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Housing Tenure: A brief synthesis of two studies including a review of the international literature and an assessment of long term fiscal costs in New Zealand

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Introduction

Housing tenure in New Zealand has undergone substantial change in last twenty-five years. Between 1991 and 2015, the proportion of households who owned their dwellings reduced from 74 percent to 64 percent. Renters on the other hand, increased over the same period from 23 to 32 percent (Statistics New Zealand 2015). More recently, the cost of housing has risen considerably. The Global Housing Watch Survey (Ahir et. al. 2016), published by the International Monetary Fund (IMF), shows New Zealand had the second highest growth in house prices during 2015, and the highest price increases relative to income of any country. The reduction in home ownership and the increasing proportion of housing costs on household budgets has led to a growing number of reports of housing hardship and unaffordability (Boston and Chapple 2014, Child Poverty Monitor 2015, Perry, B. 2016). Housing insecurity is frequently reported in the New Zealand media and it has become the focus of considerable political attention.

Housing policy is problematic for governments because of the high capital costs and market fluctuations. Consequently, effective policy often suffers from short term pragmatic responses that don't consider the long-term requirements of housing security. The objective of this report is to contribute to housing policy development in New Zealand by estimating the benefits and costs of different forms of tenure and calculating the long term fiscal costs of moving those in private and social renting towards homeownership. The purpose is to add to the debate on housing by focussing on long term solutions that address housing security and independence.

This research was commissioned and funded by the New Zealand Housing Foundation. BERL (Business Economic Research Ltd) and the FCSPRU (Family Centre Social Policy Research Unit) carried out two independent research studies. FCSPRU undertook the literature review which drew together more than a hundred and twenty international studies that explored the associations between housing tenure and social, economic and health outcomes. In particular, the review highlighted the results of studies that measured the effects of housing tenure and security on health, employment, crime, welfare, wealth and education outcomes. The review did not include studies that focussed specifically on mortgage or rent stress. It is acknowledged that unaffordable housing of whatever tenure type will almost certainly lead to negative health and social outcomes.

The second study involved BERL analysing the associations between housing tenure and fiscal costs for health, crime, welfare benefits and tax paid in New Zealand, using Statistics New Zealand's Integrated

Data Infrastructure (IDI). They also simulated the modelling of a key international study identified in the review, applying the IDI data. The study entitled 'Erasing the advantage: Home ownership and the impact of financial hardship on health for lower income Americans', by Kim Manturuk (2013) of the University of North Carolina, was chosen because of the close fit with the research questions for this project, and also because the methodology and econometric modelling used could be feasibly replicated through the availability of the IDI. Per capita costs for people residing in Auckland were estimated under the three different tenure groups of social renting, renting, and owner-occupancy. The renting tenure group covers both private and social renters. These per capita costs were based on a series of outcomes for individuals on hospitalisations, corrections, benefits, and PAYE for each of the three tenure groups.

The design of the total project was to explore the available international evidence on the social, health and economic impacts of different forms of housing tenure; estimate the current fiscal impact of the tenure groups; model the fiscal impacts of shifting people between tenure groups; and then test our findings by replicating the modelling method of one of the key studies from the literature review to identify the fiscal costs of the tenure groups to government using New Zealand data. This was to enable an in-depth assessment of factors that contribute to housing security and wellbeing applying international and New Zealand evidence, and to provide a high-level assessment of fiscal affordability.

The two studies follow this synthesis in two separate reports:

- *'Social and Economic Impacts of Housing Tenure'* by Charles Waldegrave and Michaela Urbanová (FCSPRU). This is accompanied by a *'Social and Economic Impacts of Housing Tenure Literature Review Table'* with details of each study identified; and
- *'Fiscal costs of different housing tenure groups: Social renting to housing security independence'* by Ganesh Nana, Natalia Fareti, Konrad Hurren and Hugh Dixon

Literature review summary

Please note all the studies summarised in this synthesis are identified in the text of the literature review and again in the literature review table.

The objective of the review was to explore the research evidence through the literature over the last twenty-five years, and describe the findings. The research question was: What does the research evidence demonstrate about the health, employment, crime, welfare, wealth and educational impacts of housing tenure differences? The purpose was to provide research evidence for applied policy development. Because of its applied purpose, the review was limited to those domains that directly reflect fiscal costs, rather than studies that demonstrate other social benefits like social capital, social cohesion, neighbouring and social stability, for example.

The literature has a broad focus on the impacts of housing tenure on different cohorts. The impacts of home ownership and renting that were measured include health, educational, behavioural and employment outcomes. The cohorts included home owners, sub-components of households such as the children of home owners, and tenants of rented accommodation. These spanned individual, family (i.e. household), neighbourhood, and community level effects. Most studies focussed on the comparison of

outcomes for homeowners and renters, even though there are other forms of tenure and security. This is probably because owners and renters form the bulk of occupants when compared with other forms of tenure, and they provide two clearly differentiated easy to access categories for research purposes.

The methodologies varied between the various studies, and covered a wide range of research questions and countries. The impacts of home ownership have been studied for some time now, and many studies are posited on a common perception that home ownership is desirable, because of supposed associated benefits that result from owning a house. The studies test this perception and the degree of influence that housing tenure and particularly home ownership have on outcomes such as crime, health, and education.

The literature summaries draw on the literature review tables prepared which outline, in note form, each study under the following headings: author; title; year; country; journal; citation; theme; key words; type of study; objective/research questions; conclusions; sample size, factors controlled for; and magnitude of effect. In a narrative summary, such as this, detailed information on each study would be very lengthy and confusing.

If the reader wishes to pursue more detail of particular studies than set out in this synthesis and the literature review report, the 'Social and Economic Impacts of Housing Tenure Literature Review Table' prepared with this report by the FCSPRU authors is also available. The references in this report and citations in the literature review table will enable the reader to search for each individual study if they choose to.

- This literature review has drawn together more than a hundred and twenty international studies that explored the associations between housing tenure and social, economic and health outcomes.
- By far the majority of studies under each of the six categories: health; employment; crime; welfare; wealth; and education; demonstrate statistically significant positive effects of homeownership.
- Health promoting benefits were found for both physical and mental health with objectively assessed health conditions and self-assessed health status.
- Although the results for positive employment outcomes were less consistent, most studies showed ownership to be beneficial, not only for protecting against unemployment, but also for faster exits out of unemployment when it occurs.
- There were fewer studies relating to crime, welfare and wealth, but the majority showed homeownership to be significantly associated with lower crime rates, less welfare dependency and offered a greater chance for low income families to create asset wealth, albeit at a lower rate than higher income groups.
- The children of homeowners also showed significantly higher educational attainment levels than those of renters in most of the educational studies.
- A minority of studies found no significant effects in health, crime and educational outcomes.
- The labour market studies demonstrated the most varied results. While the majority of studies found positive associations between housing tenure and employment, a minority found no significant results. Owners were found in some studies to be less mobile and therefore less able to pick up jobs in non-local labour markets.

- No studies demonstrated significantly negative health, crime, welfare or educational outcomes associated with homeownership.
- Because there has been concern that studies on the impact of housing tenure may be simply demonstrating the socio-economic or income status of the families observed, this review has identified where studies have and have not controlled for variables such as socio-economic status and income. The majority did so.
- The review did not include studies that focussed specifically on mortgage or rent stress. It is acknowledged that unaffordable housing of whatever tenure type will almost certainly lead to negative health and social outcomes.

On balance, the research suggests housing tenure is a significant factor for positive social and economic outcomes. Homeownership, as opposed to renting, is often significantly associated with positive health, crime, and educational outcomes in studies, usually after controlling for a range of variables including socio-economic status and income. A small number of other studies further suggest it is beneficial for wealth creation and not receiving a welfare benefit. The labour market results for decreased unemployment are not as strong, but point in a similar direction.

Fiscal costs and modelling summary

There were three elements to the fiscal costs and modelling part of the study.

- The first was using the IDI (Integrated Data Infrastructure: Statistics New Zealand) data to estimate the current fiscal costs of tenure groups.
- The second was modelling the fiscal impacts of shifting people between tenure groups.
- The third was to test our findings by replicating the modelling method of a selected study from the literature review, using IDI data.

Current fiscal costs of tenure groups

Our measurement of the fiscal impact focuses on three main costs to the government: corrections, health (hospitalisations) and benefit payments.

For each of these costs categories we estimated costs for people residing in Auckland under the three tenure groups of social renting, renting, and owner-occupancy. Our data was sourced from a variety of Statistics New Zealand IDI datasets and covered the 4-year period from July 2011 to June 2015.

- We found that per capita costs across these cost categories for those with Renter tenure status were higher than those with Owner-Occupier tenure status.
- Further, per capita PAYE revenue from Renters was lower than that from Owner-Occupiers.

Modelling fiscal impacts of tenure shifts

Using the above information, we modelled two scenarios – hypothetically transitioning individuals between tenure groups. This was over a 15-year time horizon, at assumed transition rates, and included an annual (but declining) cost of advisory and support services during the transition process.

- In the first scenario, we modelled transitioning 1,000 individuals from Renters tenure status to Owner-Occupiers. The potential net fiscal saving over the 15-year horizon accrues to a present value of \$6.4 million. Net fiscal saving refers to the difference between PAYE and fiscal costs.
- In the second scenario, we modelled transitioning 1,000 individuals from Social Renters tenure status (i.e. those renting from government or social agencies) to Owner Occupiers. The potential net fiscal saving over the 15-year horizon accrues to a present value of \$11.1 million.

While this is a gross simplification of the range of outcomes that households would experience, it strongly implies that it would be beneficial from a fiscal point of view to move people from renting (and, in particular social renting) towards owner-occupation.

Replicating selected literature study modelling method

Our findings were then tested by attempting to replicate the modelling method of a selected relevant study, Kim Manturuk, from our literature review. In our replication of the modelling method we use the data we sourced from the IDI and controlled for age, income, tenure and financial hardship. Our simulation of Manturuk’s modelling, supports the above scenario findings.

- There is a relationship between government fiscal expenditure on health, and tenure type.
- Owner-occupation yields lower fiscal health costs compared to renters overall, and renters in financial hardship.

Overall, we find that there is indeed a link between tenure and outcomes across the health, corrections, and benefits payments components of fiscal expenditure, and also for PAYE revenue. The associated benefits of moving people towards housing independence can indeed provide better outcomes not only for the individuals in question, but for the fiscal accounts as well.

Links between the literature and fiscal costs

Health in the literature

The links between housing and health have been studied extensively. Apart from the influence of physical housing conditions like dampness or overcrowding, many, though not all, studies found an independent direct relationship between housing tenure and health. Homeownership has been found to be significantly associated with many positive physical health conditions when compared with renters, e.g. a lower rate of coronary heart disease, a lower rate of long-standing illness, better self-reported health, lower consultation rates in general practice, lower mortality. Similar results were shown for home owners over renters for mental health. Nevertheless, other studies show no statistically significant effects of homeownership at all, but these are a minority of studies, and none demonstrate negative effects from homeownership.

Some studies focused on the health outcomes of tenure amongst vulnerable groups. Several of them have explored the health effects of tenure on children and found that homeownership had positive associations. Homeownership has also been positively associated with the health outcomes of older citizens. Literature on the benefits of homeownership for low-income families found modest evidence of improved psychological and physical health where homeowners from low-income families had better health outcomes than renters.

One of the overriding research concerns about the effect of tenure is that studies may be simply demonstrating the socio-economic or income status of the families observed, and that their better health outcomes are simply a result of easier lives, the ability to access better healthcare and the information and capacity to live healthier lifestyles. However, it should be noted that except for a few studies, there was consistent evidence about the health benefits of homeownership, either after controlling for socio-economic status in general, or after controlling specifically for income.

In summary, the majority of studies found health promoting effects, both physical and mental, resulting from various forms of homeownership. Several studies also demonstrated beneficial outcomes for vulnerable groups including children, elderly people, low-income families, some cultural groups and drug users. There are some exceptions that show mixed results or no independent effects of homeownership on health.

Current fiscal health costs of tenure groups

For the sake of simplicity, hospital admission was selected as the indicator of health outcomes. It was chosen because it provides a proxy for the prevalence (i.e. level of incidence) of bad health outcomes, i.e. a higher frequency of hospital admissions indicates a lower health outcome.

As summarised in Table 1, renters have higher fiscal health costs (per capita) than owner-occupiers. This is a combination of admissions and the type of diagnosis that led to the admission.

Owner-occupiers had a higher total number of admissions, largely because a significant proportion of owner-occupiers are older cohorts, who are more prone to being admitted to hospital. However, when comparing those in similar age groups, renters were more likely to be admitted to hospital than owner-occupiers.

Similarly, while owner-occupiers accounted for a significantly larger total of health costs; on a per capita basis, renters cost more than owner-occupiers. The difference is more pronounced for social renters, who have the highest per capita health costs.

Table 1: Current health fiscal costs of tenure groups

Area	Fiscal account	Annual per capita* costs (\$)		
		Owner-Occupier	Tenure Renters	Social Renters
Health: Public Hospital admissions				
	for 0 to 15 year olds	305	388	446
	for 16 to 35 year olds	403	467	703
	for 36 to 55 year olds	436	647	1,052
	for 56 to 75 year olds	1,083	1,601	2,184
	for 75 plus	3,033	3,134	3,428

* per person in stated age group

Crime in the literature

The studies exploring the relationship between housing tenure and crime, though not as many as other areas of enquiry, mostly found ownership to be associated with lower crime. Crime rates were lower in neighbourhoods with higher homeownership rates. An exception was an early (1991) Swedish study in which no significant association was detected. Homeownership was also associated with perceptions of order in neighbourhoods in all but one study of those who assessed it. These led to greater feelings of safety, and in one study collective community control of behaviour in their neighbourhoods. No studies were found where homeownership was associated with higher crime rates.

Current fiscal crime costs of tenure groups

Prison and community sentences were our indicators of crime and justice outcomes. They were chosen because they provide a proxy for the prevalence of bad crime outcomes, i.e. a higher frequency of prison and community sentences indicates worse crime outcomes.

Overall, renters tended to account for the highest count in terms of people with some form of corrections sentence. And this translated into a higher fiscal cost on a per capita basis.

Social renters consistently generated the highest cost per capita across all the different types of corrections sentences. This reflects the higher proportion of individuals within social renters who had

some sort of sentencing whether prison or community related. Owner-occupiers were the opposite, with the lowest cost per capita across all sentence types.

Table 2: Current fiscal crime costs of tenure groups

Area	Fiscal account	Annual per capita* costs (\$)		
		Owner-Occupier	Tenure Renters	Social Renters
Corrections (PRISON)	Prison sentences	39	222	444
	Home detention sentences	2	10	22
	Time spent on Parole	7	10	15
	Time spent Released on Conditions	0	1	3
	Time spent Remanded in custody	4	20	48
Corrections (COMMUNITY)	Community detention sentences	1	4	9
	Community work sentences	1	6	13

* per person aged 15 plus

These fiscal results are consistent with the literature review findings, that home ownership is associated with better outcomes in terms of crime and justice.

Employment in the literature

Most studies have tended to demonstrate positive effects of homeownership on labour market performance. Several studies showed tenure to have no significant effect on employment. There were a few studies though, that showed homeownership to be associated with a small increase in unemployment because they were less mobile than renters. The studies showing the positive effects are considerable and a number of them also indicated that homeowners moved out of unemployment more rapidly than renters and their children had better employment outcomes. Studies that contrasted unemployment exit spatially, either to local or non-local labour markets, suggested homeowners do better locally and less well in non-local markets. Some literature reviews offered modest support for the effects of homeownership on employment outcomes, but tended to urge caution on interpreting the relationship between housing tenure and the labour market because the impacts are not yet fully

established. Nevertheless, most of the recent studies demonstrated better employment outcomes for homeowners.

It is interesting to note that practically all the studies that demonstrated lower unemployment rates being associated with homeownership, controlled in various ways for socio-economic status and/or income. Whereas the studies that found no significant relationships or higher unemployment rates seldom controlled for these variables.

Welfare and wealth in the literature

We discovered few studies exploring the effect of homeownership on welfare. The few we did find showed that homeownership was beneficial for children of homeowners and concluded that they have a lower probability of receiving welfare, after controlling for neighbourhood effects, family characteristics and income. Later studies found these effects held for low-income groups, but ceased to be significant for the high-income families.

The studies on housing tenure and wealth indicate that ownership is an effective way to building wealth for low income and minority families. However, they benefit to a lesser extent than higher income homeowners. Some studies suggested shared equity schemes offered a safer option for lower-income homebuyers, as they help prevent mortgage stress and foreclosure risk. The gains in wealth were competitive with what they would have received if they had invested in stocks or bonds.

Current fiscal MSD costs and PAYE revenue of tenure groups

We used the three types of Ministry of Social Development (MSD) benefits, the Accommodation Supplement, and PAYE tax revenue, as our indicators of labour market outcomes. They were chosen as a proxy for the prevalence of relative labour market outcomes, i.e. a higher uptake of MSD benefits and accommodation supplements, and lower PAYE tax revenue, suggests worse labour market outcomes (either as lower employment rates or lower income received).

Renters incurred a greater fiscal cost compared to owner-occupiers, reflecting the greater prevalence of renters receiving some sort MSD benefit and/or accommodation supplement. This comparison was reinforced in the PAYE revenue to government, with more PAYE generated (per capita) by owner-occupiers than by renters.

Table 3: Current fiscal MSD costs and PAYE revenue of tenure groups

Area	Fiscal account	Annual per capita* costs (\$)		
		Owner-Occupier	Tenure Renters	Social Renters
MSD benefits	Unemployment/Jobseeker	101	333	658
	Sole Parent	45	268	515
	Sickness/Supported living	57	141	307
Accommodation Supplement		99	1,168	na
Total PAYE revenue		8,532	6,569	3,052

* per person aged 15 plus

Education in the literature

The positive effects of parental homeownership on children’s educational attainment have been demonstrated in the literature by most studies, through a range of different measures and types of research. However, not all replicate the same positive effects, with a smaller number showing no significant differences. Where significant effects occurred, they related to school graduation, post-secondary education, specific subject areas, length of time at school and fewer behavioural problems. The positive effects of homeownership were also demonstrated for children of single mothers and children in poor and distressed neighbourhoods. No studies were found that demonstrated negative effects of homeownership on the educational attainment of children.

Discussion

The problem

As noted at the beginning of this article, the combination of a substantial decrease in homeownership and the high and growing cost of housing, both rental and homeownership, places New Zealand with a serious housing dilemma. While the causes are debated, the solutions are often seen to be simply a matter of supply that can be solved by providing more land, greater intensification and removing obstacles for developers. While these solutions can contribute, the fundamental historical change in New Zealand has been one of tenure. Homeownership has decreased and renting has increased. Furthermore, the younger cohorts are showing that owner occupancy is becoming even less attainable, exacerbating this trend.

It is quite possible that New Zealand could address its housing supply deficit, but still have many households in housing hardship because of high rents and insecure tenancies. The protection for them in the post-war years was created by a policy setting that enabled almost universal accessible and affordable homeownership that provided security of tenure, equity and minimal housing costs in old age. Governments in New Zealand and other countries facilitated this process through low interest loans and benefit contributions that could be capitalised for deposits on houses.

The literature review and the calculation of fiscal costs and modelling in this study point to the importance of tenure type and the positive benefits of homeownership. Furthermore, they show long term fiscal advantages for government. Together they suggest that a new era of social housing could profitably focus on affordable ownership and/or shared equity schemes for low and low-middle income households.

The study

In summary, the literature review drew together more than a hundred and twenty studies that explored the associations between housing tenure and social, economic and health outcomes. By far the majority of studies under each of the six categories: health; employment; crime; welfare; wealth; and education; demonstrated the positive effects of homeownership. Health promoting benefits were found for both physical and mental health with objectively assessed health conditions and self-assessed health status.

Although the results for positive employment outcomes were less consistent, most studies showed ownership to be beneficial, not only for protecting against unemployment, but also for faster exits out of unemployment when it occurs. There were fewer studies relating to crime, welfare and wealth, but the majority showed homeownership to be significantly associated with lower crime rates, less welfare dependency and offered a greater chance for low income families to create asset wealth, albeit at a lower rate than higher income groups. The children of homeowners also showed significantly higher educational attainment levels than those of renters in most of the educational studies.

As is common in social science research though, such results are not replicated in every study. A minority of studies found no significant effects in mental and physical health, employment, crime and education outcomes, due to differences in housing tenure. However, no studies demonstrated negative outcomes associated with homeownership, apart from employment. A minority reported negative employment impacts due to mobility constraints, but these studies have not been consistently replicated.

Because of all these studies, the relationship between housing tenure and several independent variables like health, crime and education are becoming more accepted as most them continue to replicate positive significant associations with ownership. Labour market outcomes are less clear though, and more caution is required when describing the relationship between tenure and employment because the studies are less consistent. Nevertheless, it is fair to note the majority continue to show lower unemployment among owners.

The study of fiscal costs, using Statistics New Zealand's IDI data over the four-year period July 2011 to June 2015, found that per capita costs to government of corrections, health (hospitalisations) and benefit payments were higher for renters than homeowners. Furthermore, renters paid less per capita PAYE revenue than homeowners.

In a second part of the project, when the costs were modelled of hypothetically transitioning 1,000 private renters to owner occupier status over fifteen years, a potential net fiscal saving of \$2.8 million was shown. The same modelling for transitioning social renters demonstrated a net fiscal saving of \$11.4 million. While this was a hypothetical and simplified process, the results strongly indicate homeownership in New Zealand offers longer term fiscal savings for government.

These results were tested in a third part of this project. A key study in the literature review was replicated using the same New Zealand data sets, this time controlling for age, income, tenure and financial hardship. The simulation modelling supported the earlier results. They demonstrated the relationship between government expenditure on health and tenure type, and showed that owner-occupation yielded lower fiscal health costs compared to renters overall.

Together, all three parts of the study on fiscal costs demonstrated the benefits to households and government of owner occupancy.

The implications

A full discussion on the advantages of homeownership has seldom featured in the frequent reports of New Zealand's housing dilemma, as though its proven benefits are not appreciated, and the security and quality of life provided for the baby boomer cohorts did not happen. Nor has homeownership been a major focus of policy making for low and low-middle income households in recent years. A few small schemes have been floated, but none of sufficient size to arrest the decrease in homeownership. Given the volatilities of the market and the large-scale investment in rental housing, many New Zealanders can be expected to experience the social, economic and health outcomes associated with renting outlined above, unless affordable homeownership and/or equity schemes are made accessible to low and low-middle income families.

It is important to note that many of the studies in the literature review came out of European countries where the tenancy protection laws are substantially stronger than those in New Zealand. This would suggest the negative effects of renting in New Zealand may well be under-estimated in the international literature.

While the focus of this research has been on the impacts and fiscal costs of different housing tenure types, it has not been within its scope to address the costs of entering accessible homeownership and/or shared equity schemes for low and low-middle income households. That can be the subject of a separate study, but it need not be as difficult or costly as people often think. We note that in our modelling of hypothetical tenure shifts we did include costs of support and advisory services to assist those transitioning. In a discussion of these results, it suffices to say that affordable policy options could be developed to enable and further facilitate such tenure shifts. These could include rent to buy

schemes, shared equity projects and requiring developers to build affordable housing for fifteen to twenty percent of any development as other countries have.

The government can borrow at rates of three percent or less and the cost of this interest, if it was used to purchase modest houses or apartments in New Zealand, would frequently be little different from the weekly payments many renters in poor suburbs are currently paying. Such borrowing could provide less well-off families with an avenue into ownership with minimal costs to government. The Accommodation Supplement for the families involved could be diverted more usefully for this purpose, and such households could be supported by community based social housing organisations.

The findings of the literature review and the fiscal costs and modelling in this study demonstrate the social, economic and health benefits of homeownership and the fiscal cost advantages to governments over time. They contribute to the serious debate on housing currently occurring in New Zealand by focussing on long term solutions that address affordable housing security and quality of life.

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Disclaimer

Access to the data used in this study was provided by Statistics New Zealand under conditions designed to give effect to the security and confidentiality provisions of the Statistics Act 1975. The results presented in this study are the work of the author(s), not Statistics NZ. The results in this report are not official statistics, they have been created for research purposes from the Integrated Data Infrastructure (IDI), managed by Statistics New Zealand.

The opinions, findings, recommendations, and conclusions expressed in this report are those of the author(s), not Statistics NZ, [Department XY, or Organisation Z].

Access to the anonymised data used in this study was provided by Statistics NZ in accordance with security and confidentiality provisions of the Statistics Act 1975. Only people authorised by the Statistics Act 1975 are allowed to see data about a particular person, household, business, or organisation, and the results in this report have been in confidence to protect these groups from identification. Careful consideration has been given to the privacy, security, and confidentiality issues associated with using administrative and survey data in the IDI. Further detail can be found in the Privacy impact assessment for the Integrated Data Infrastructure available from www.stats.govt.nz.

The results are based in part on tax data supplied by Inland Revenue to Statistics NZ under the Tax Administration Act 1994. This tax data must be used only for statistical purposes, and no individual information may be published or disclosed in any other form, or provided to Inland Revenue for administrative or regulatory purposes.

Any person who has had access to the unit record data has certified that they have been shown, have read, and have understood section 81 of the Tax Administration Act 1994, which relates to secrecy. Any discussion of data limitations or weaknesses is in the context of using the IDI for statistical purposes, and is not related to the data's ability to support Inland Revenue's core operational requirements.