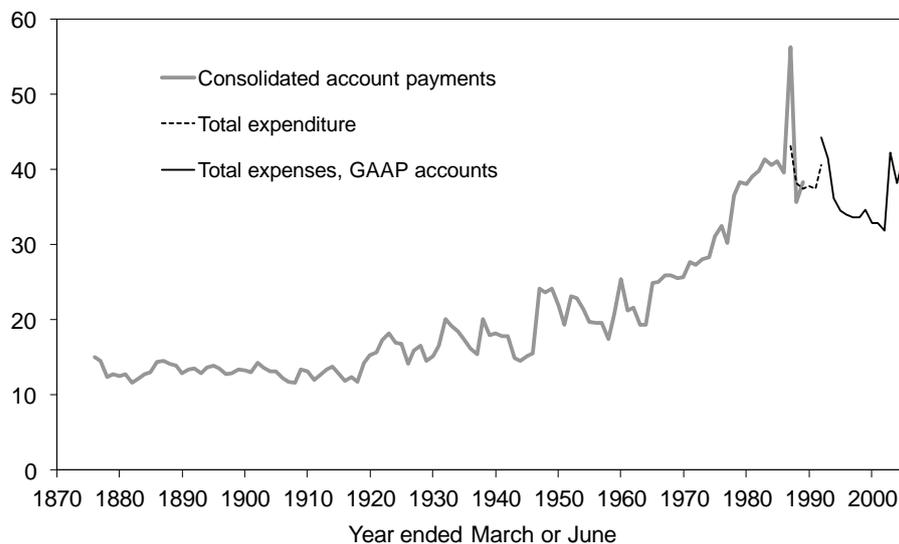
Similarly, the ability by farmers to lower their tax liability by averaging their income over a number of years is not in New Zealand's tax expenditure statement. However, the resulting loss of revenue from the corresponding Australian tax break, which also applies to artists, is quantified (The Australian Government the Treasury, 2014, p. 66). Furthermore, the loss of revenue from not taxing capital gains on owner-occupied housing has been quantified and routinely reported in Australia (Stebbing & Spies-Butcher, 2010, p. 593). In addition, the decision to exclude all imputed income on this housing from income taxes has long been noted and criticised for encouraging overinvestment in housing in Australia (Jones, 1980, p. 178; Stebbing & Spies-Butcher, 2010, p. 593). It has also been suggested these sources of income should be taxed in New Zealand so that taxes on other forms of savings can be reduced, and to increase investment in other economic activities (Financial Services Council, 2013, pp. 5, 22). Indeed, the OECD has called for New Zealand to implement a capital gains tax across a range of capital-income assets to make its tax system more efficient and equitable (OECD, 2013, pp. 3, 22). Political pressures have also prevented employee car parking privileges being subject to fringe benefit tax in New Zealand (Shuttleworth, 2013), even though this could help reduce congestion and travel times. In addition, the activities of some charities are not taxed, even when they primarily benefit higher income earners (Krupp, 2015). It is therefore important to consider not just the level of recorded government expenditure, but also unrecorded tax breaks for various groups and activities, and regulatory policies in areas such as housing (Cook et al., 2011, p. 22).

5. Alternative data sets

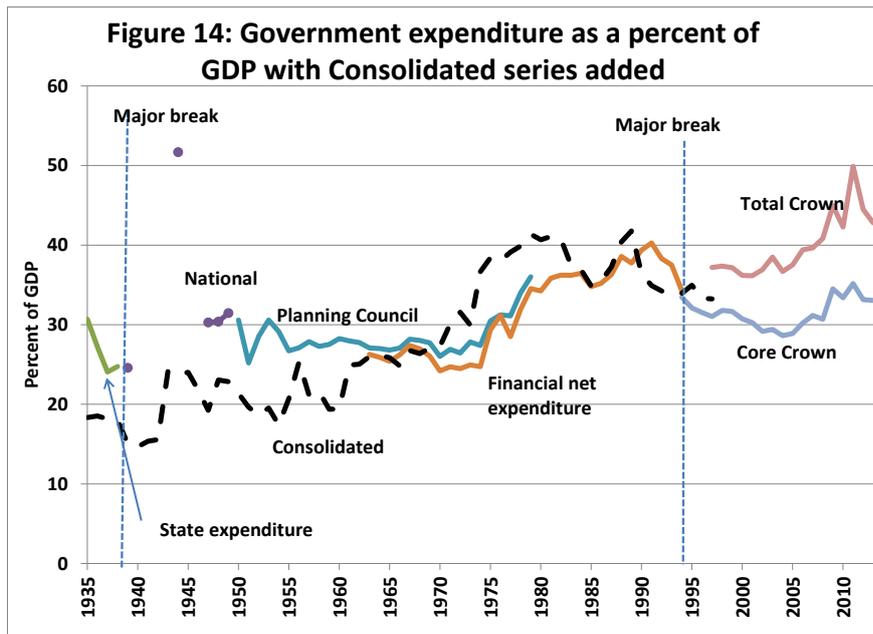
The data used in this paper predominantly comes from consolidated functional expenditure series published in official sources, although the author has also managed to extend expenditure series for some functional areas. The government departments producing the series considered this data to be the best available, although they were also aware of its limitations and changes in how expenditure was recorded over time. This data was used by the author in his PhD. However, the most-used long-term government expenditure graph for New Zealand is based on Consolidated Account expenditure and is shown in Figure 13. Slightly different versions of this graph have appeared in a number of sources including NZIER economic history texts (Briggs, 2007, p. 128), briefly in an article in *Policy Quarterly* that focussed on contemporary government expenditure (but using the best quality 1972-1993 data) (Rea, 2009), and in a report by the Productivity Taskforce (2025 Taskforce, 2009, p. 82) that

preceded the creation of the Productivity Commission. However, a Treasury report on governments and economic growth partly used data collected and created by the author of this paper for a graph of government expenditure since the 1910s (Cook et al., 2011, p. 27). Treasury’s fiscal updates have sometimes included graphs since the 1950s for particular functional expenditure areas, in the process using data from the current author’s PhD thesis (New Zealand Treasury, 2006, pp. 57, 74, 95. 96), but have not included graphs of total government expenditure for long periods of time. Indeed, Treasury’s most recent fiscal update only graphs government expenditure since 2000 (New Zealand Treasury, 2013, p. 21).

Figure 13: Government expenditure as a percentage of GDP since 1870 in NZIER’s *Looking at the numbers*



Overlapping the series reveals considerable differences (Figure 14). In particular, the Consolidated Accounts payment series shows continual growth in government expenditure between the early 1950s and the early 1980s, whereas National Expenditure and Financial Net Expenditure series show no increase until the mid-1970s.



These differences partly occur because the Consolidated series has absorbed other government accounts over time (Committee on the simplification of the public accounts, 1962). In particular, in 1964 the Consolidated Fund, Social Security Fund and the (relatively unimportant) Gas Industry Account merged to form the Consolidated Revenue Account, boosting government expenditure by 13% compared to the old Consolidated Fund measure. Social security funds had existed in New Zealand since a separate fund was established to fund relief payments for the unemployed in 1931, but they had always been under government control, and had quickly become an important component of government expenditure. Similarly, the Works and Trading Accounts was reduced in scope during the 1970s, and then abolished by the 1978 Public Finance Act, further increasing Consolidated Account expenditure. In addition, the Consolidated series data were reported on a gross basis from the early 1950s, whereas the National Accounts and Net Fiscal data were net.

The limitations of the Consolidated series raise the question of why it has been so widely used to illustrate changes in government expenditure. In the past, historic expenditure data from the Consolidated Fund and Consolidated Revenue Account has been printed in the appendices of Yearbooks with the warning that “The figures shown in the above table are not on a comparable basis over the whole period” (Statistics Department, 1980, p. 934). Expenditure from functional classifications has been printed in the main body of the Yearbook, but usually only for relatively short time periods. Since 1984, the Consolidated expenditure data has been reprinted in two studies of New Zealand historical statistics, by a geographer and sociologists respectively, who included similar disclaimers (Bloomfield, 1984, p. 335; Thorns & Sedwick, 1997, p. 103).

Subsequently the Consolidated data was added to an internal Treasury set of statistics compiled by graduate students, and in 2004 these statistics were moved to a Statistics New Zealand website called the long-term data series. Treasury staff added expenditure as a percentage of GDP and a graph, similar to Figure 2. Documentation included by the compilers of the electronic long-term data series indicates they thought that the number of times series were included in other sources was a measure of their validity. Although the long-term data series carries strong disclaimers encouraging users to check the statistics themselves, and the expenditure sheet notes the data is “not strictly consistent” (New Zealand Treasury, 2004), time constraints and the considerable size of this dataset have discouraged both critical analysis of the 16 series published and the creation of new datasets. Instead, the series has met the desire of researchers to have a graph showing expenditure for as long as possible. In addition, use of this series has increased its legitimacy, although users have usually repeated Treasury’s warning that expenditure is not strictly comparable over time. However, this shows it is important to critically consider the accuracy of electronic datasets.

Considerable caution remains necessary when considering other government expenditure statistics. For instance, published statistics on per student education costs make early childhood and tertiary education appear to be relatively expensive sectors compared to the compulsory sector. However, because the Ministry of Education is still responsible for school property the capital charge on school property gets eliminated on consolidation. This makes comparisons of per student government expenditure on compulsory education and on early childhood and tertiary education potentially misleading, with the differences in subsidy becoming much smaller when property funding is considered for each sector on a similar basis. Furthermore, student living costs are included in total tertiary education costs, whereas the cost of working for families tax credits is not allocated to other education sectors.

6. Conclusion

This paper has outlined the best available government expenditure statistics since 1935. These come from a variety of different sources, and present a different and more accurate picture of growth in government to the “consolidated” account series often used by researchers. In particular, they show government expenditure to have been relatively stable between the late 1940s and the mid-1970s, although expenditure increased thereafter. This increase was largely due to higher social security and welfare expenditure, particularly on pensions, although some of this increase was taxed back by making formerly means-tested pensions subject to income taxation. Interest costs for the government

also steadily increased from the late 1970s, while expenditure on land use and on economic services was high from the late 1970s to mid-1980s as the National government expanded support for the private sector. During the 1980s expenditure on means-tested benefits, but not on support for families, also grew. New Zealand government expenditure has fallen as a percentage of GDP since 1991, with pensions expenditure falling sharply due to a higher eligibility age and demographic changes. Interest costs and expenditure on means-tested benefits have also declined since the early 1990s.

The statistics in this paper exclude tax expenditures, which are important in other countries and appear to be underreported in New Zealand. However, the functional data used in this paper are superior to the “consolidated” series used by several other publications since they include a wider range of government activities and are more consistent over time. The results show the need to carefully consider the accuracy and comprehensiveness of statistics, and to check them against primary sources, rather than simply using statistics in electronic databases.

This article is the first step towards better understanding New Zealand government expenditure. It is hoped that it will serve to facilitate further research. Since detailed information on government expenditure is available in primary sources, and it is possible to replicate many functional expenditure classifications developed in the past, it should be possible to extend historic expenditure series back further and to make them more consistent with current expenditure series.

References

- 2025 Taskforce. (2009). Answering the \$64,000 question. Wellington: New Zealand Government.
- Ashwin, B. C. (1935). Practical problems in public finance. Wellington: Commerce Society, Victoria University College.
- Aziz, O., Gibbons, M., Ball, C., & Gorman, E. (2012). The effect on household income of government taxation and expenditure in 1988, 1998, 2007 and 2010. *Policy Quarterly*, 8(1), 29-38.
- Bloomfield, G. T. (1984). *New Zealand: A handbook of historical statistics*. Boston: G.K. Hall.
- Briggs, P. (2007). *Looking at the numbers: A view of New Zealand's economic history*. Wellington: NZIER.
- Burman, L. E., Geissler, C., & Toder, E. J. (2008). How Big Are Total Individual Income Tax Expenditures, and Who Benefits from Them? *The American Economic Review*, 98(2), 79-83. doi: 10.2307/29729999
- Castles, F. (1998). *Comparative public policy: Patterns of post-war transformation*. Cheltenham: Edward Elgar.
- Coleman, A. (2009). The long term effects of capital gains taxes in New Zealand. Wellington: Motu.
- Committee on the simplification of the public accounts. (1962). Report of the committee on the simplification of the public accounts. Wellington: House of Representatives.
- Cook, D., Schousboe, C., & Law, D. (2011). Government and economic growth: Does size matter? Wellington: New Zealand Treasury.
- Douglas, R., & Callan, L. (1987). *Toward prosperity*. Auckland: David Bateman.
- Easton, B. (2007). *The current state of the public sector: An economist's view*. Paper presented at the Annual Public Sector Finance Forum, Wellington. <http://www.eastonbh.ac.nz/2007/09/the-current-state-of-the-public-sector-an-economists-view-2/>
- Faricy, C. (2011). The Politics of Social Policy in America: The Causes and Effects of Indirect versus Direct Social Spending. *The Journal of Politics*, 73(1), 74-83. doi: 10.1017/S0022381610000873
- Financial Services Council. (2013). The tax barrier to retirement prosperity in New Zealand. Wellington.
- Fiorramonti, L. (2013). *Gross Domestic Product: The politics behind the world's most powerful number*. London: Zed books.
- Forbes, G. W. (1931). *Financial statement: By the Right Hon. G.W Forbes*. Wellington: New Zealand Government.
- Gemmell, N. (1993). The public sector: Definition and measurement issues. In N. Gemmell (Ed.), *The growth of the public sector*. Adlershott: Edward Elgar.
- Gibbons, M. (2000). *Election programmes in New Zealand Politics, 1911-1996*. (PhD), University of Waikato, Hamilton.
- Gibbons, M. (2001). *New Zealand government expenditure patterns between 1913 and 1944*. Paper presented at the New Zealand Political Studies Association, Palmerston North.
- Gleisner, B., Llewellyn-Fowler, M., & McAlister, F. (2011). Working towards higher living standards for New Zealanders: Treasury.
- Goldsmith, P. (2008). *We won, you lost, eat that! A political history of tax in New Zealand since 1840*. Auckland: David Ling.
- Hofferbert, R. I., & Budge, I. (1996). Patterns of post-war expenditure in ten democracies. In L. Imbeau (Ed.), *Comparing government activity*. Basingstoke, UK: Macmillan
- Howard, C. (1997). *The hidden welfare state: Tax expenditures and social policy in the United States*. Princeton: Princeton University Press.
- Howard, C. (2007). *The welfare state nobody knows*. Princeton: Princeton University Press.
- Jones, M. A. (1980). *The Australian welfare state*. Sydney: Allen and Unwin.
- King, A. (2014, 3 July 2014). Landlords say low taxes cap rents. *Dominion Post*. Retrieved from <http://www.stuff.co.nz/business/money/10228984/Landlords-say-low-taxes-cap-rents>
- Krupp, J. (2015). Giving charities a helping hand. Wellington: New Zealand Institute.

- McKinlay, P. J. (1983). *Origin of budget table 2*. Wellington: Treasury.
- New Zealand Planning Council. (1979). *Public expenditure and its financing, 1950-1979: A companion volume to the welfare state? Social policy in the 1980's*. Wellington: New Zealand Planning Council.
- New Zealand Treasury. (1935). *Balance sheets and statements of account of various government departments for the year 1935 (audited accounts)*. Wellington: New Zealand Government.
- New Zealand Treasury. (1973). *Budget 1973*. Wellington: Treasury.
- New Zealand Treasury. (1984). *1984 budget part II: Tables*. Wellington: New Zealand Treasury.
- New Zealand Treasury. (1986). *1986 Budget Part II: Economic commentary and budget tables*. Wellington: New Zealand Treasury.
- New Zealand Treasury. (1994). *Economic & fiscal outlook 1994*. Wellington: New Zealand Treasury.
- New Zealand Treasury. (2004). Long-term data series. Retrieved 24 March, 2013, from http://www.stats.govt.nz/browse_for_stats/economic_indicators/nationalaccounts/long-term-data-series.aspx
- New Zealand Treasury. (2006). *New Zealand's long-term fiscal position*. Wellington: New Zealand Treasury.
- New Zealand Treasury. (2008). *Fiscal time series explanatory note*. Wellington: New Zealand Treasury.
- New Zealand Treasury. (2010). *Treasury Report: Potential of irrigation*. Wellington: New Zealand Treasury.
- New Zealand Treasury. (2013). *Affording our future: New Zealand's long-term fiscal position* (N. Z. Treasury Ed.). Wellington: New Zealand Treasury.
- New Zealand Treasury. (2014). *2014 Tax expenditure statement*. Wellington: New Zealand Treasury.
- New Zealand Treasury. (2015). *Data - Fiscal time series historical fiscal indicators 1972-2014*. Retrieved 2 January, 2015, from <http://www.treasury.govt.nz/government/data>
- OECD. (2010). *Tax expenditures in OECD countries*. Paris: OECD.
- OECD. (2011). *Government at a glance 2011*. Paris: OECD.
- OECD. (2013). *OECD Economic surveys New Zealand*. Paris: OECD.
- Pope, M. J. (1978). *The public sector overload - is there any?* Wellington: New Zealand Institute of Economic Research.
- Preston, D. (1980). *Government accounting in New Zealand: An explanation of the accounting and financial system of the central government of New Zealand*. Wellington: Government Printer.
- Preston, D. (2008). *Retirement income in New Zealand: The historical context*. Wellington: Retirement Commission.
- Rea, D. (2009). *Government expenditure and income in New Zealand: A brief overview*. *Policy Quarterly*, 5(3), 58-67.
- Richardson, R. (1995). *Making a difference*. Christchurch: Shoal Press.
- Rose, D. (2014). *Trends in public revenue and spending, 1948 to 2013*. Paekakariki: Institute for Governance and Policy Studies.
- Rudd, C. (1991). *The changing structure of public expenditure*. In J. Boston & e. al. (Eds.), *Reshaping the state: New Zealand's bureaucratic revolution*. Auckland: Oxford University Press.
- Shand, D. (1979). *Measuring government expenditure and the budget*. *Public Sector Accounting*(October), 350-354.
- Shuttleworth, K. (2013, 18 March). *Government backs out of carpark tax*. *New Zealand Herald*. Retrieved from http://www.nzherald.co.nz/business/news/article.cfm?c_id=3&objectid=10872016
- Statistics Department. (1941). *New Zealand official year-book*. Wellington: Statistics Department.
- Statistics Department. (1950). *New Zealand official year-book*. Wellington: Statistics Department.
- Statistics Department. (1953). *New Zealand official year-book*. Wellington: Statistics Department.
- Statistics Department. (1980). *New Zealand official Yearbook*. Wellington: Statistics Department.

- Stebbing, A., & Spies-Butcher, B. (2010). Universal welfare by 'other means'? Social tax expenditures and the Australian dual welfare state. *Journal of Social Policy*, 39(04), 585-606. doi:doi:10.1017/S0047279410000267
- Tan, D. (1981). Reconciliation between the budget and New Zealand System of National Accounts (NZSNA). Wellington Statistics New Zealand.
- The Australian Government the Treasury. (2014). Tax expenditures statement 2013. Canberra: Commonwealth of Australia.
- Thorns, D., & Sedwick, C. (1997). *Understanding Aotearoa/New Zealand: Historical statistics*. Palmerston North: Dunmore Press.
- Wanna, J., Kelly, J., & Forster, J. (2000). *Managing public expenditure in Australia*. Sydney: Allen & Unwin.