Working Paper 2017/03

Key Graphs on Poverty in New Zealand: A compilation

MCGUINNESS INSTITUTE
TE HONONGA WAKA

TACKLING POVERTY NZ

Working Paper 2017/03

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Introduction

This working paper aims to collate existing research on poverty in a clear and accessible format. The paper is designed to contribute to the Institute's *TacklingPovertyNZ* project but does not include the results of the Institute's 2016 *TacklingPovertyNZ* tour; these are discussed in *Working Paper 2017/01 – TacklingPovertyNZ 2016 Tour: Methodology, results and observations*. Instead, it collates a diverse group of figures and tables from the research of others that the Institute considers to be both informative and interesting. The focus of this paper is on New Zealand, although we have added some comparative data and some uniquely international data. In the latter case, these are provided as examples of the type of research that might be interesting going forward.

Poverty in New Zealand is a multi-faceted issue. To break this down into more manageable pieces we have divided the tables and figures into three parts: the general, the demographics and the international. Part 1 presents data on socioeconomic mobility, relative income and material hardship. In Part 2, we have grouped the data under four specific demographic categories to convey the relevant indicators of the causes and effects of poverty. The data in Part 2C illustrates the effects poverty can have on education. In Part 2D, Māori outcomes are compared with non-Māori outcomes. Part 2E reveals regional disparities. In 2F, the data is split across three age groups to indicate the risks and outcomes that affect each. Part 3 has been included to provide an international perspective.

There is an inherent tension between what people mean when they describe their experiences of poverty and the desire to define poverty for measurement purposes. Policy dealing with poverty is based on the premise that poverty is something that can be measured and, when measuring poverty, definitions are set by bright-line tests to produce consistent data through measurements such as 60 percent contemporary median income, or material hardship.

In contrast to this, Rayden Horton a participant from the original *TacklingPovertyNZ* workshop in 2015 defined poverty as the deprivation of opportunity and the inability to live a safe and healthy life. He expanded upon his definition with other workshop participants to describe poverty as a series of immeasurable feelings in the finale at Parliament.[1]

Purpose

The purpose of this working paper is twofold; to provide a compilation of all the informative data that we have come across in our research on poverty, and to contribute to an informed discussion about issues of setting goals and measuring performance in addressing poverty. Specifically, this paper indicates, in graph form, which groups in society are affected by poverty and how.

Limitations

The data in this working paper reveals certain causes and effects of poverty in an aggregate statistical sense but does not describe nuanced experiences of poverty.

This working paper relied on extractions from other reports, which in turn relied largely on data collected through publicly available resources such as SoFIE, IDI, and the Census. As the information collected throughout New Zealand is limited due to small data sets, the results may not always reflect the true population. For example, while measurements may have less variance in very affluent or very deprived neighbourhoods, in average areas, aggregate measures may be much less predictive of individual socioeconomic status.

Interpretation of data sets were not included in this working paper, instead, only excerpts from existing reports were used. As some areas of research on poverty have not been updated recently, data occasionally does not represent the most up to date information.

We acknowledge that some data is less proportionate than others. An example of this are the assumptions created by the unit of personal income mobility, which exaggerates income inequality. The more accurate measure is the household as a unit of aggregation as the 'household' is the relevant concept. However, data on household mobility is scarce hence this is what is available.

1 'The feeling of sympathy and judgement from the outside, when all you want is love from the inside. The feeling of raindrops on your skin when you can't afford a jacket. The taste of blood from biting your cheek to stop the tears, while explaining to your child why they can't have a birthday party. The feeling of not knowing what is going to happen next, whether you will be fed or sheltered. The loss of your childhood when as a 12-year-old you are faced with making the medial decision whether your father either walks or talks again. Feeling as if a rug has been pulled from beneath you, and you are left with a bare floor. Feeling as if you are responsible, at 12 years old, for something that is not your fault. The look on Mum's face as she leaves WINZ knowing that there won't be enough for lunchboxes and dinners. The look on your face as your child offers you toast while you insist no, you're not hungry.' See the *TacklingPovertyNZ* booklet for more details – www.tacklingpovertynz.org/tacklingpovertynz-booklet.

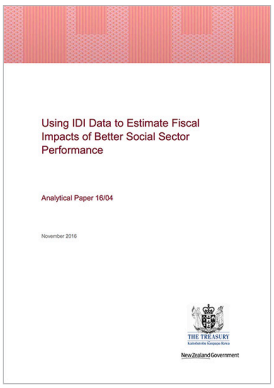
A: Socioeconomic mobility

Socioeconomic mobility refers to the movement of individuals, families, households or other categories of people within or between social strata in a society. Usually the term describes a change in social status.

The availability and ease of socioeconomic mobility is particularly important in societies with high social inequality because it provides opportunities for those currently in poverty to gain access to a higher quality of life. In contrast, persistent deprivation is a symptom of a lack of socioeconomic mobility, where people currently facing poverty remain in a similar situation in the long term, restricting their ability to make the most of their life chances.

1. Minimise Childhood Vulnerability: Comparing children identified at birth as high risk with all others

▼ EXCERPT FROM NEW ZEALAND TREASURY, *USING IDI DATA TO ESTIMATE FISCAL IMPACTS OF BETTER SOCIAL SECTOR PERFORMANCE* (2016)[2]

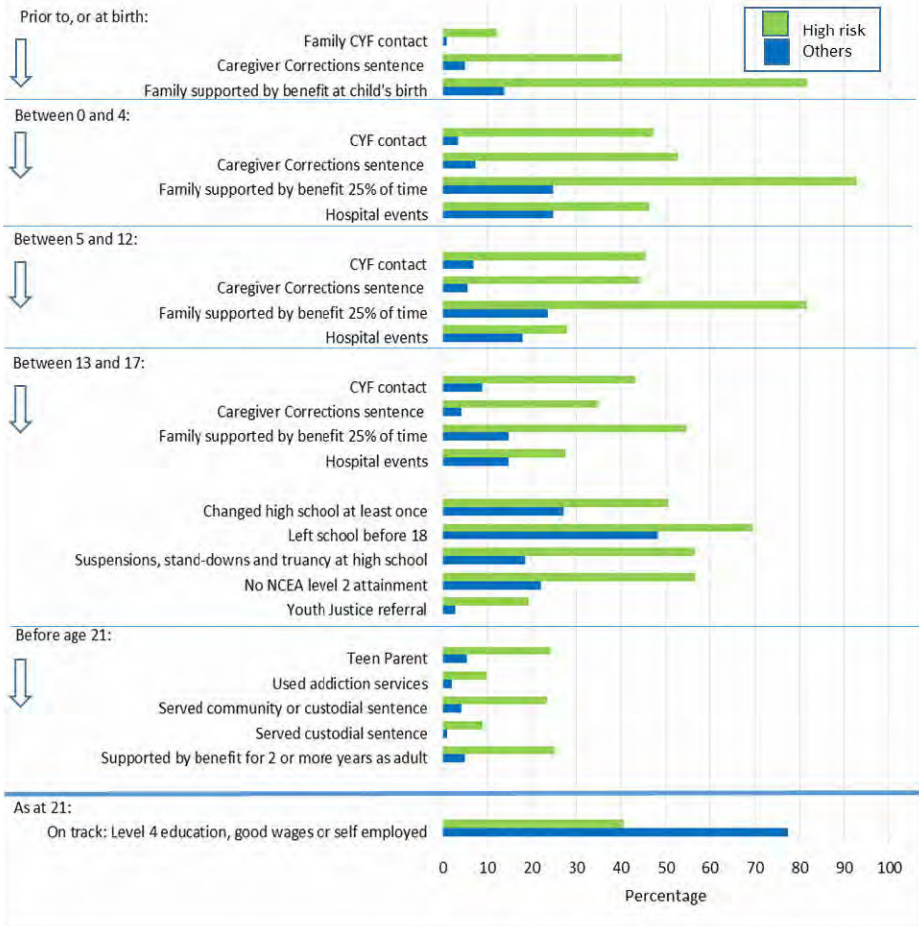


New Zealand Treasury, *Using IDI Data to Estimate Fiscal Impacts of Better Social Sector Performance* (2016)

'The chart illustrates that we can describe and monitor the prevalence of an array of life events throughout [the first 21 years of the 1993-born] cohort's life. These include health, education, family welfare, child protection and justice-related events.

Showing the contrast between those identified as at risk at birth and the others provides a sense of the improvements in non-fiscal outcomes that are the aspirational goals under the "minimise childhood vulnerability" scenario. The green bars are the levels for the target population and the blue bars represent the rest of the population (the aspirational benchmark).'

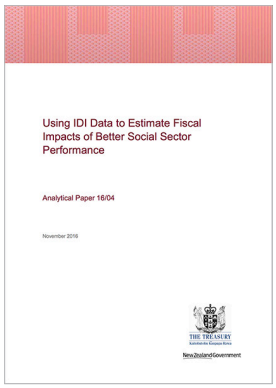
Figure 1: Minimise Childhood Vulnerability: Comparing children identified at birth as high risk with all others



2 New Zealand Treasury. (2016). *Using IDI Data to Estimate Fiscal Impacts of Better Social Sector Performance*, p. 5. Retrieved 16 January 2017 from www.treasury.govt.nz/publications/research-policy/ap/2016/16-04/ap16-04.pdf.

2. Family welfare history and adult outcomes

▼ EXCERPT FROM NEW ZEALAND TREASURY, *USING IDI DATA TO ESTIMATE FISCAL IMPACTS OF BETTER SOCIAL SECTOR PERFORMANCE* (2016)[3]



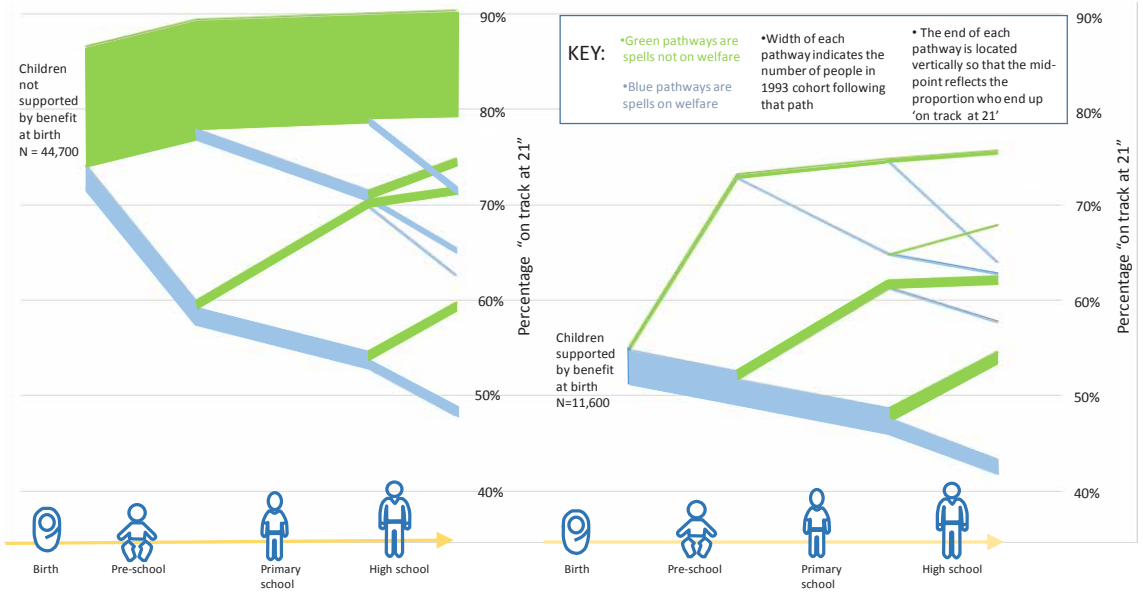
New Zealand Treasury, *Using IDI Data to Estimate Fiscal Impacts of Better Social Sector Performance* (2016)

'Appendix Figure 2 shows:

- Higher "on track at 21" rates for those with no history of being supported by welfare at birth or during their childhood and that this is by far the largest sub-group.
- Relatively even negative slopes for those who experience welfare at all ages from preschool to high school, regardless of the extent of welfare in their lives up to that point (i.e. the slopes of the branches are reasonably similar when comparing them with others above or below them in the diagram).
- Smaller but (generally) consistent negative slopes for those with periods of welfare later in childhood (i.e. the slopes of the branches get progressively smaller when comparing them with others to the right of them in the diagram).
- Those with two or more terms of welfare support have lower "on track" rates compared to those without multiple terms of welfare support.

At this point it is important to emphasise that in using welfare support as a "risk factor" we are pointing to its interpretation as a proxy for adverse events that may have led the family to need welfare support from the state. However the intention of welfare support will have been to help buffer the family from the worst impacts of these events and their consequent exposure to periods of very low income. This (presumably) beneficial effect is also reflected in moderating the sizes of the slopes of the branches in this graph from what they would have otherwise been.'

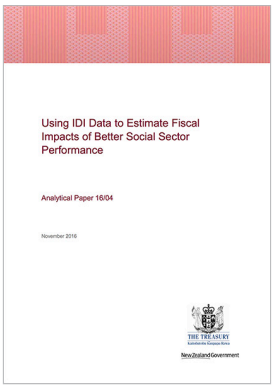
Appendix Figure 2 – Family welfare history and adult outcomes



3 New Zealand Treasury. (2016). *Using IDI Data to Estimate Fiscal Impacts of Better Social Sector Performance*, pp. 25–26. Retrieved 16 January 2017 from www.treasury.govt.nz/publications/research-policy/ap/2016/16-04/ap16-04.pdf.

3. Subset of family welfare diagram – Children supported by benefit at birth

▼ EXCERPT FROM NEW ZEALAND TREASURY, *USING IDI DATA TO ESTIMATE FISCAL IMPACTS OF BETTER SOCIAL SECTOR PERFORMANCE* (2016)[4]

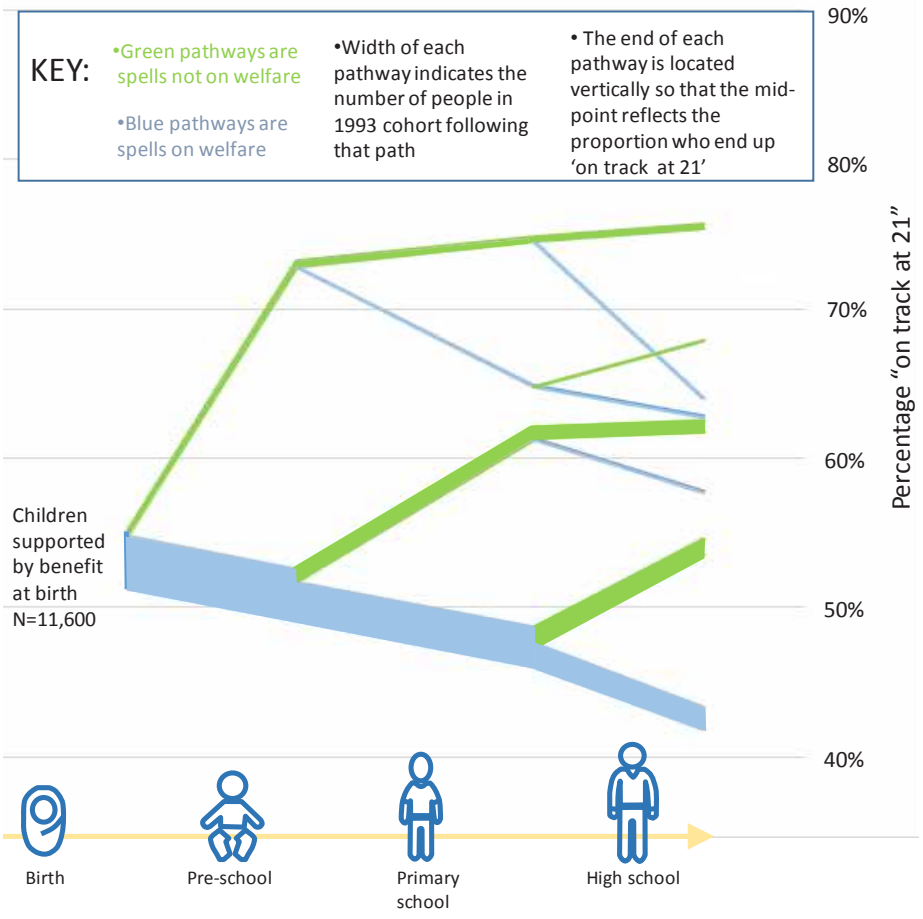


New Zealand Treasury, *Using IDI Data to Estimate Fiscal Impacts of Better Social Sector Performance* (2016)

'Appendix Figure 3 is an extract from Appendix Figure 2 which illustrates family welfare pathways for the 1993 cohort. Focussing on the group of children supported by benefit at birth, but whose families subsequently have less time supported by benefit (green pathway), we see higher rates of being "on track at 21" (76%), in fact quite close to the cohort's overall average of 77%. Those children whose families have significant time on benefit consistently through the child's life, have much lower "on track at 21" rates (43%).

Unpicking the data in this way can help us see the potential of policies that target at different times in children's lives. Always, of course, bearing mind that we are not inferring that the spells on benefit caused poorer outcomes, but rather highlighting the potential of identifying possible groups to target (and when in their lives) for the provision of better social services.'

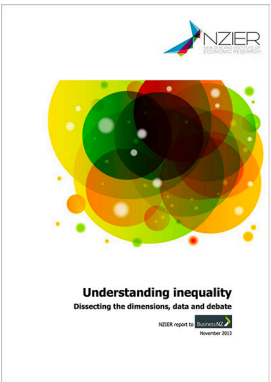
Appendix Figure 3: Subset of family welfare diagram – Children supported by benefit at birth



4 New Zealand Treasury. (2016). *Using IDI Data to Estimate Fiscal Impacts of Better Social Sector Performance*, p. 27. Retrieved 16 January 2017 from www.treasury.govt.nz/publications/research-policy/ap/2016/16-04/ap16-04.pdf.

4. Personal income mobility 2005–10

▼ EXCERPT FROM NEW ZEALAND INSTITUTE OF ECONOMIC RESEARCH, *UNDERSTANDING INEQUALITY* (2013)[5]



New Zealand Institute of Economic Research, *Understanding inequality* (2013)

'A summary of income mobility from tax data is shown in Table 4. On average, 1 in 10 people moved from one income decile to another between 2005 and 2010. More people moved out of the bottom half of incomes and into the top half of incomes than fell from the top half.

Movements from the very bottom of the distribution to the very top are reasonably rare; 1.5% of people (~2000 people) moved from the lowest decile to the highest and 2.1% (~4000) moved from the top to the bottom.'

Table 4: Personal income mobility 2005–10

Percentage of people moving between annual income deciles. Dollars are 1000s.

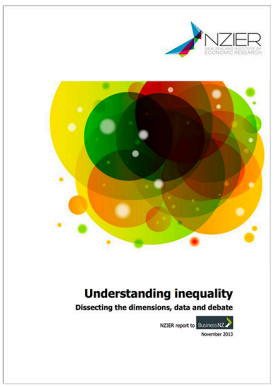
	From									
To	$2.20	$6.40	$12.30	$19.70	$26.80	$33.50	$40.20	$49.30	$64.00	$64+
$2.80	26.1%	13.5%	10.1%	7.7%	5.5%	4.1%	3.1%	2.6%	2.2%	2.1%
$8.10	15.0%	16.5%	11.9%	8.4%	6.2%	4.4%	3.3%	2.5%	2.0%	1.5%
$15.30	14.1%	15.1%	16.5%	12.5%	8.4%	6.0%	4.6%	3.4%	2.7%	2.0%
$24.20	12.0%	13.3%	15.6%	18.9%	13.2%	8.6%	6.4%	4.6%	3.6%	2.4%
$32.30	10.1%	11.9%	12.6%	16.4%	20.1%	13.1%	8.0%	5.3%	3.9%	2.5%
$39.90	8.0%	10.2%	10.8%	12.6%	18.3%	22.5%	14.0%	7.4%	4.6%	2.5%
$48.00	6.2%	8.3%	9.0%	9.8%	13.0%	19.6%	24.3%	14.6%	6.8%	3.4%
$59.30	4.3%	6.2%	7.2%	7.1%	8.6%	12.7%	21.0%	28.5%	14.6%	5.0%
$77.50	2.6%	3.4%	4.5%	4.4%	4.7%	6.5%	11.7%	23.6%	37.6%	13.9%
$77.5+	1.5%	1.5%	1.9%	2.1%	2.1%	2.4%	3.7%	7.5%	21.9%	64.8%

Source: Statistics NZ LEED

5 New Zealand Institute of Economic Research. (2013). *Understanding inequality*, p. 15. Retrieved 16 January 2017 from www.businessnz.org.nz/__data/assets/pdf_file/0004/85927/NZIER-Understanding-Inequality.pdf.

5. Probability of household moving decile from year to year

▼ EXCERPT FROM NEW ZEALAND INSTITUTE OF ECONOMIC RESEARCH, *UNDERSTANDING INEQUALITY* (2013)[6]



New Zealand Institute of Economic Research, *Understanding inequality* (2013)

'Families at the bottom end of the income distribution (decile 1) have a high probability of remaining there over time – compared with the rates at which others move between income deciles (see Table 5). This observation at the family level differs significantly from the income mobility picture painted earlier. This is because the statistics shown here are adjusted for size of families including non-earners, which are mostly children.

The study from which the data in Table 5 is taken also notes that:

> Where cross-sctional low income (<60% of median household equivalised income) rates were around 24% (low income estimate) the longitudinal estimate of low income prevalence over seven years is approximately double this (50%) – i.e. half of the sample experienced one or more years of low income.[7]

That is, at the family level incomes at the low end might move up and down a bit but they are persistently lower for longer with less mobility and more deprivation than for other families.

Qualitative measures of deprivation have been used to gauge absolute levels of hardship. The findings show that 6–7% of people are in deprivation in any given year and that of those people who were in deprivation in year 1, 40% remained in deprivation 7 years later.'

Table 5: Probability of household moving decile from year to year

Deciles based on equivalised household income

	From									
To	1	2	3	4	5	6	7	8	9	10
1	50.6%	17.4%	8.7%	6.0%	4.3%	3.1%	2.8%	2.5%	2.4%	2.4%
2	18.8%	44.0%	18.8%	6.8%	4.6%	2.4%	1.7%	1.4%	0.8%	0.7%
3	10.3%	19.8%	36.8%	15.5%	7.1%	3.8%	2.5%	1.8%	1.2%	1.4%
4	6.1%	8.7%	17.9%	33.8%	15.3%	7.1%	4.7%	2.7%	1.7%	1.6%
5	4.3%	3.6%	8.3%	19.6%	32.3%	16.2%	7.1%	4.0%	2.9%	1.8%
6	2.8%	2.6%	3.6%	8.8%	19.0%	32.4%	16.3%	7.9%	4.0%	2.4%
7	2.2%	1.6%	2.3%	4.0%	8.9%	20.0%	34.0%	16.5%	6.6%	3.9%
8	1.8%	1.2%	1.8%	2.5%	4.1%	8.5%	20.8%	35.8%	17.1%	6.5%
9	1.5%	0.6%	0.9%	2.0%	2.5%	3.8%	7.1%	20.9%	44.9%	15.8%
10	1.7%	0.6%	1.0%	1.1%	1.8%	2.5%	2.8%	6.6%	18.4%	63.5%

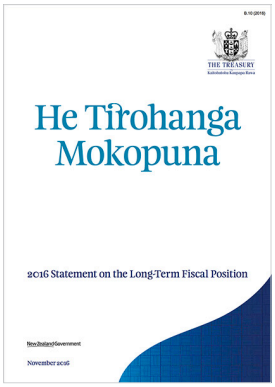
Source: Carter and Gunasekara, University of Otago (2012)

6 New Zealand Institute of Economic Research. (2013). *Understanding inequality*, pp. 25–26. Retrieved 16 January 2017 from www.businessnz.org.nz/__data/assets/pdf_file/0004/85927/NZIER-Understanding-Inequality.pdf.

7 Carter, K. & Imlach Gunasekara, F. (2012). *Dynamics of Income and Deprivation in New Zealand, 2002–2009: A descriptive analysis of the Survey of Family, Income and Employment* (SoFIE) (Public Health Monograph Series: No. 24). Wellington: Department of Public Health, University of Otago, Wellington.

6. Differences in outcomes between people at high risk and others

▼ EXCERPT FROM NEW ZEALAND TREASURY, *HE TIROHANGA MOKOPUNA 2016: STATEMENT ON THE LONG-TERM FISCAL POSITION* (2016)[8]



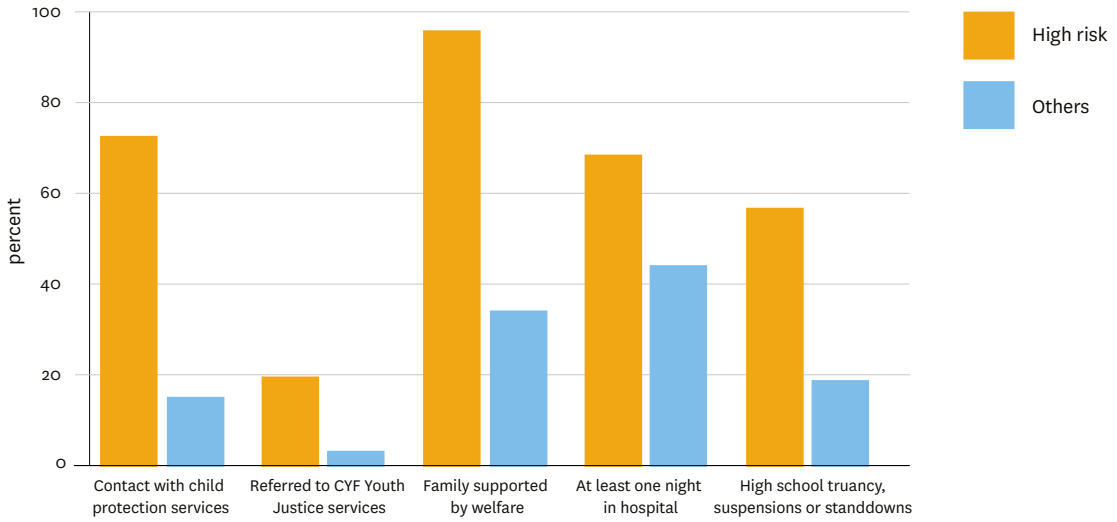
New Zealand Treasury, *He Tirohanga Mokopuna 2016: Statement on the Long-Term Fiscal Position* (2016)

'Some New Zealanders experience barriers to social and economic participation that lead to lower living standards. For example, a lack of skills, previous criminal convictions, and health issues, can make finding employment difficult. Government has a range of services designed to reduce these barriers. However, accessing some services can itself be a barrier for participation, for example because of the time required to gather supporting evidence and the challenge of complying with paperwork.

The Treasury's analysis shows most people experiencing persistent disadvantage access government services repeatedly. Figure 4.1 uses the Integrated Data Infrastructure (IDI), a data set that links routinely-collected government data, including on children and their families. The figure shows the rates of uptake of services for two groups – the 10 percent of people now in their early 20s who at birth could be shown to be at high risk of poor welfare and corrections outcomes and other people of the same age. The IDI information shows that high-risk children have a significantly increased likelihood of engaging with social services throughout their lifetimes.'

'However, income inequality is only one input into life outcomes. Outcomes for people also depend on a range of other factors including access to quality education, jobs, healthcare, stable home environments, material hardship and persistent disadvantage. This highlights the importance of providing all New Zealanders with the opportunities they need to participate and develop their capabilities so that they can live independent and productive lives.'

Figure 4.1 – Differences in outcomes between people at high risk and others



Source: See the background paper prepared for this Statement: The benefits of improved social sector performance.

8 New Zealand Treasury. (2016). *He Tirohanga Mokopuna 2016: Statement on the Long-Term Fiscal Position*, pp. 43–44. Retrieved 16 January 2017 from www.treasury.govt.nz/government/longterm/fiscalposition/2016/he-tirohangamokopuna/ltfs-16-htm.pdf.

7. Percentage of children with current and persistent low incomes

▼ EXCERPT FROM SIMPSON, J., DUNCANSON, M., OBEN, G., WICKEN, A. & GALLAGHER, S., *CHILD POVERTY MONITOR 2016 TECHNICAL REPORT* (2016)[9]

Simpson, J., Duncanson, M., Oben, G., Wicken, A. & Gallagher, S. *Child Poverty Monitor 2016 Technical Report* (2016)

'Poverty persistence was defined as being when a participant's average income over the seven years of the survey was below the average low income poverty line over the same period.'

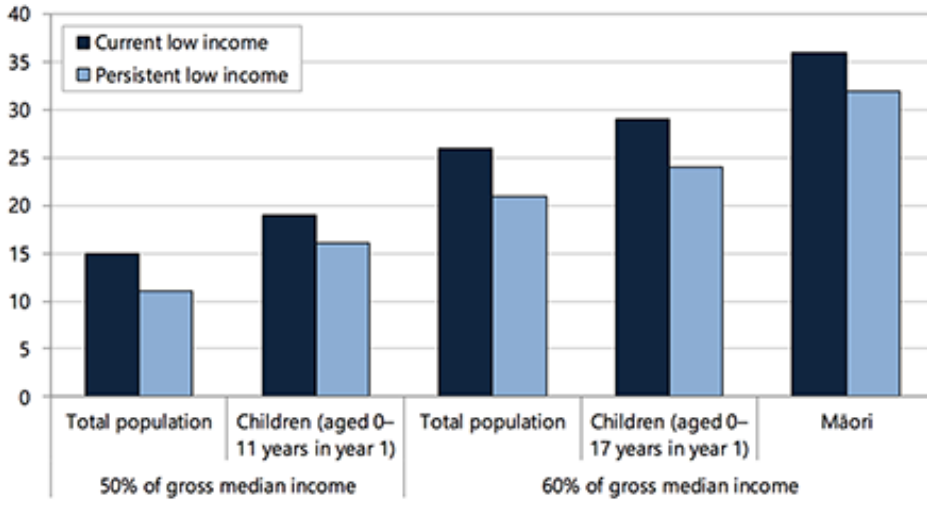
'50% gross median threshold

When the threshold used was 50% of the gross median income, 16% of children who were aged 0–11 years in the first year (2002–03) were deemed to be in persistent poverty and 19% in current poverty over the seven years (Figure 19). In any one year, three out of five (60%) 0–11 year olds living in current poverty were also in persistent (also called chronic) poverty using the 50% gross median threshold. There was also a further group of children who, although not in poverty in the current year, were in persistent poverty when their households' incomes were averaged over the seven survey years.

60% gross median threshold

Of those aged 0–17 years in the first year of SoFIE [Survey of Family, Income and Employment] (2002–03), 24% lived in households experiencing persistent poverty where the household income averaged across all seven years was below 60% of the gross median. 29% were deemed to be in current poverty as their household income was below 60% of the gross median in the year under review (Figure 19). This difference reflected the mix of those in poverty comprising those who had transiently moved into poverty in any given year, and those who were living in long term poverty. Māori children and young people were over represented in households living with current and persistent low incomes at the 60% gross median threshold with 36% in current low income and 32% in persistent low income. The rate of persistent poverty was around 81% of the current low income for the total population, 83% for 0–17 year olds and 88% for Māori.'

Figure 19: Percentage of children with current and persistent low incomes, Statistics New Zealand's Survey of Family, Income and Employment (SoFIE) 2002–2009

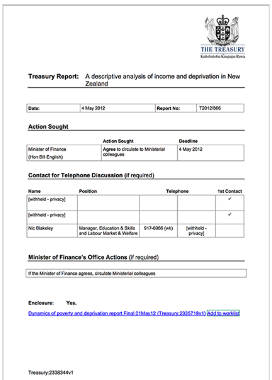


Source: Perry 2016 derived from Statistics NZ's Survey of Family, Income and Employment 2002–2009

9 Simpson, J., Duncanson, M., Oben, G., Wicken, A. & Gallagher, S. (2016). *Child Poverty Monitor 2016 Technical Report,* p. 25. Retrieved 16 January 2017 from www.ourarchive.otago.ac.nz/bitstream/handle/10523/7006/2016%20CPM.pdf?sequence=4&isAllowed=y.

8. Characteristics of population with persistent deprivation

▼ EXCERPT FROM NEW ZEALAND TREASURY, *A DESCRIPTIVE ANALYSIS OF INCOME AND DEPRIVATION IN NEW ZEALAND* (REPORT NO. T2012/866) (2012)[10]


THE TREASURY
Kaitohutohu Kaupapa Rawa

Treasury Report: A descriptive analysis of income and deprivation in New Zealand

Date:	4 May 2012	**Report No:**	T2012/866

Action Sought

	Action Sought	Deadline
Minister of Finance (Hon Bill English)	**Agree** to circulate to Ministerial colleagues	4 May 2012

Contact for Telephone Discussion (if required)

Name	Position	Telephone		1st Contact
[withheld - privacy]				✓
[withheld - privacy]				✓
Nic Blakeley	Manager, Education & Skills and Labour Market & Welfare	917-6986 (wk)	[withheld - privacy]	

Minister of Finance's Office Actions (if required)

If the Minister of Finance agrees, circulate Ministerial colleagues

Enclosure: **Yes.**

Dynamics of poverty and deprivation report Final 01May12 (Treasury:2335718v1) Add to worklist

Treasury:2338344v1

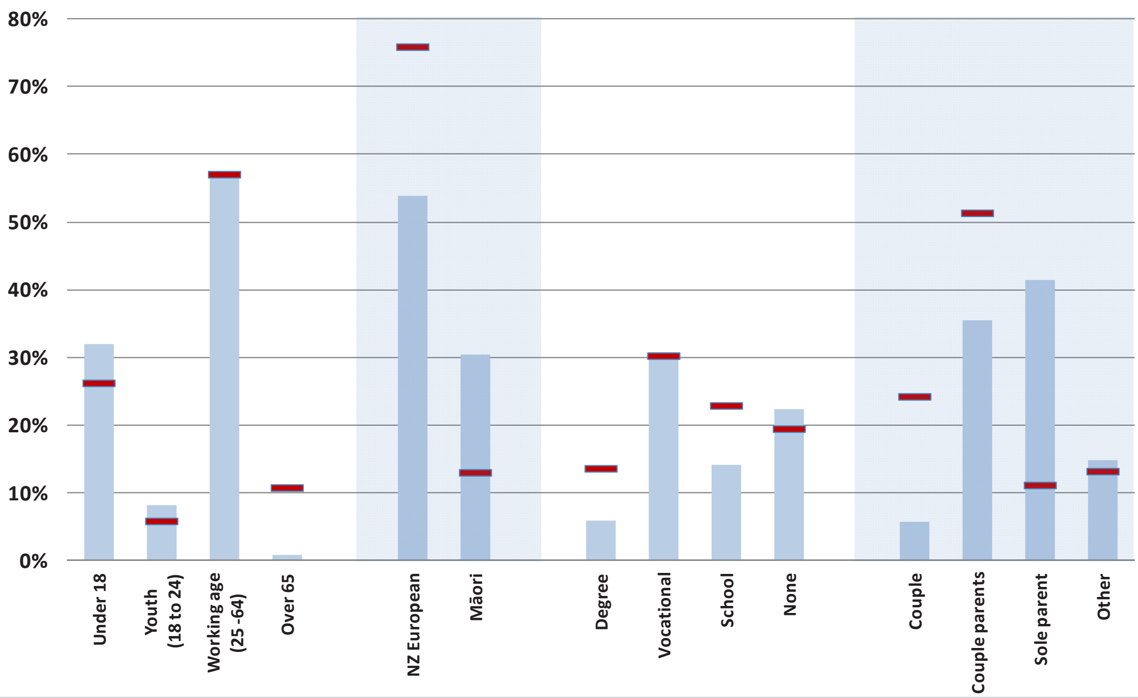
New Zealand Treasury, *A descriptive analysis of income and deprivation in New Zealand* (Report No. T2012/866) (2012)

'The blue bars in the figure below characterise the 6% of the population with persistent deprivation by age, ethnicity, educational and family status. The height of the blue bar shows the proportion of those with persistent deprivation that have that characteristic. The red dashes show the proportion with that characteristic in the population as a whole. Where the red bar is higher than the blue bar, a person with that characteristic is less likely to be in persistent deprivation than the population as a whole.

a **What characterises people in persistent deprivation?** The height of the blue bars shows that most people in persistent deprivation are aged 25 to 64, New Zealand European, have vocational qualifications and are sole parents.

b **People with which characteristics are more likely to be in persistent deprivation?** The difference between the height of the blues *[sic]* bars and the red dashes shows under 18s and youths, Māori, those with low qualifications, and sole parents more likely to be in persistent deprivation.'

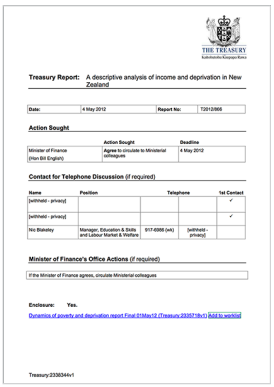
Characteristics of population with persistent deprivation



10 New Zealand Treasury. (2012). *A descriptive analysis of income and deprivation in New Zealand* (Report No. T2012/866), pp. 2–3. Retrieved 17 January 2017 from www.treasury.govt.nz/publications/informationreleases/income-deprivation/t2012-866.pdf.

9. Characteristics of those who moved out of low income

▼ EXCERPT FROM NEW ZEALAND TREASURY, *A DESCRIPTIVE ANALYSIS OF INCOME AND DEPRIVATION IN NEW ZEALAND* (REPORT NO. T2012/866) (2012)[11]



Treasury Report: A descriptive analysis of income and deprivation in New Zealand

Date: 4 May 2012 | Report No: T2012/866

Action Sought

	Action Sought	Deadline
Minister of Finance (Hon Bill English)	Agree to circulate to Ministerial colleagues	4 May 2012

Contact for Telephone Discussion (if required)

Name	Position	Telephone		1st Contact
[withheld - privacy]				✓
[withheld - privacy]				✓
Nic Blakeley	Manager, Education & Skills and Labour Market & Welfare	917-6906 (wk)	[withheld - privacy]	

Minister of Finance's Office Actions (if required)

If the Minister of Finance agrees, circulate Ministerial colleagues

Enclosure: Yes.

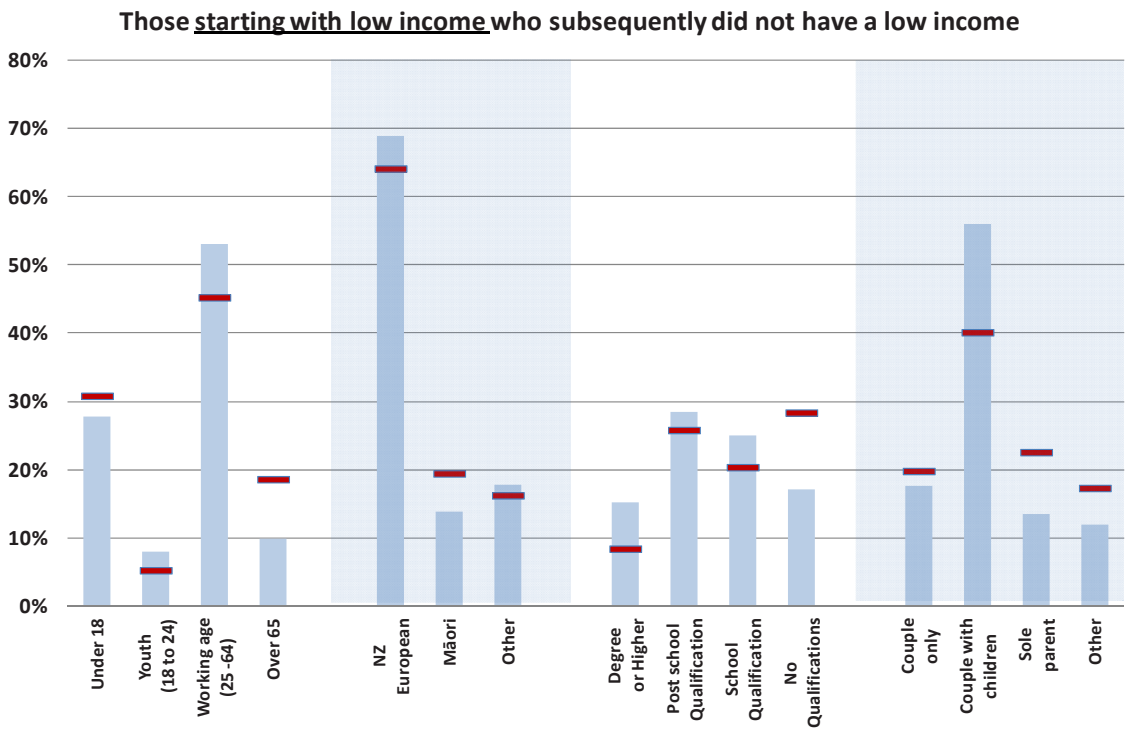
Dynamics of poverty and deprivation report Final 01Mar12 (Treasury:2338719v1) Add to word list

Treasury:2338344v1

New Zealand Treasury, *A descriptive analysis of income and deprivation in New Zealand* (Report No. T2012/866) (2012)

b **'People with which characteristics started with a low income and then avoided low incomes?** The difference between the height of the blues *[sic]* bars and the red dashes shows youths and those aged 25 to 64, New Zealand European, those with any qualification, and couples with children were more likely to move on from having a low income.'

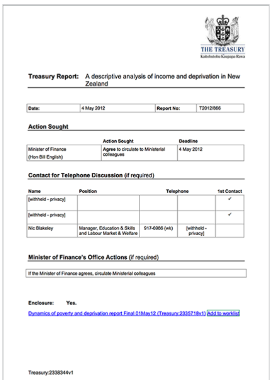
Figure 9: Characteristics of those who moved out of low income



11 New Zealand Treasury. (2012). *A descriptive analysis of income and deprivation in New Zealand* (Report No. T2012/866), p. 12. Retrieved 17 January 2017 from www.treasury.govt.nz/publications/informationreleases/income-deprivation/t2012-866.pdf.

10. Characteristics of those moved into low income

▼ EXCERPT FROM NEW ZEALAND TREASURY, *A DESCRIPTIVE ANALYSIS OF INCOME AND DEPRIVATION IN NEW ZEALAND* (REPORT NO. T2012/866) (2012)[12]


THE TREASURY
Kaitohutohu Kaupapa Rawa

Treasury Report: A descriptive analysis of income and deprivation in New Zealand

Date:	4 May 2012	**Report No:**	T2012/866

Action Sought

	Action Sought	Deadline
Minister of Finance (Hon Bill English)	**Agree** to circulate to Ministerial colleagues	4 May 2012

Contact for Telephone Discussion (if required)

Name	Position	Telephone		1st Contact
[withheld - privacy]				✓
[withheld - privacy]				✓
Nic Blakeley	Manager, Education & Skills and Labour Market & Welfare	917-6986 (wk)	[withheld - privacy]	

Minister of Finance's Office Actions (if required)

If the Minister of Finance agrees, circulate Ministerial colleagues

Enclosure: Yes.

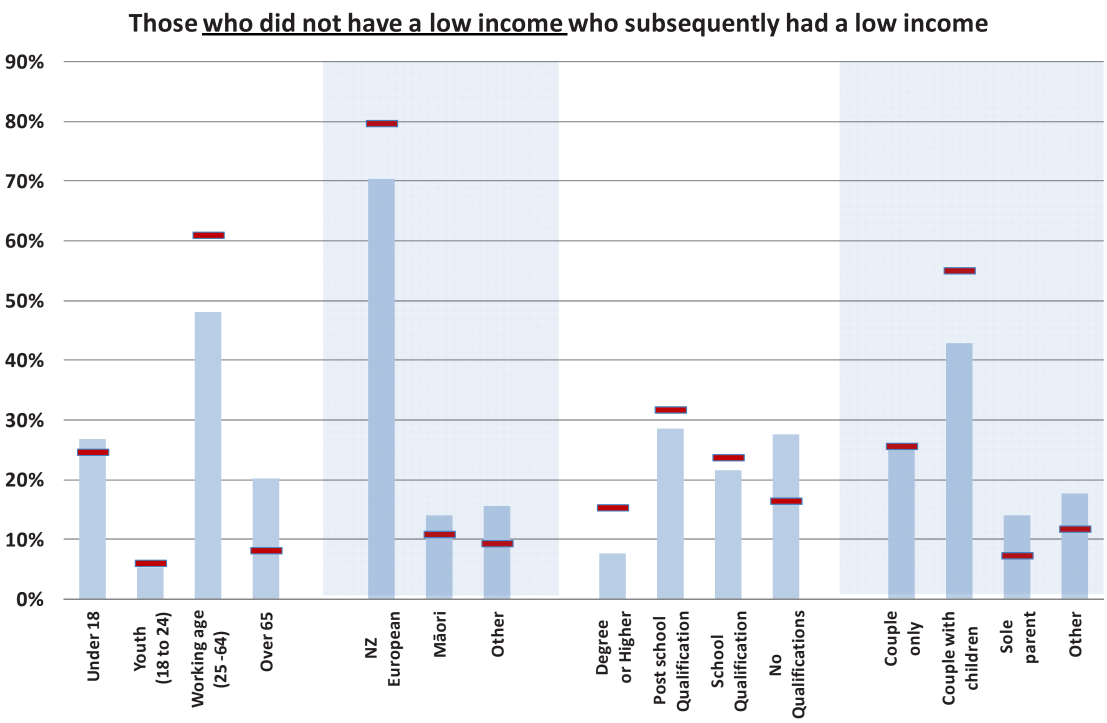
Dynamics of poverty and deprivation report Final 01May12 (Treasury:2335718v1) Add to worklist

Treasury:2338344v1

New Zealand Treasury, *A descriptive analysis of income and deprivation in New Zealand* (Report No. T2012/866) (2012)

b **'People with which characteristics did not have a low income and then had low incomes?** The difference between the height of the blues *[sic]* bars and the red dashes shows those under 18 and over 65, those who were not New Zealand European, those with no qualification, and those not living in a couple were more likely to move into low incomes.'

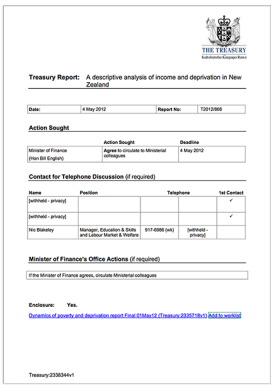
Figure 10: Characteristics of those moved into low income



12 New Zealand Treasury. (2012). *A descriptive analysis of income and deprivation in New Zealand* (Report No. T2012/866), pp. 12–13. Retrieved 17 January 2017 from www.treasury.govt.nz/publications/informationreleases/income-deprivation/t2012-866.pdf.

11. Impact of low income on deprivation 2003–09

▼ EXCERPT FROM NEW ZEALAND TREASURY, *A DESCRIPTIVE ANALYSIS OF INCOME AND DEPRIVATION IN NEW ZEALAND* (REPORT NO. T2012/866) (2012)[13]



Treasury Report: A descriptive analysis of income and deprivation in New Zealand

Date: 4 May 2012 Report No: T2012/866

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Name	Position	Telephone		1st Contact
[withheld - privacy]				✓
[withheld - privacy]				✓
Nic Blakeley	Manager, Education & Skills and Labour Market & Welfare	917-6906 (wk)	[withheld - privacy]	

Minister of Finance's Office Actions (if required)

If the Minister of Finance agrees, circulate Ministerial colleagues

Enclosure: Yes.

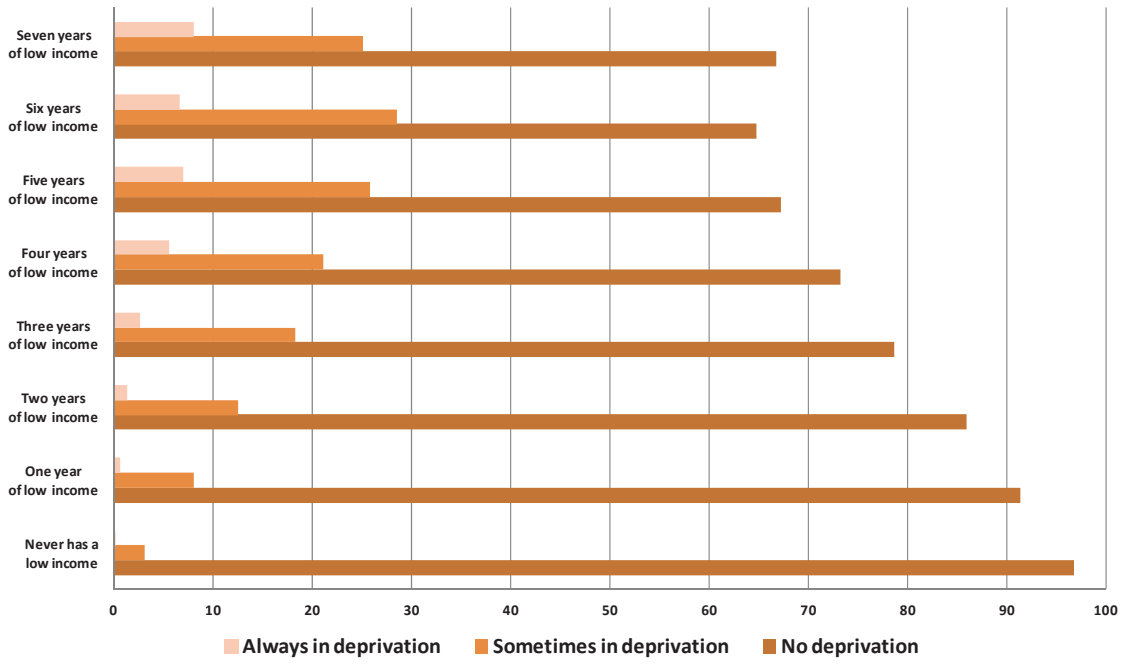
Dynamics of poverty and deprivation report Final 01Mar12 (Treasury:2338719v1) [Add to workbid]

Treasury:2338344v1

New Zealand Treasury, *A descriptive analysis of income and deprivation in New Zealand* (Report No. T2012/866) (2012)

'The scale of the alignment between deprivation and income is sensitive to the definitions of deprivation and low income (a looser definition of deprivation and narrower definition of low income lead to a closer link between the two). As in previous studies, longer periods of low income are linked to higher deprivation, but the link between them is modest. Only a third of those who had seven years of low income had been in deprivation at any point.'

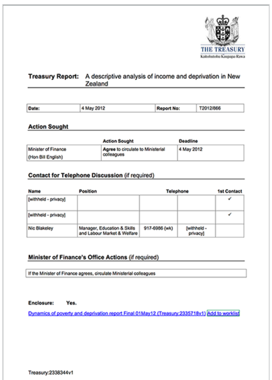
Impact of low income on deprivation 2003–09



13 New Zealand Treasury. (2012). *A descriptive analysis of income and deprivation in New Zealand* (Report No. T2012/866), p. 3. Retrieved 17 January 2017 from www.treasury.govt.nz/publications/informationreleases/income-deprivation/t2012-866.pdf.

12. The proportion of the population experiencing low income at least once

▼ EXCERPT FROM NEW ZEALAND TREASURY, *A DESCRIPTIVE ANALYSIS OF INCOME AND DEPRIVATION IN NEW ZEALAND* (REPORT NO. T2012/866) (2012)[14]



THE TREASURY
Kaitohutohu Kaupapa Rawa

Treasury Report: A descriptive analysis of income and deprivation in New Zealand

Date:	4 May 2012	**Report No:**	T2012/866

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Nic Blakeley	Manager, Education & Skills and Labour Market & Welfare	917-6986 (wk)	[withheld - privacy]	

Minister of Finance's Office Actions (if required)

If the Minister of Finance agrees, circulate Ministerial colleagues

Enclosure: Yes.

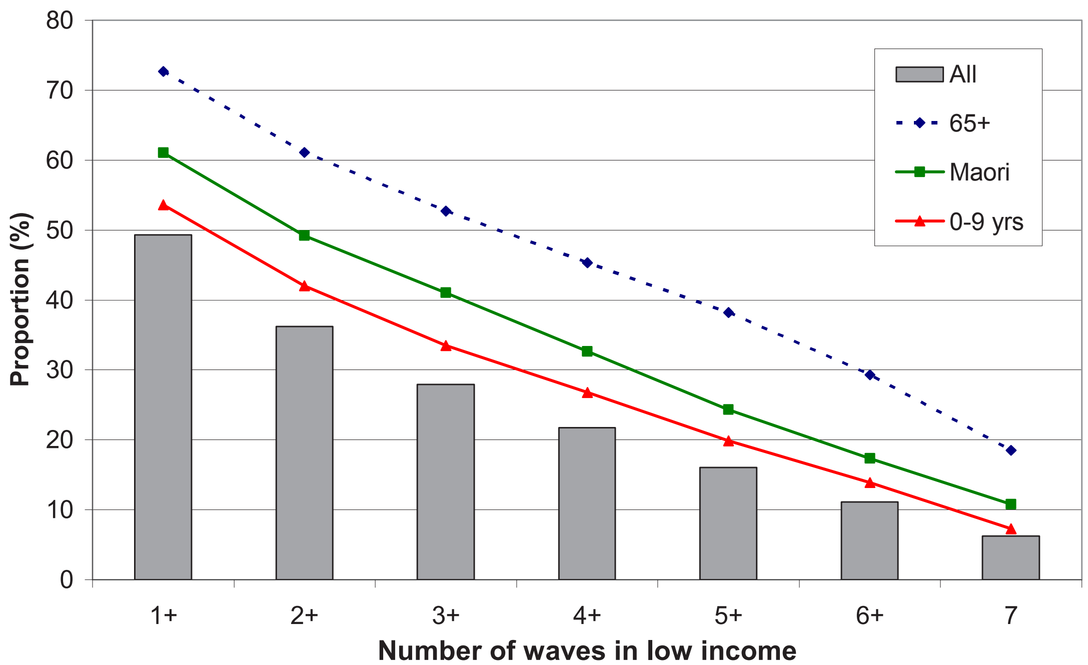
Dynamics of poverty and deprivation report Final 01May12 (Treasury:2335718v1) Add to worklist

Treasury:2338344v1

New Zealand Treasury, *A descriptive analysis of income and deprivation in New Zealand* (Report No. T2012/866) (2012)

'The level of income mobility suggests a large proportion of the population experiences low income levels at some point in time. On the definition used in this paper, around 25% of the population has a low income in any single year, but Figure 7 shows that over the seven years covered here 50% of the population experienced low income at least once.'

Figure 7: The proportion of the population experiencing low income at least once



14 New Zealand Treasury. (2012). *A descriptive analysis of income and deprivation in New Zealand* (Report No. T2012/866), p. 10. Retrieved 17 January 2017 from www.treasury.govt.nz/publications/informationreleases/income-deprivation/t2012-866.pdf.

B: Relative income/material hardship

Relative income is measured using two thresholds relative to the median income of New Zealand: before housing costs (BHC) and after housing costs (AHC). These measures are usually benchmarked at 60% of the median income representing income poverty and 50%, representing severe income poverty. While relative income does not necessary translate directly to poverty,

> Low incomes can limit people's abilities to take part in their community and society, and may lower their quality of life. Long-lasting low family income in childhood is associated with negative outcomes, such as lower levels of education and poorer health.[15]

Material hardship can be measured using a variety of methods. For part 1B of this working paper we chose to focus on the frequently used DEP-17[16] measure of material hardship.

> The DEP-17 is an index of material hardship or deprivation, particularly suited to capturing the living standards of those at the low end of the material living standards. The DEP-17 items reflect enforced lack of essentials, enforced economising, cutting back or delaying purchases "a lot" because money was needed for other essentials, being in arrears more than once in last 12 months because of shortage of cash at the time (not through forgetting), and/or being in financial stress and vulnerability.[17]

15 Statistics New Zealand. (2015). *Population with low incomes.* Retrieved 16 January 2017 from www.stats.govt.nz/browse_for_stats/snapshots-of-nz/nz-social-indicators/Home/Standard%20of%20living/pop-low-incomes.aspx.

16 See www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/monitoring/child-material-hardship-2015.docx for DEP-17 index table.

17 Simpson, J., Duncanson, M., Oben, G., Wicken, A. & Gallagher, S. (2016). *Child Poverty Monitor 2016 Technical Report.* Retrieved 16 January 2017 from www.ourarchive.otago.ac.nz/bitstream/handle/10523/7006/2016%20CPM.pdf?sequence=4&isAllowed=y.

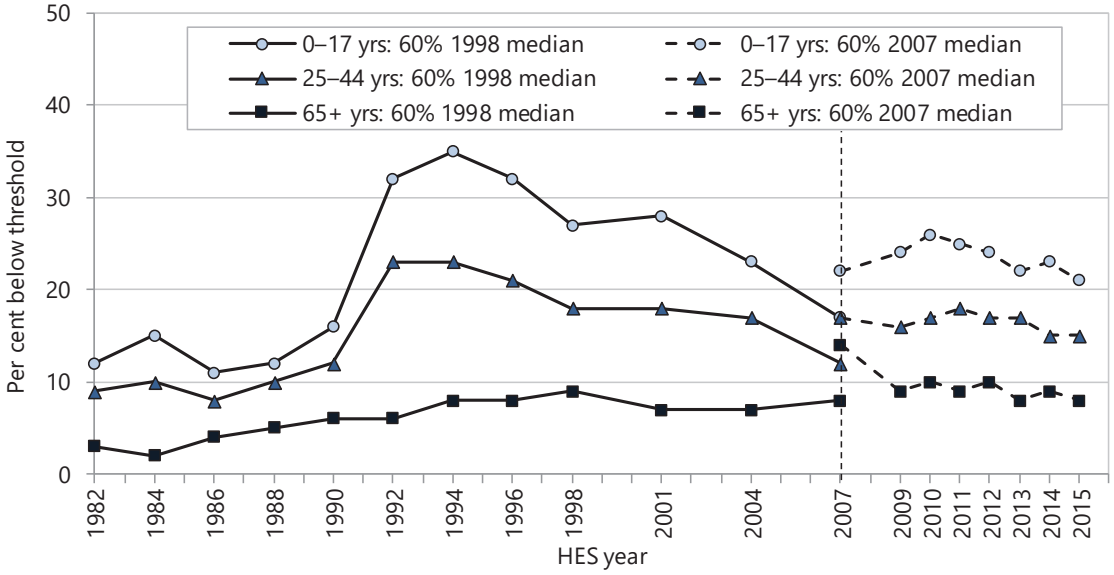
13. Population living below the 60% income poverty threshold (fixed-line) after housing costs by selected age-group, New Zealand 1982–2015 NZHES years

▼ EXCERPT FROM SIMPSON, J., DUNCANSON, M., OBEN, G., WICKEN, A. & GALLAGHER, S., *CHILD POVERTY MONITOR 2016 TECHNICAL REPORT* (2016)[18]

Simpson, J., Duncanson, M., Oben, G., Wicken, A. & Gallagher, S. *Child Poverty Monitor 2016 Technical Report* (2016)

'Children and young people aged 0–17 years are much more likely to be in poverty than adults aged 65+ years. In 2015, they were 2.6 times more likely (21% for 0–17 year olds compared to 8% for 65+ years). During the whole period 1982 to 2015, poverty rates were also consistently higher for children aged 0–17 years than for adults aged 25–44 years. The lowest poverty rates were seen amongst those aged 65+ years.'

Figure 3: Population living below the 60% income poverty threshold (fixed-line) after housing costs by selected age-group, New Zealand 1982–2015 NZHES years



Source: New Zealand Household Economic Survey (NZHES) via Perry 2016

18 Simpson, J., Duncanson, M., Oben, G., Wicken, A. & Gallagher, S. (2016). *Child Poverty Monitor 2016 Technical Report,* pp. 10–11. Retrieved 16 January 2017 from www.ourarchive.otago.ac.nz/bitstream/handle/10523/7006/2016%20CPM.pdf?sequence=4&isAllowed=y.

14. Children and young people aged 0–17 years and selected sub-groups living in material hardship, New Zealand 2007–2015 NZHES years

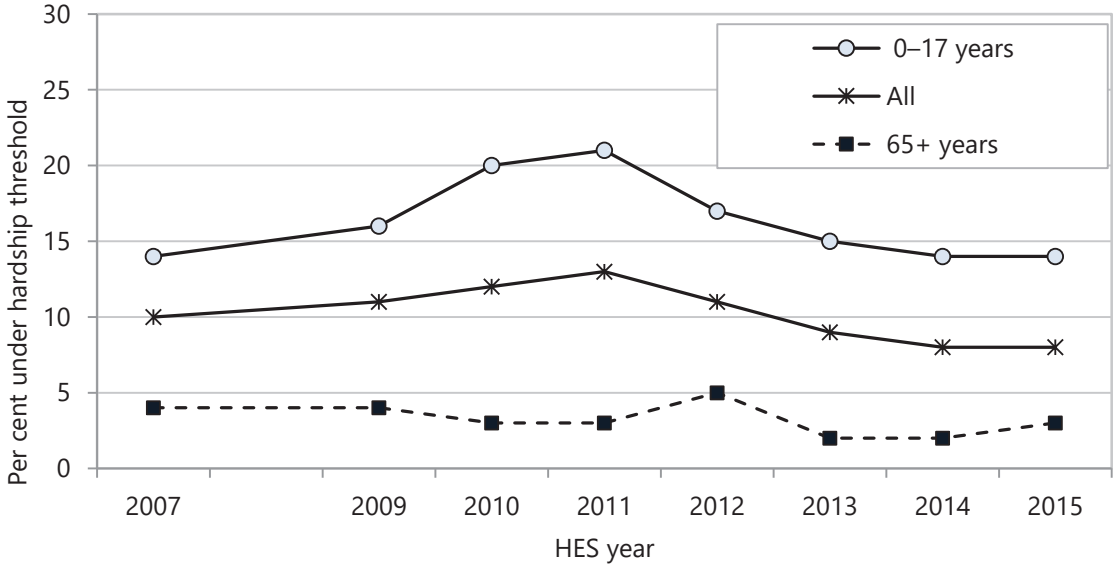
▼ EXCERPT FROM SIMPSON, J., DUNCANSON, M., OBEN, G., WICKEN, A. & GALLAGHER, S., *CHILD POVERTY MONITOR 2016 TECHNICAL REPORT* (2016)[19]

Simpson, J., Duncanson, M., Oben, G., Wicken, A. & Gallagher, S. *Child Poverty Monitor 2016 Technical Report* (2016)

'The following data are from the NZHES survey data from 2007–2015. At a MWI [Material Wellbeing Index] ≤9 severity threshold, the percentage of material hardship was consistently higher for children aged 0–17 years than for all ages or for older groups. The proportion of 0–17 year olds in material hardship at this level of severity rose from 16% in 2009 to 21% in 2011, before falling to 17% in 2012. In 2015, 14% of 0–17 year olds were at this level of hardship. The lowest hardship rates were among those aged 65+ years (Figure 9).

Children can experience material hardship whether their families are above or below the income-poverty threshold, however, a lower proportion of children from non income-poor families (those with a family income above the 60% poverty threshold) lived in material deprivation than did New Zealand children overall. The percentage rose slightly for children in non income-poor families between 2014 and 2015 with 8% of children from non income-poor families being under the hardship threshold compared to 14% of all children. Families with incomes above the 60% threshold may be in relatively precarious financial circumstances, and small drops in income or unexpected bills potentially make a significant difference to day-to-day living standards.'

Figure 9: Children and young people aged 0–17 years and selected sub-groups living in material hardship, New Zealand 2007–2015 NZHES years

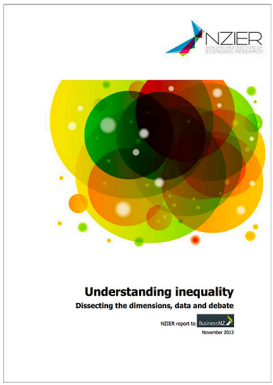


Source: New Zealand Household Economic Survey (NZHES) via Perry 2016 Hardship defined using Economic Living Standards Index (ELSI) and Material Wellbeing Index, MWI ≤9 which is ≡ 7+ on DEP-17

19 Simpson, J., Duncanson, M., Oben, G., Wicken, A. & Gallagher, S. (2016). *Child Poverty Monitor 2016 Technical Report,* p. 16. Retrieved 16 January 2017 from www.ourarchive.otago.ac.nz/bitstream/handle/10523/7006/2016%20CPM.pdf?sequence=4&isAllowed=y.

15. Recent changes in NZ Gini coefficients

▼ EXCERPT FROM NEW ZEALAND INSTITUTE OF ECONOMIC RESEARCH, *UNDERSTANDING INEQUALITY* (2013)[20]



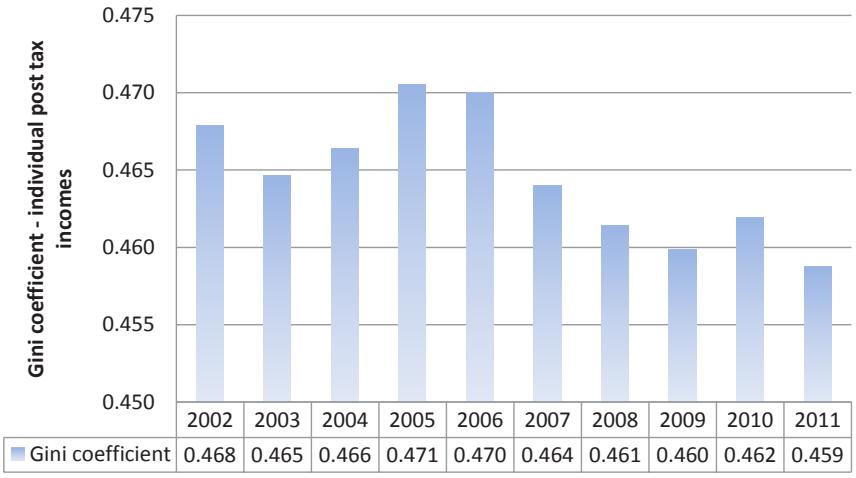
New Zealand Institute of Economic Research, *Understanding inequality* (2013)

'Over the past decade New Zealand's income distribution has become more equal. Gini coefficients have trended down on all income measures. There have been years when inequality worsened but the overall trend is downwards.

The gradually reducing inequality of the past decade is a reversal of a 30 year trend in increasing inequality which has been observed across all of the OECD.'

Note: The Gini coefficient is a measure that compares income distribution against a standard of perfect equality where 1 is perfect equality and 0 is a case where one person holds all the income in the country.

Figure 1: Recent changes in NZ Gini coefficients



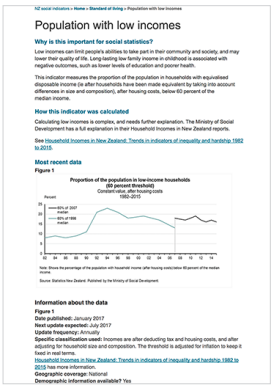
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Gini coefficient	0.468	0.465	0.466	0.471	0.470	0.464	0.461	0.460	0.462	0.459

Source: NZIER, LEED

20 New Zealand Institute of Economic Research. (2013). *Understanding inequality*, p. 5. Retrieved 16 January 2017 from www.businessnz.org.nz/__data/assets/pdf_file/0004/85927/NZIER-Understanding-Inequality.pdf.

16. Proportion of the population in low-income households (60 percent threshold)

▼ EXCERPT FROM STATISTICS NEW ZEALAND, *POPULATION WITH LOW INCOMES* (2015)[21]



Population with low incomes

Why is this important for social statistics?

Low incomes can limit people's abilities to take part in their community and society, and may lower their quality of life. Long-lasting low family income in childhood is associated with negative outcomes, such as lower levels of education and poorer health.

This indicator measures the proportion of the population in households with equivalised disposable income (ie after households have been made equivalent by taking into account differences in size and composition), after housing costs, below 60 percent of the median income.

How this indicator was calculated

Calculating low incomes is complex, and needs further explanation. The Ministry of Social Development has a full explanation in their Household Incomes in New Zealand reports.

See Household Incomes in New Zealand: Trends in indicators of inequality and hardship 1982 to 2015.

Most recent data

Figure 1

Proportion of the population in low-income households (60 percent threshold)
Constant value, after housing costs
1982–2015

Percent

60% of 2007 median
60% of 1998 median

82 84 86 88 90 92 94 96 98 00 02 04 06 08 10 12 14

Note: Shows the percentage of the population with household income (after housing costs) below 60 percent of the median income.

Source: Statistics New Zealand. Published by the Ministry of Social Development.

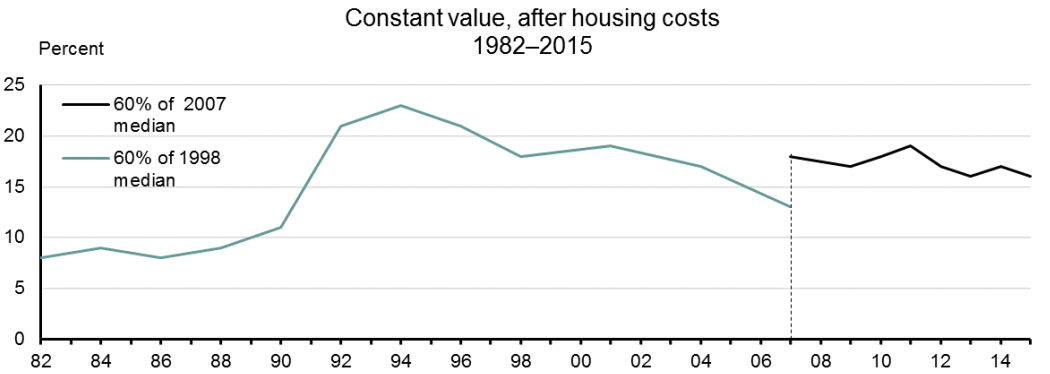
Information about the data

Figure 1
Date published: January 2017
Next update expected: July 2017
Update frequency: Annually
Specific classification used: Incomes are after deducting tax and housing costs, and after adjusting for household size and composition. The threshold is adjusted for inflation to keep it fixed in real terms.
Household Incomes in New Zealand: Trends in indicators of inequality and hardship 1982 to 2015 has more information.
Geographic coverage: National
Demographic information available? Yes

Statistics New Zealand, *Population with low incomes* (2015)

'This indicator measures the proportion of the population in households with equivalised disposable income (i.e. after households have been made equivalent by taking into account differences in size and composition), after housing costs, below 60 percent of the median income.'

Figure 1: Proportion of the population in low-income households (60 percent threshold)



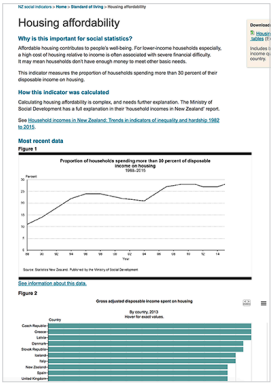
Note: Shows the percentage of the population with household income (after housing costs) below 60 percent of the median income.

Source: Statistics New Zealand. Published by the Ministry of Social Development.

21 Statistics New Zealand. (2015). *Population with low incomes*. Retrieved 16 January 2017 from www.stats.govt.nz/browse_for_stats/snapshots-of-nz/nz-social-indicators/Home/Standard%20of%20living/pop-low-incomes.aspx.

17. Proportion of households spending more than 30 percent of disposable income on housing

▼ EXCERPT FROM STATISTICS NEW ZEALAND, *HOUSING AFFORDABILITY* (2015)[22]


Housing affordability

Why is this important for social statistics?

How this indicator was calculated

Most recent data

Figure 1

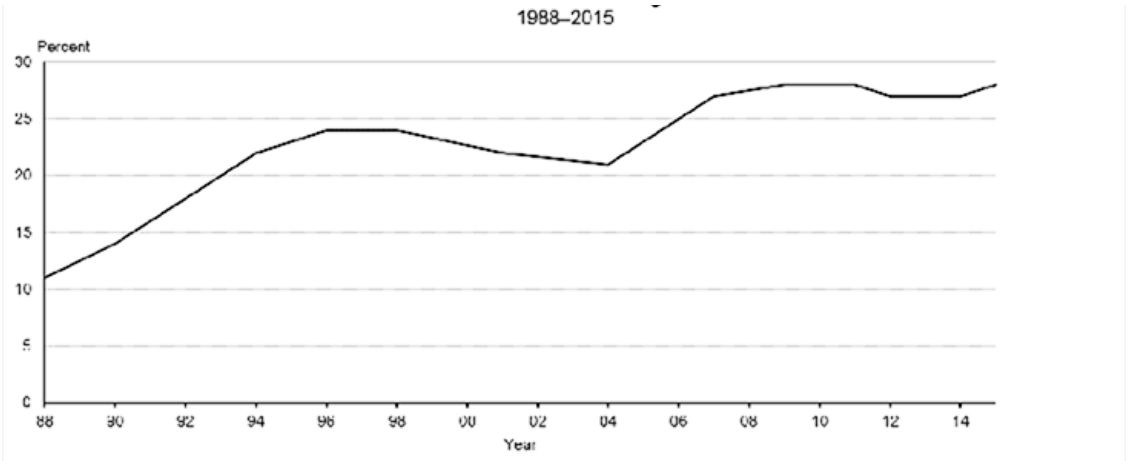
Figure 2

Statistics New Zealand, *Housing affordability* (2015)

'Affordable housing contributes to people's well-being. For lower-income households especially, a high cost of housing relative to income is often associated with severe financial difficulty. It may mean households don't have enough money to meet other basic needs.

This indicator measures the proportion of households spending more than 30 percent of their disposable income on housing.'

Figure 1: Proportion of households spending more than 30 percent of disposable income on housing



Source: Statistics New Zealand. Published by the Ministry of Social Development

22 Statistics New Zealand. (2015). *Housing affordability*. Retrieved 16 January 2017 from www.stats.govt.nz/browse_for_stats/snapshots-of-nz/nz-social-indicators/Home/Standard%20of%20living/housing-affordability.aspx.

18. Income inequality (P80/P20 ratio)

▼ EXCERPT FROM STATISTICS NEW ZEALAND, *INCOME INEQUALITY* (2015)[23]


Income inequality

Why is this important for social statistics?

How this indicator was calculated

Most recent data

Figure 1

Figure 2

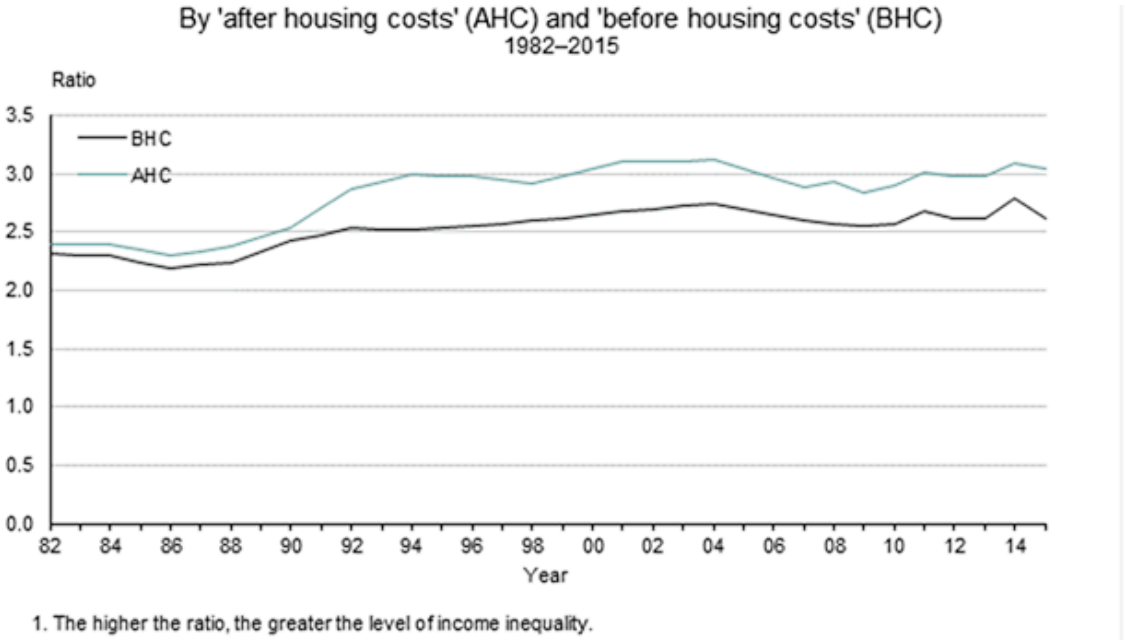
Statistics New Zealand, *Income inequality* (2015)

'The level of income inequality is often seen as a measure of the fairness of the society we live in. A high level of inequality may also mean the population is less socially connected as a whole.

This indicator measures inequality between high-income and low-income households, after adjusting for household size and composition.'

'The measure used for the New Zealand data is the P80/20 ratio, which shows the difference between high household incomes (those in the 80th percentile) and low household incomes (those in the 20th percentile).'

Figure 1: Income inequality (P80/P20 ratio)



Source: Statistics New Zealand. Published by the Ministry of Social Development

23 Statistics New Zealand. (2015). *Income inequality*. Retrieved 16 January 2017 from www.stats.govt.nz/browse_for_stats/snapshots-of-nz/nz-social-indicators/Home/Standard%20of%20living/income-inequality.aspx.

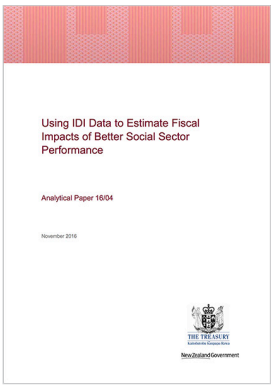
C: Education

Education is often seen as the key for people who are currently facing poverty to increase their wellbeing. H.S. Bhola's review of adult and lifelong education for poverty reduction found that 'Irrespective of the particular political ideology of a nation and of the specific strategy of mobilization, adult and lifelong education can and must play a significant role in reducing poverty, including preventing its inception.'[24] Currently however, a large portion of New Zealand students attending lower decile schools are not progressing into tertiary education (Graph 21). There may be a variety of reasons for this, such as a lack of jobs requiring tertiary education in a person's home region, or the impact of socioeconomic background on educational attainment. It is clear however, that investment in education provides positive outcomes fiscally and socially (Graph 20).

24 Bhola, H. (2006). *Adult and Lifelong Education for Poverty Reduction: A Critical Analysis of Contexts and Conditions. International Review of Education / Internationale Zeitschrift Für Erziehungswissenschaft / Revue Internationale De L'Education,52*(3/4), 231-246. Retrieved 8 October 2017 from www.jstor.org.ezproxy.auckland.ac.nz/stable/29737078.

19. Broader human capital investment: Comparing those who did not achieve NCEA Level 2 with those who did

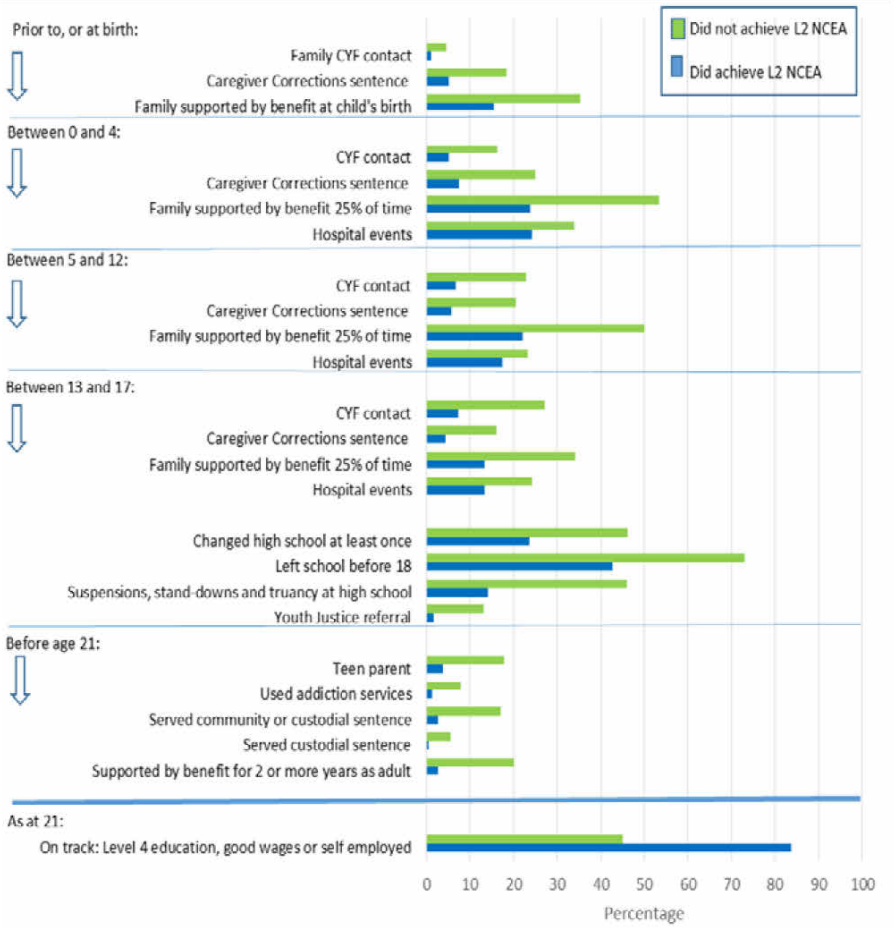
▼ EXCERPT FROM NEW ZEALAND TREASURY, *USING IDI DATA TO ESTIMATE FISCAL IMPACTS OF BETTER SOCIAL SECTOR PERFORMANCE* (2016)[25]



New Zealand Treasury, *Using IDI Data to Estimate Fiscal Impacts of Better Social Sector Performance* (2016)

'The figures [numbered 19, 22 and 28 in this working paper] are simply devices to present a profile of the current outcomes for the target groups compared to the aspirational benchmark for each scenario. Descriptive comparisons like these are at some risk of being mis-interpreted. Differences in composition of the two groups we are comparing will explain much of the difference in the various indicators we have presented. We are not implying that there are independent educational, regional, ethnic or early age risk effects of this magnitude.'

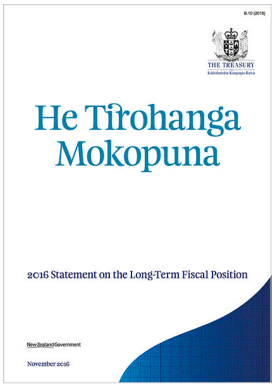
Figure 4: Broader human capital investment: Comparing those who did not achieve NCEA Level 2 with those who did



25 New Zealand Treasury. (2016). *Using IDI Data to Estimate Fiscal Impacts of Better Social Sector Performance*, pp. 8–9. Retrieved 16 January 2017 from www.treasury.govt.nz/publications/research-policy/ap/2016/16-04/ap16-04.pdf.

20. Potential fiscal impacts of improved outcomes for the most vulnerable children

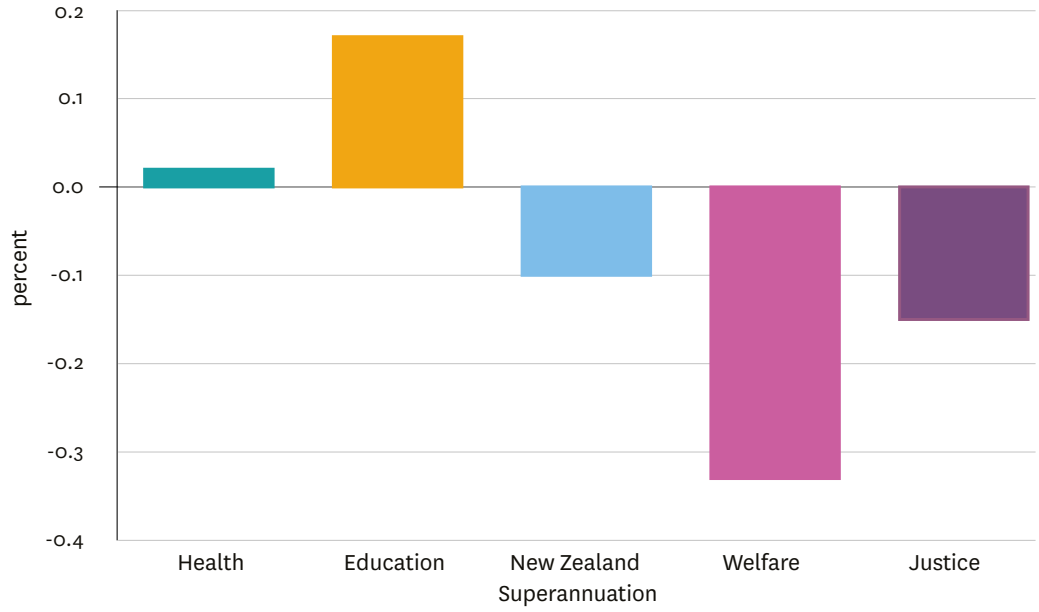
▼ EXCERPT FROM NEW ZEALAND TREASURY, *HE TIROHANGA MOKOPUNA: 2016 STATEMENT ON THE LONG-TERM FISCAL POSITION* (2015)[26]



New Zealand Treasury, *He Tirohanga Mokopuna: 2016 Statement on the Long-Term Fiscal Position* (2015)

'Relatively small reductions in the risk of poor outcomes for our most at-risk children could considerably improve their outcomes in life. Figure 4.3 shows the potential change in costs from marginally reducing the risk of poor outcomes for the 10 percent of children at highest risk to equate with that of the next 10 percent.'[27] 'Furthermore, socioeconomic background has more impact on educational attainment in New Zealand than in most other OECD countries.'[28]

Figure 4.3 – Potential fiscal impacts of improved outcomes for the most vulnerable children



Source: See the background paper prepared for this Statement: The benefits of improved social sector performance.

Note: This figure relates to Scenario E in Figure 6.3 of this Statement. Fiscal impact is the percentage point of GDP change in costs relative to the Historical Spending Patterns scenario, in 2060.

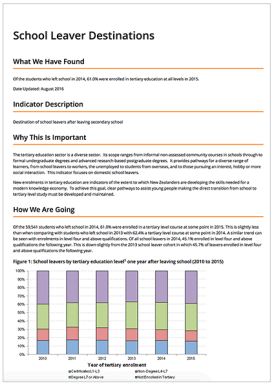
26 New Zealand Treasury. (2016). *He Tirohanga Mokopuna: 2016 Statement on the Long-Term Fiscal Position*, p. 46. Retrieved 16 January 2017 from www.treasury.govt.nz/government/longterm/fiscalposition/2016/he-tirohangamokopuna/ltfs-16-htm.pdf.

27 New Zealand Treasury. (2016). *He Tirohanga Mokopuna: 2016 Statement on the Long-Term Fiscal Position*, p. 46. Retrieved 16 January 2017 from www.treasury.govt.nz/government/longterm/fiscalposition/2016/he-tirohangamokopuna/ltfs-16-htm.pdf.

28 New Zealand Treasury. (2016). *He Tirohanga Mokopuna: 2016 Statement on the Long-Term Fiscal Position*, p. 33. Retrieved 16 January 2017 from www.treasury.govt.nz/government/longterm/fiscalposition/2016/he-tirohangamokopuna/ltfs-16-htm.pdf.

21. Proportion of school leavers progressing directly to tertiary education by school quintile and tertiary level (2015)

▼ EXCERPT FROM EDUCATION COUNTS, *SCHOOL LEAVER DESTINATIONS* (2016)[29]



School Leaver Destinations

What We Have Found

Indicator Description

Why This Is Important

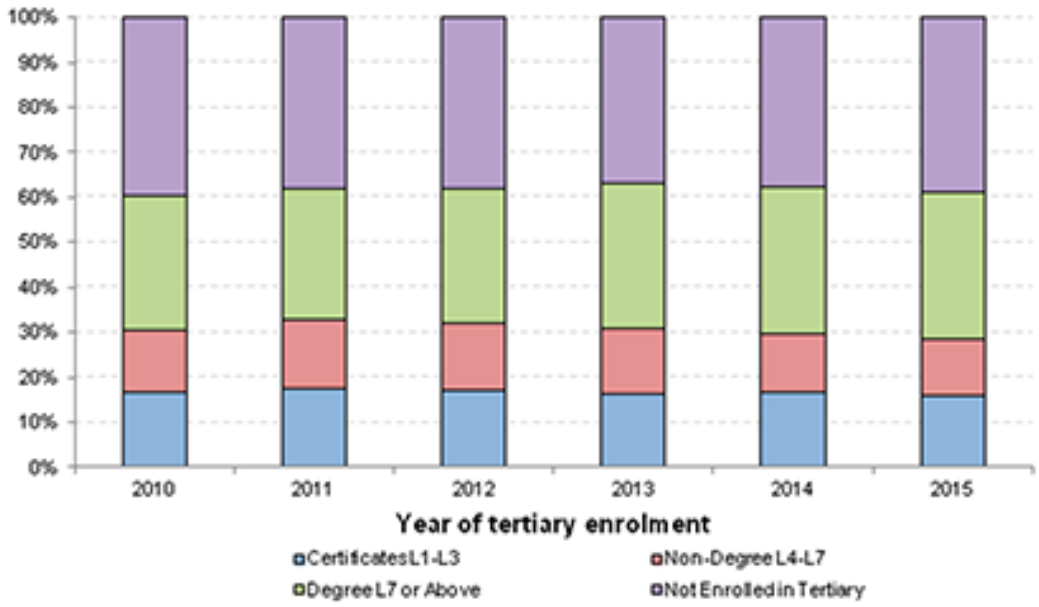
How We Are Going

Year of tertiary enrolment

Education Counts, *School Leaver Destinations* (2016)

'Students from lower decile schools are more likely to be enrolled in foundation courses, certificates and diplomas than students from higher deciles. Based on the 2014 school leaver cohort, 39.5% of leavers from schools in the lowest quintile that progressed directly to tertiary education were enrolled in levels one to seven (non-degree) in 2015. In comparison, 16.2% of school leavers from the highest quintile enrolled in levels one to seven (non-degree) in 2015.'

Figure 9: Proportion of school leavers progressing directly to tertiary education by school quintile and tertiary level (2015)



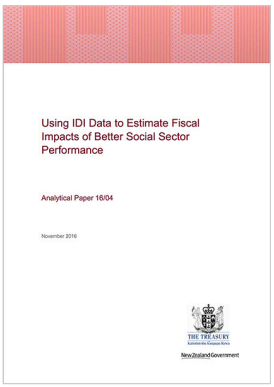
29 Education Counts. (2016). *School Leaver Destinations*. Retrieved 16 January 2017 from www.educationcounts.govt.nz/statistics/indicators/main/education-and-learning-outcomes/1907.

D: Ethnicity

The data in the ethnicity lens reveals a clear difference in outcomes between ethnicities. Compared with other ethnicities, Māori and Pasifika peoples currently face significantly higher rates of hardship among children, higher unemployment than the total population and report lower levels of life satisfaction. These figures may indicate that a different approach is necessary for tackling poverty, as the current approach is working more for some ethnicities than others.

22. Equitable Māori Outcomes: Comparing Māori and non-Māori

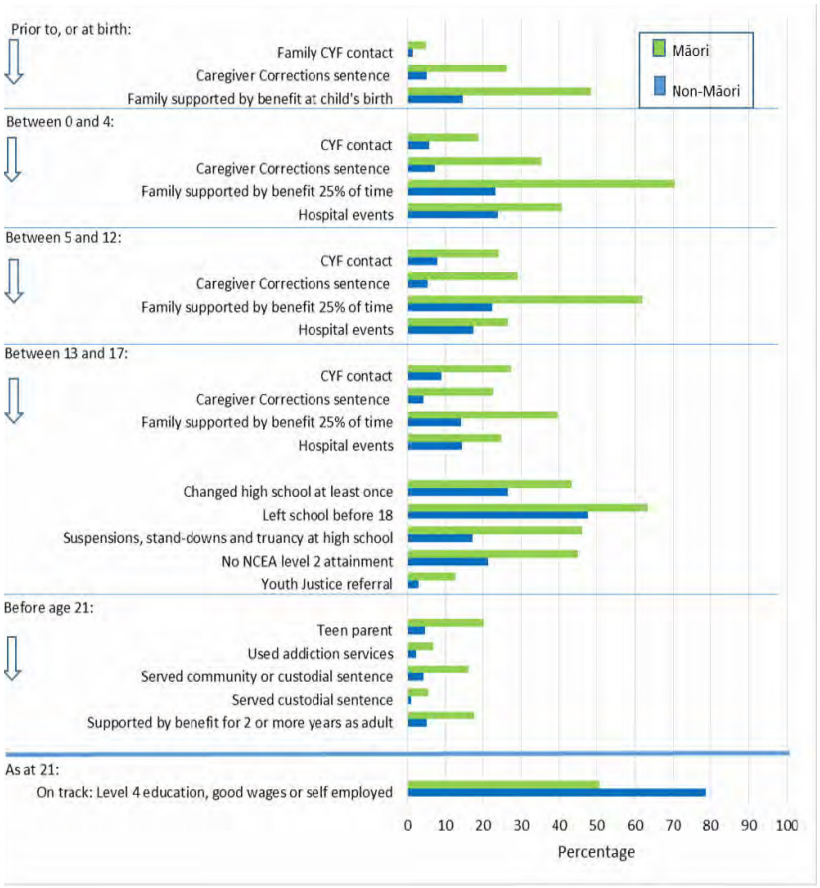
▼ EXCERPT FROM NEW ZEALAND TREASURY, *USING IDI DATA TO ESTIMATE FISCAL IMPACTS OF BETTER SOCIAL SECTOR PERFORMANCE* (2016)[30]



New Zealand Treasury, *Using IDI Data to Estimate Fiscal Impacts of Better Social Sector Performance* (2016)

'The figures [numbered 19, 22 and 28 in this working paper] are simply devices to present a profile of the current outcomes for the target groups compared to the aspirational benchmark for each scenario. Descriptive comparisons like these are at some risk of being mis-interpreted. Differences in composition of the two groups we are comparing will explain much of the difference in the various indicators we have presented. We are not implying that there are independent educational, regional, ethnic or early age risk effects of this magnitude.'

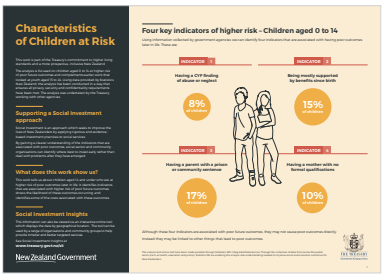
Figure 3: Equitable Māori Outcomes: Comparing Māori and non-Māori



30 New Zealand Treasury. (2016). *Using IDI Data to Estimate Fiscal Impacts of Better Social Sector Performance*, pp. 7, 9. Retrieved 16 January 2017 from www.treasury.govt.nz/publications/research-policy/ap/2016/16-04/ap16-04.pdf.

23. Children at higher risk of poor outcomes are more likely to be Māori

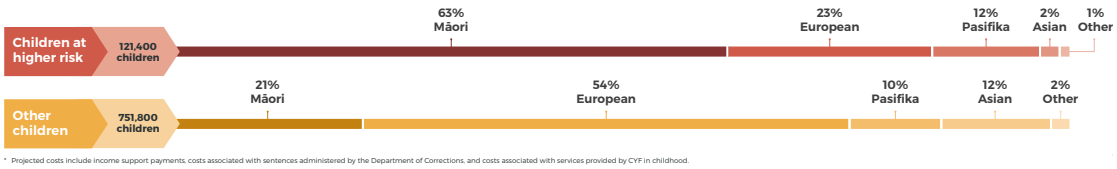
▼ EXCERPT FROM NEW ZEALAND TREASURY, *CHARACTERISTICS OF CHILDREN AT RISK* (2016)[31]



New Zealand Treasury, *Characteristics of Children at Risk* (2016)

'Better services should provide opportunities for all New Zealanders. We need to better understand how to build on the strengths of New Zealand's communities and whānau, particularly for Māori.'

Children at higher risk of poor outcomes are more likely to be Māori



* Projected costs include income support payments, costs associated with sentences administered by the Department of Corrections, and costs associated with services provided by CYF in childhood.

31 New Zealand Treasury. (2016). *Characteristics of Children at Risk*, p. 4. Retrieved 21 January 2017 from www.treasury.govt.nz/publications/research-policy/ ap/2016/16-01/ap16-01-infographic.pdf.

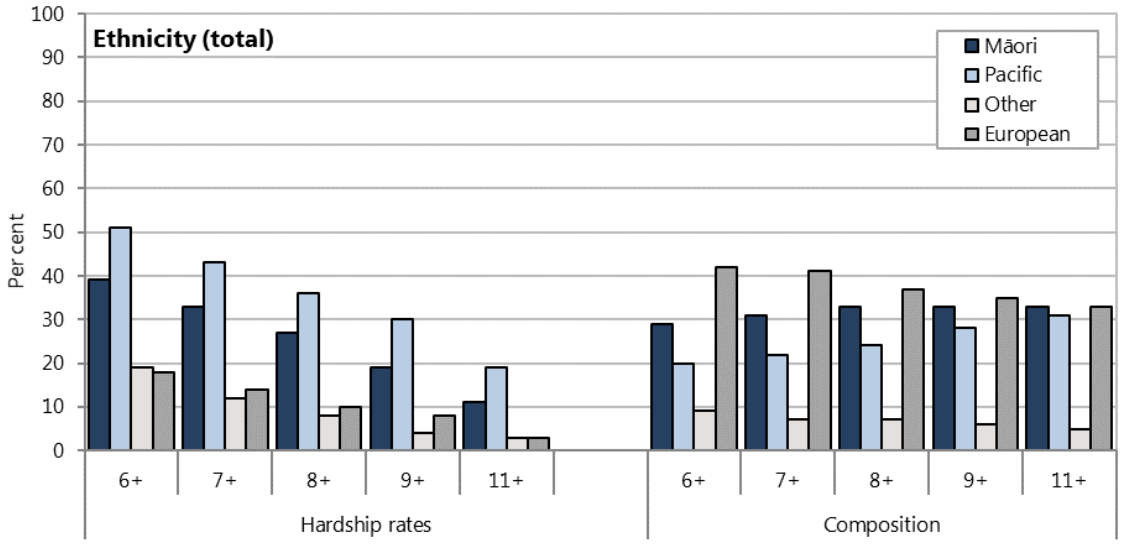
24. Number children in hardship by ethnicity

▼ EXCERPT FROM SIMPSON, J., DUNCANSON, M., OBEN, G., WICKEN, A. & GALLAGHER, S., *CHILD POVERTY MONITOR 2016 TECHNICAL REPORT* (2016)[32]

Simpson, J., Duncanson, M., Oben, G., Wicken, A. & Gallagher, S. *Child Poverty Monitor 2016 Technical Report* (2016)

'Figure 13 shows there was disparity between ethnic groups regarding children in hardship with 51% of Pacific children at the less severe threshold of 6+ and 19% at the most severe end of hardship (11+) compared with 39% of Māori children at 6+ and 11% at 11+. European and Other ethnicities children in hardship were lower at 18-19% at 6+ and 3% at 11+. The composition of the group "all children in hardship" was 42% European, 29% Māori and 20% Pacific at the 6+ threshold. This changed with increasing severity of material hardship and at the 11+ threshold the composition of "all children in hardship" was 33% Māori, 31% Pacific and 33% European.'

Figure 13: Number children in hardship by ethnicity



Source: NZ 2008 Living Standards Survey from Perry, 2016; Note: left side of graph 'hardship rates' answers "what percentage of the selected group of children are in hardship?" and right side of graph 'composition' answers "what percentage of all children in hardship are in this group?"

Note: 'Children' are aged 0–17.

32 Simpson, J., Duncanson, M., Oben, G., Wicken, A. & Gallagher, S. (2016). *Child Poverty Monitor 2016 Technical Report,* pp. 20–21. Retrieved 16 January 2017 from www.ourarchive.otago.ac.nz/bitstream/handle/10523/7006/2016%20CPM.pdf?sequence=4&isAllowed=y.

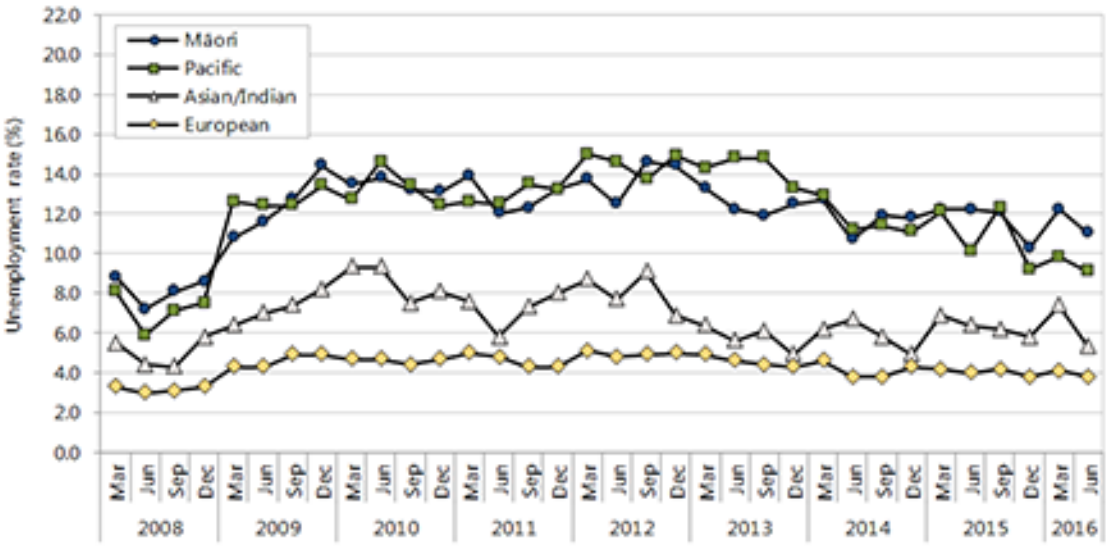
25. Quarterly unemployment rates by ethnicity, New Zealand March 2008–2015

▼ EXCERPT FROM SIMPSON, J., DUNCANSON, M., OBEN, G., WICKEN, A. & GALLAGHER, S., *CHILD POVERTY MONITOR 2016 TECHNICAL REPORT* (2016)[33]

Simpson, J., Duncanson, M., Oben, G., Wicken, A. & Gallagher, S. *Child Poverty Monitor 2016 Technical Report* (2016)

'Unemployment increases the risk of poverty and consequent social exclusion. A rise in the unemployment rate is a key marker of an economic downturn, effecting a wide range of outcomes for all children and young people in a community. Overall the unemployment rate in New Zealand has increased since 1987, an observation which is categorised as "negative change" when the unemployment rate is used as a progress indicator.'

Figure 60. Quarterly unemployment rates by ethnicity, New Zealand March 2008–2015

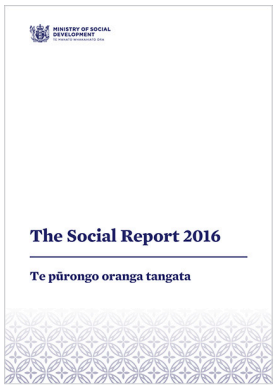


Source. Statistics New Zealand Household Labour Force Survey; Ethnicity is total response

33 Simpson, J., Duncanson, M., Oben, G., Wicken, A. & Gallagher, S. (2016). *Child Poverty Monitor 2016 Technical Report,* pp. 68, 70. Retrieved 16 January 2017 from www.ourarchive.otago.ac.nz/bitstream/handle/10523/7006/2016%20CPM.pdf?sequence=4&isAllowed=y.

26. Real equivalised median household incomes, by ethnic group, 1988–2014 ($2014)

▼ EXCERPT FROM MINISTRY OF SOCIAL DEVELOPMENT, *THE SOCIAL REPORT* (2016)[34]

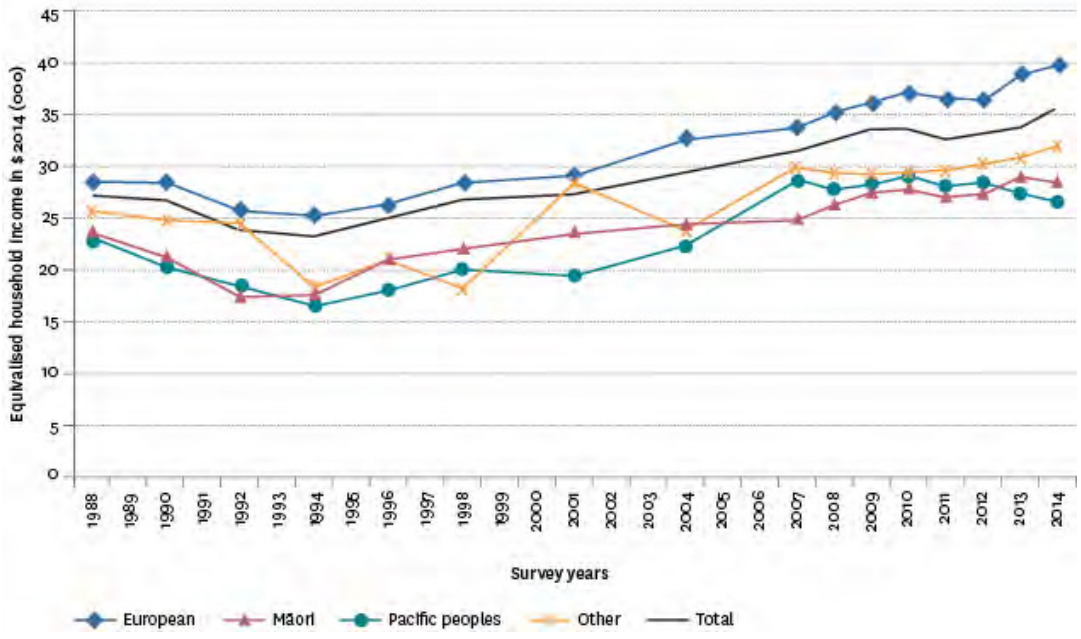


Ministry of Social Development, *The Social Report* (2016)

'Having insufficient economic resources limits people's ability to participate in and belong to their community and wider society, and otherwise restricts their quality of life. Furthermore, long-lasting low family income in childhood is associated with negative outcomes, such as lower educational attainment and poorer health. Three measures are provided to give a fuller picture of change over time. The primary measure is the proportion of people in households with equivalised disposable income net-of-housing-costs below a threshold set at 50 percent of the 2007 household disposable income median – and held fixed in real terms (the 2007 anchored or constant value measure, CV-07). This measure shows whether the incomes of low-income households are rising or falling in real terms, irrespective of what is happening to the incomes of the rest of the population.'

'For all ethnic groups, median household incomes rose steadily from the low point in 1994 through to 2007. There has been a small net increase from 2007 to 2014 for Māori and Other, and a small net decline for Pacific peoples. Over the period of the survey, equivalised median household incomes for the European group have ranked the highest of all ethnic groups, followed, on average, by the Other ethnic group, Māori and Pacific peoples.'

Figure EC3.3 – Real equivalised median household incomes, by ethnic group, 1988–2014 ($2014)



Source: Perry (2015a), Ministry of Social Development, using data from Statistics New Zealand's Household Economic Survey

Note: Ethnicity used for this figure is prioritised not total response (each person is captured in one ethnic group only).

34 Ministry of Social Development. (2016). *The Social Report 2016*, pp. 135, 138. Retrieved 23 February 2017 from www.socialreport.msd.govt.nz/documents/2016/msd-the-social-report-2016.pdf.

27. Proportion of population aged 15 years and over by ratings of overall life satisfaction, by ethnic group, 2014

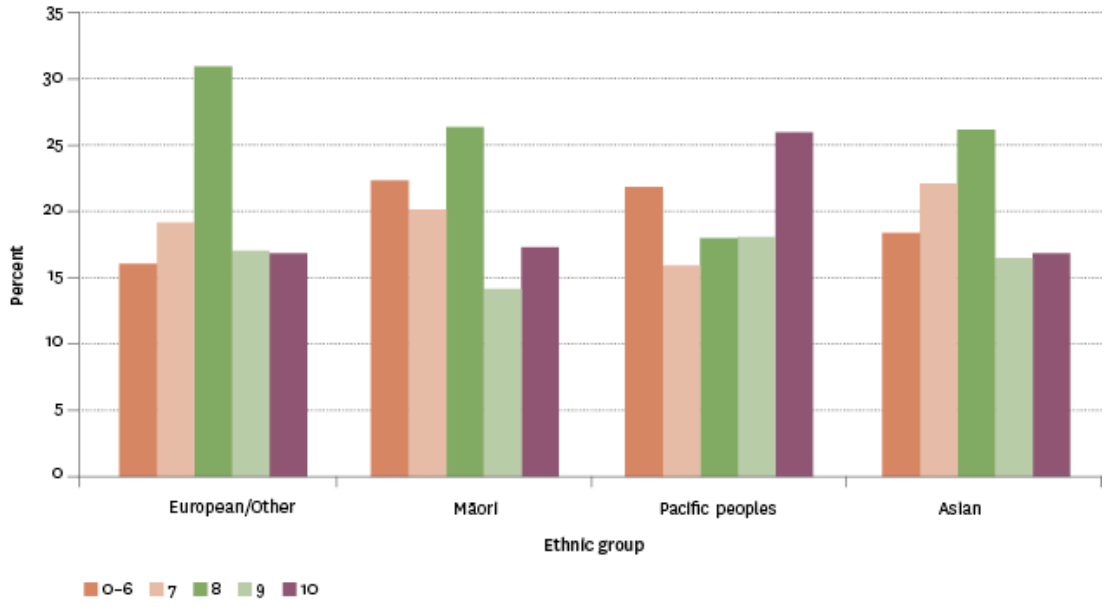
▼ EXCERPT FROM MINISTRY OF SOCIAL DEVELOPMENT, *THE SOCIAL REPORT* (2016)[35]

Ministry of Social Development, *The Social Report* (2016)

'Overall life satisfaction is an indicator of subjective wellbeing. A number of circumstances may influence overall life satisfaction, such as health; education; employment; income; personality; family and social connections; civil and human rights; levels of trust and altruism; and opportunities for democratic participation.'

'In 2014, those who identified as European/Other had the highest reported life satisfaction (84.0 percent rating their satisfaction at 7 or above), followed by people in the Asian ethnic group (81.6 percent). Māori (77.8 percent) and Pacific peoples (78.1 percent) were slightly less likely to rate their overall life satisfaction highly. Pacific peoples had the highest proportion of people rating their overall life satisfaction at 10 out of 10 (25.9 percent), compared with 17.3 percent of Māori and 16.9 percent each for European/Other and those in the Asian ethnic group.'

Figure LS1.2 – Proportion of population aged 15 years and over by ratings of overall life satisfaction, by ethnic group, 2014



Source: Statistics New Zealand, New Zealand General Social Survey

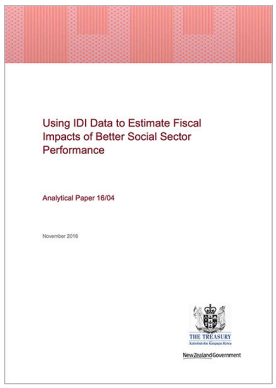
35 Ministry of Social Development. (2016). *The Social Report 2016*, pp. 246, 249. Retrieved 23 February 2017 from www.socialreport.msd.govt.nz/documents/2016/msd-the-social-report-2016.pdf.

E: Location

Measuring indicators of poverty by location reveals the inequalities across New Zealand. This section presents the different experiences and outcomes for the individuals living in the relative areas. These outcomes correlate to the areas' levels of deprivation and illustrates that where people live has an important impact on the opportunities available to them and their wellbeing.

28. Regional convergence: Comparing the 3 main urban areas with the rest of New Zealand

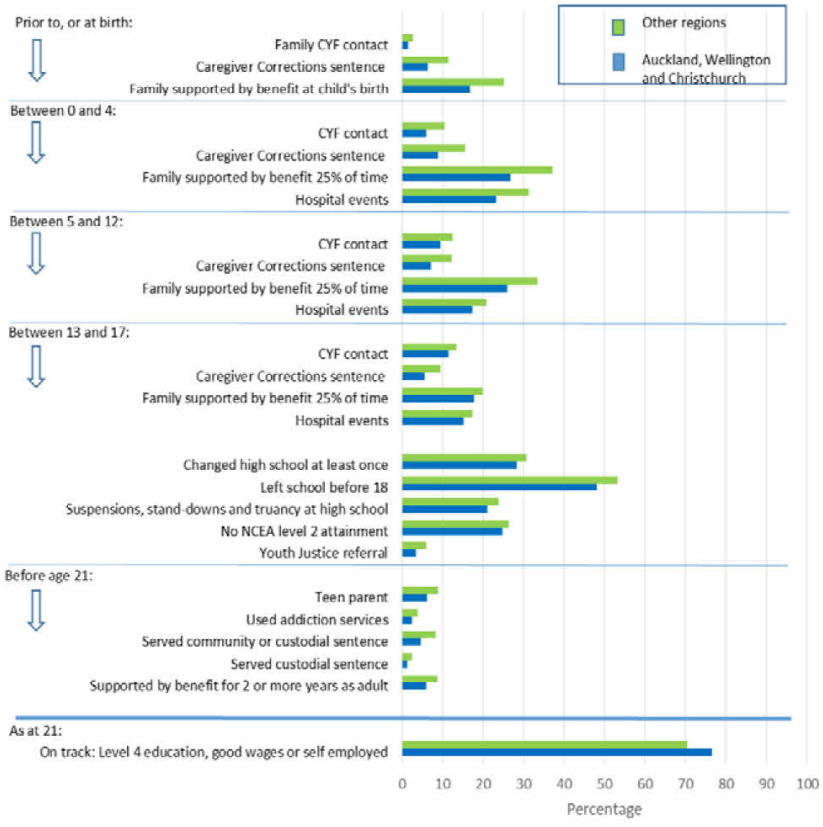
▼ EXCERPT FROM NEW ZEALAND TREASURY, *USING IDI DATA TO ESTIMATE FISCAL IMPACTS OF BETTER SOCIAL SECTOR PERFORMANCE* (2016)[36]



New Zealand Treasury, *Using IDI Data to Estimate Fiscal Impacts of Better Social Sector Performance* (2016)

'The figures [numbered 19, 22 and 28 in this working paper] are simply devices to present a profile of the current outcomes for the target groups compared to the aspirational benchmark for each scenario. Descriptive comparisons like these are at some risk of being mis-interpreted. Differences in composition of the two groups we are comparing will explain much of the difference in the various indicators we have presented. We are not implying that there are independent educational, regional, ethnic or early age risk effects of this magnitude.'

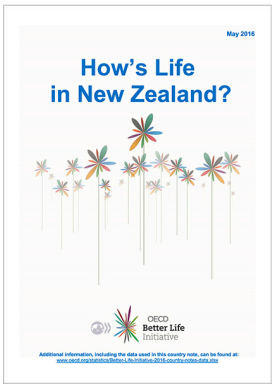
Figure 5: Regional convergence: Comparing the 3 main urban areas with the rest of New Zealand



36 New Zealand Treasury. (2016). *Using IDI Data to Estimate Fiscal Impacts of Better Social Sector Performance*, p. 9. Retrieved 16 January 2017 from www.treasury.govt.nz/publications/research-policy/ap/2016/16-04/ap16-04.pdf.

29. Regional well-being in New Zealand: Performance of New Zealand regions across selected well-being indicators relative to the other OECD regions

▼ EXCERPT FROM ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT, *HOW'S LIFE IN NEW ZEALAND?* (2016)[37]



Organisation for Economic Co-operation and Development, *How's Life in New Zealand?* (2016)

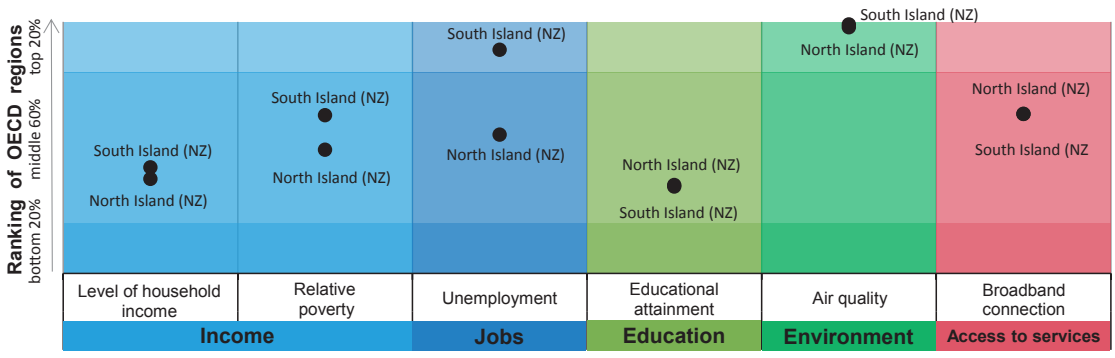
'Regional gaps in material living conditions

Compared to other OECD countries regional inequalities in income and jobs are small in New Zealand. Average household adjusted disposable income is 7% higher in the South Island than in the North Island. Regarding relative income poverty, while 10.1% of people in the South Island have an income of less than half of the New Zealand median income, the share is 12.2% in the North Island. Unemployment rates range from 3.7% in the South Island to 6.4% in the North Island. This gap (2.7 percentage points) is smaller than the regional differences observed in Australia and many other OECD countries.

Regional differences in people's quality of life

Regarding educational attainment, 73.4% of the labour force has at least a secondary education in the North Island, while this share is 72.8% in the South Island. This gap (0.6 percentage points) is the smallest regional difference in educational attainment in the OECD area. Equally, the regional variation of air quality in New Zealand is among the lowest in the OECD. The share of households with a broadband connection is 75% in the North as well as the South Island.'

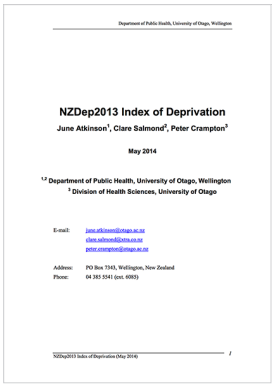
Regional well-being in New Zealand: Performance of New Zealand regions across selected well-being indicators relative to the other OECD regions



37 Organisation for Economic Co-operation and Development. (2016). *How's Life in New Zealand?*, p. 6. Retrieved 16 January 2017 from www.oecd.org/newzealand/Better-Life-Initiative-country-note-New-Zealand.pdf.

30. NZDep2013 distribution in the North Island of New Zealand

▼ EXCERPT FROM ATKINSON, J., SALMOND, C. & CRAMPTON, P., *NZDEP2013 INDEX OF DEPRIVATION* (2014)[38]


Department of Public Health, University of Otago, Wellington

NZDep2013 Index of Deprivation

June Atkinson[1], Clare Salmond[2], Peter Crampton[3]

May 2014

[1,2] Department of Public Health, University of Otago, Wellington
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NZDep2013 Index of Deprivation (May 2014)

Atkinson, J., Salmond, C. & Crampton, P. *NZDep2013 Index of Deprivation* (2014)

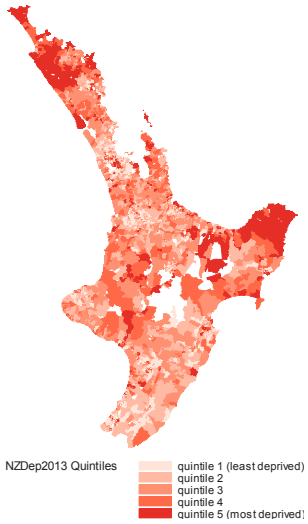
'NZDep2013 is an updated version of the NZDep91, NZDep96, NZDep2001 and NZDep2006 indexes of socioeconomic deprivation. NZDep2013 combines nine variables from the 2013 census which reflect eight dimensions of deprivation. NZDep2013 provides a deprivation score for each meshblock in New Zealand. Meshblocks are geographical units defined by Statistics New Zealand, containing a median of approximately 81 people in 2013.'

'NZDep2013 combines the following census data (calculated as proportions for each small area):

Dimension of deprivation	Description of variable (in order of decreasing weight in the index)
Communication	People aged <65 with no access to the Internet at home
Income	People aged 18-64 receiving a means tested benefit
Income	People living in equivalised* households with income below an income threshold
Employment	People aged 18-64 unemployed
Qualifications	People aged 18-64 without any qualifications
Owned home	People not living in own home
Support	People aged <65 living in a single parent family
Living space	People living in equivalised* households below a bedroom occupancy threshold
Transport	People with no access to a car

*Equivalisation: methods used to control for household composition.'

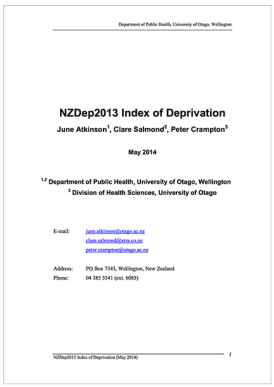
Figure 4: NZDep2013 distribution in the North Island of New Zealand



38 Atkinson, J., Salmond, C. & Crampton, P. (2014). *NZDep2013 Index of Deprivation*, pp. 7, 8, 33. Retrieved 16 January 2017 from www.otago.ac.nz/wellington/otago069936.pdf.

31. NZDep2013 distribution in the South Island of New Zealand

▼ EXCERPT FROM ATKINSON, J., SALMOND, C. & CRAMPTON, P., *NZDEP2013 INDEX OF DEPRIVATION* (2014)[39]



Department of Public Health, University of Otago, Wellington

NZDep2013 Index of Deprivation

June Atkinson[1], Clare Salmond[2], Peter Crampton[3]

May 2014

[1,2] Department of Public Health, University of Otago, Wellington
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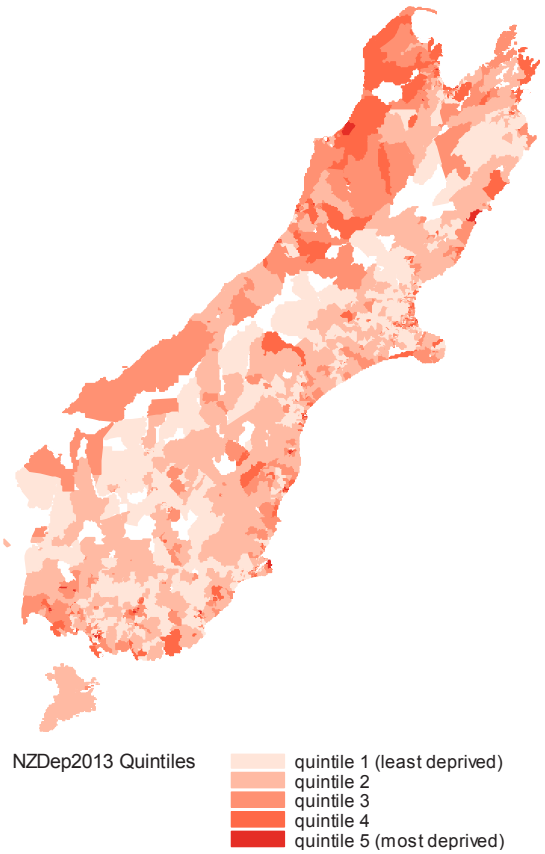
Atkinson, J., Salmond, C. & Crampton, P. *NZDep2013 Index of Deprivation* (2014)

'There is frequently a considerable amount of variation between neighbourhoods or small areas within any given larger geographical area. For example, if a Territorial Authority boundary is used for creating an NZDep profile there may be pockets of relatively deprived areas and relatively non-deprived areas within the territorial authority.'

Figure 5: NZDep2013 distribution in the South Island of New Zealand



39 Atkinson, J., Salmond, C. & Crampton, P. (2014). *NZDep2013 Index of Deprivation*, p. 28, 34. Retrieved 16 January 2017 from www.otago.ac.nz/wellington/otago069936.pdf.

32. A regional picture of children at higher risk

▼ EXCERPT FROM NEW ZEALAND TREASURY, *CHARACTERISTICS OF CHILDREN AT RISK* (2016)[40]

New Zealand Treasury, *Characteristics of Children at Risk* (2016)

'Social Investment Insights is an interactive online tool that presents detailed geographic information on children and youth at risk. See www.treasury.govt.nz/sii'

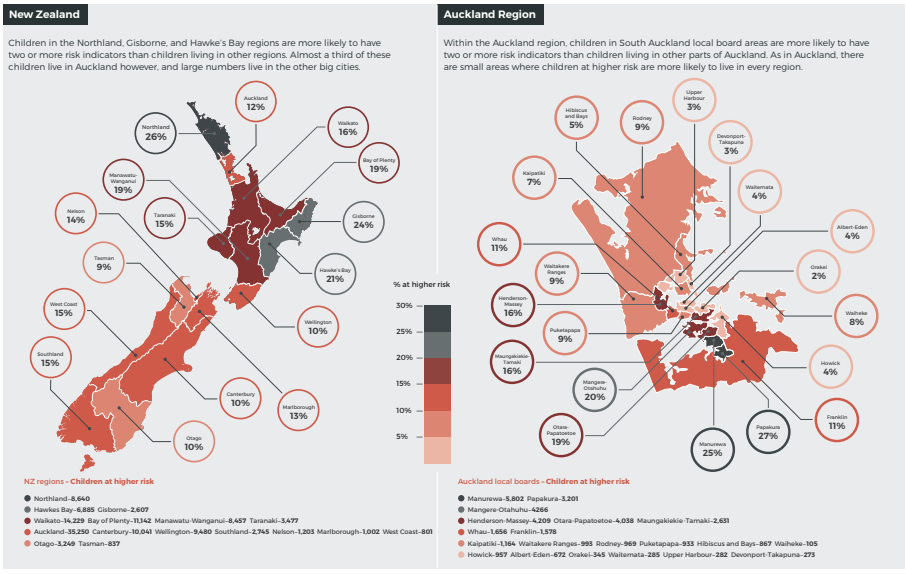
'Insights provides evidence to inform policies and services, with the current content focussed on at-risk children and youth. It replaces the Social Investment Insights (SII) tool, which was launched in February 2016, and provides updated information on children and youth at risk of poor outcomes, new content, and new ways to visualise and map the data presented.

The information previously provided by the SII tool on children and youth at risk of poor outcomes has been updated to 2015. The definition of the study population has been refined. Some measures have been improved, and new ways of visualising the results have been developed. The new results presented in Insights are broadly consistent with those presented in the SII tool.

Insights also presents new information on young people's activities and outcomes as they transition to adulthood, such as their rates of participation in employment, education and training. These outcomes can be graphed according to whether a young person was identified as being at-risk at age 15, and can be analysed at a detailed geographical level within broad age groups. Risk measures at age 15 are shown to be predictive of poorer future outcomes through to age 24, while the extent of this varies somewhat across New Zealand.

Finally, Insights includes some new experimental results on the extent to which educational and employment services are accessed by children and youth at risk. Almost all services targeted at improving educational and employment outcomes are disproportionately likely to be accessed by children and youth who are considered to be at risk, consistent with the intent of these services. Nevertheless, the coverage of services varies across New Zealand, with more analysis needed to understand this in the context of specific services.'[41]

A regional picture of children at higher risk



40 New Zealand Treasury. (2016). *Characteristics of Children at Risk*, p. 6. Retrieved 21 January 2017 from www.treasury.govt.nz/publications/research-policy/ap/2016/16-01/ap16-01-infographic.pdf.

41 New Zealand Treasury. (2017). *Insights – Informing policies and services for at-risk children and youth,* Retrieved 23 February 2017 from www.treasury.govt.nz/publications/research-policy/ap/2017/17-02/ap17-02.pdf

F: Age

i) Child Poverty (0–17 years)

This section analyses relative poverty and material hardship over time for 0–17 year olds in New Zealand.

Child poverty has been a focus of the poverty landscape in New Zealand, aided by the significant research undertaken by the Child Poverty Report from 2012–2016. While child poverty is a symptom of the overreaching issue of poverty throughout the population, it is important to note due to the intergenerational nature of poverty.

Under the United Nation's 'Agenda 2030' sustainable development goals, New Zealand has signed up to: 'By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions.'[42] The differences between trends in the past 30 years and the necessary trends to meet this goal over the next 13 years indicates that significant change in approach is required.

42 See goal 1.2. United Nations. (2015). Transforming our world: the 2030 Agenda for Sustainable Development. Retrieved 8 October 2017 from www.sustainabledevelopment.un.org/post2015/transformingourworld.

33. Number and percentage of dependent children aged 0–17 years living below various poverty thresholds, New Zealand 2001–2015 NZHES selected years

▼ EXCERPT FROM SIMPSON, J., DUNCANSON, M., OBEN, G., WICKEN, A. & GALLAGHER, S., *CHILD POVERTY MONITOR 2016 TECHNICAL REPORT* (2016)[43]

Simpson, J., Duncanson, M., Oben, G., Wicken, A. & Gallagher, S. *Child Poverty Monitor 2016 Technical Report* (2016)

'This section reports on two measures for children in households living in poverty. Children are defined as dependent children and young people aged 0–17 years. The income in both measures relates to the income of the child's household. Throughout this section, child poverty should be understood to mean children and young people aged 0-17 year of age in households living in income poverty (as defined). The two thresholds for poverty used are a) contemporary median (moving line): an income below 60% of the contemporary median income, after housing costs and b) fixed-line: an income below 60% of the 2007 median income, after housing costs.'

'Analysis indicates that during 1992–1998, child poverty, as measured by the fixed-line threshold, declined as a result of falling unemployment with the incomes of those around the poverty line rising more quickly than the median. After 1998, as economic conditions improved, the median income rose again. Incomes for many low-income households with children did not rise, however, and the percentage of child poverty at this threshold has remained higher on both contemporary median and fixed-line measures. The promising decline seen from 2001 to 2007 when policies such as Working for Families contributed to some families' income increasing, has not been maintained. Between 2007 and 2010 child poverty rates increased (reflecting the time of the global financial crisis), then declined, so that in 2013 the rates were nearly equal to those in 2007.'

Table 1. Number and percentage of dependent children aged 0–17 years living below various poverty thresholds, New Zealand 2001–2015 NZHES selected years

HES year	Before housing costs		After housing costs					
	<60% contemporary median		<50% contemporary median		<60% contemporary median		<60% 2007 median	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
2001	250,000	24	215,000	21	310,000	30	380,000	37
2004	265,000	26	200,000	19	285,000	28	320,000	31
2007	210,000	20	175,000	16	240,000	22	240,000	22
2009	230,000	21	210,000	20	280,000	26	255,000	24
2010	250,000	23	210,000	20	315,000	30	275,000	26
2011	235,000	22	210,000	20	290,000	27	270,000	25
2012	225,000	21	215,000	20	285,000	27	255,000	24
2013	215,000	20	205,000	19	260,000	24	235,000	22
2014	250,000	24	220,000	21	305,000	29	245,000	23
2015	220,000	21	210,000	20	295,000	28	230,000	21

Source: New Zealand Household Economic Survey (NZHES) via Perry 2016

43 Simpson, J., Duncanson, M., Oben, G., Wicken, A. & Gallagher, S. (2016). *Child Poverty Monitor 2016 Technical Report,* p. 9. Retrieved 16 January 2017 from www.ourarchive.otago.ac.nz/bitstream/handle/10523/7006/2016%20CPM.pdf?sequence=4&isAllowed=y.

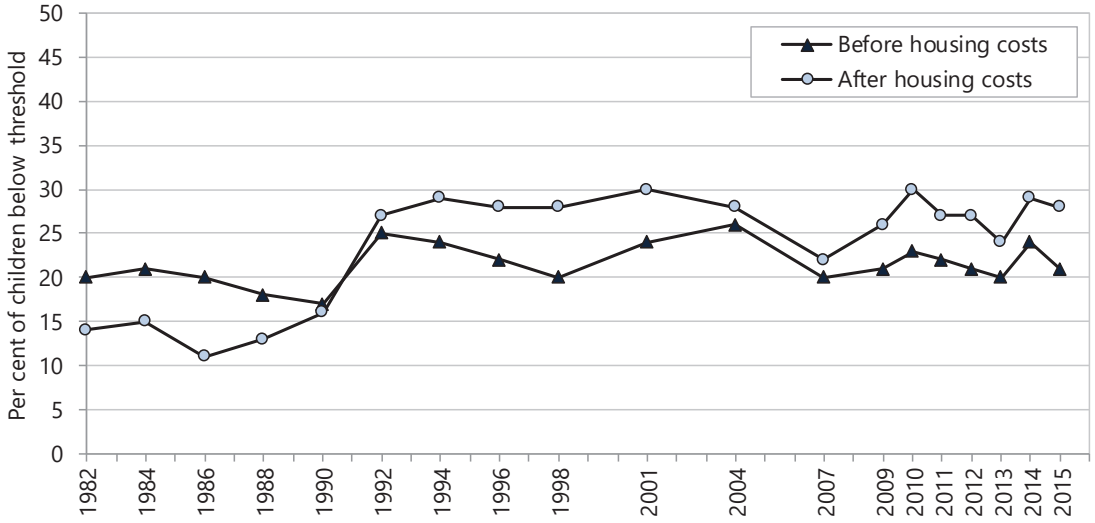
34. Dependent 0–17 year olds living below the 60% income poverty threshold (contemporary median) before and after housing costs, New Zealand 1982–2015 NZHES years

▼ EXCERPT FROM SIMPSON, J., DUNCANSON, M., OBEN, G., WICKEN, A. & GALLAGHER, S., *CHILD POVERTY MONITOR 2016 TECHNICAL REPORT* (2016)[44]

Simpson, J., Duncanson, M., Oben, G., Wicken, A. & Gallagher, S. *Child Poverty Monitor 2016 Technical Report* (2016)

'The percentage of children in households living in income poverty in 2015 using the contemporary median measure is 28% (approximately 295,000 children). The percentage of children living in income poverty in 2015 using the fixed-line measure is 21% (approximately 230,000 children). There has been little change in the percentage of children in households living in income poverty with 2014 percentages being 29% and 23% respectively. These measures both indicate that any change in the last decade has not redressed the impact of the effects of the sudden increase in the late 1980s and early 1990s. The marked increase in the contemporary median measures of child income poverty from 13% in 1988 to 27% in 1992 (or 12% to 33% using the fixed-line measure) can be attributed to rising unemployment and cuts made to benefits in 1991. These cuts disproportionately reduced incomes for beneficiaries compared with changes in median income and has not been addressed.'

Figure 2. Dependent 0–17 year olds living below the 60% income poverty threshold (contemporary median) before and after housing costs, New Zealand 1982–2015 NZHES years



Source: New Zealand Household Economic Survey (NZHES) via Perry 2016

44 Simpson, J., Duncanson, M., Oben, G., Wicken, A. & Gallagher, S. (2016). *Child Poverty Monitor 2016 Technical Report,* pp. 9, 11. Retrieved 16 January 2017 from www.ourarchive.otago.ac.nz/bitstream/handle/10523/7006/2016%20CPM.pdf?sequence=4&isAllowed=y.

35. Children and young people aged 0–17 years in households living in hardship measured by 7+ and 9+ lacks on the DEP-17, New Zealand 2007–2015 NZHES years

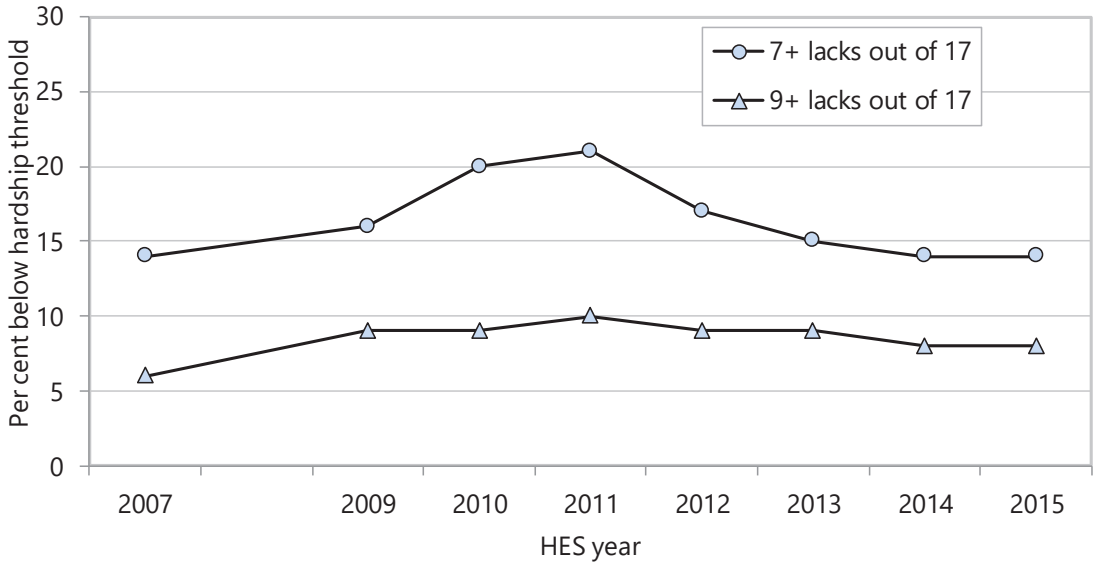
▼ EXCERPT FROM SIMPSON, J., DUNCANSON, M., OBEN, G., WICKEN, A. & GALLAGHER, S., *CHILD POVERTY MONITOR 2016 TECHNICAL REPORT* (2016)[45]

Simpson, J., Duncanson, M., Oben, G., Wicken, A. & Gallagher, S. *Child Poverty Monitor 2016 Technical Report* (2016)

'A more serious measure of hardship has been included in Government reporting: the MWI ≤5 or 9+ / 17 on DEP-17 severity threshold. The following data are from the NZHES survey data from 2007–2015. At a hardship threshold of MWI ≤5 or 9+ /17 on DEP-17, the proportion of 0–17 year olds in households living at this level of material hardship has stayed relatively constant. In 2007, the proportion was 9% which increased to 10% in 2011, fell to 8% in 2014, where it remained in 2015.'

'While going without a small number of these items does not constitute hardship, experiencing multiple "enforced lacks" and "economising a lot" indicates material hardship.'

Figure 11. Children and young people aged 0–17 years in households living in hardship measured by 7+ and 9+ lacks on the DEP-17, New Zealand 2007–2015 NZHES years



Source: Perry 2016 derived from Statistics New Zealand Household Economic Survey (HES) 2007–2015; Material Well-being Index, MWI ≤9 which is ≡ 7+ on DEP-17 and MWI ≤5 which is ≡ 9+; See Methods box for further detail

45 Simpson, J., Duncanson, M., Oben, G., Wicken, A. & Gallagher, S. (2016). *Child Poverty Monitor 2016 Technical Report,* pp. 15, 17. Retrieved 16 January 2017 from www.ourarchive.otago.ac.nz/bitstream/handle/10523/7006/2016%20CPM.pdf?sequence=4&isAllowed=y.

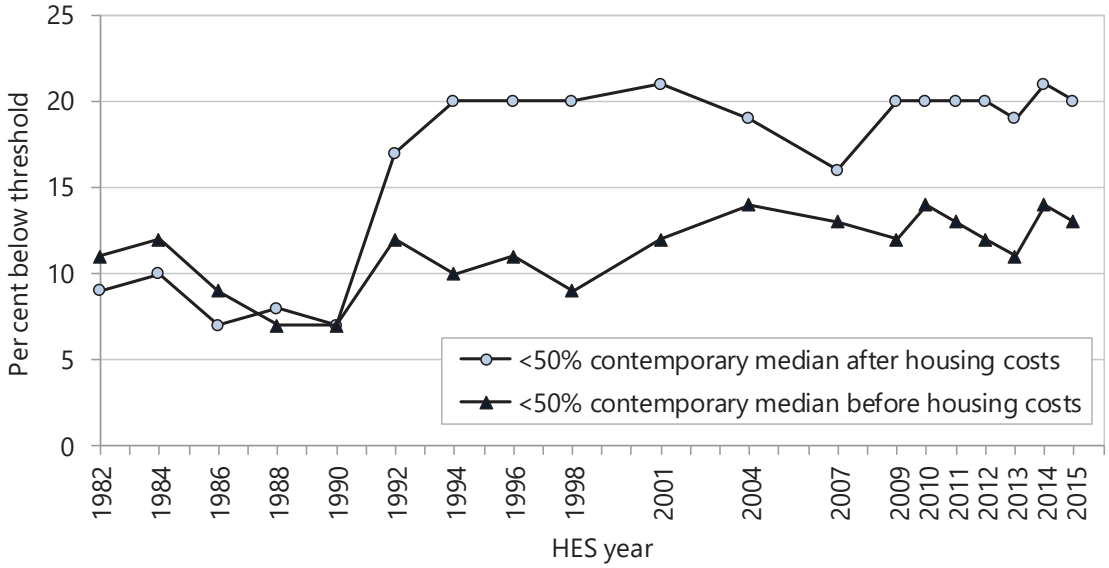
36. Percentage of dependent children aged 0–17 years living below the 50% of median income poverty threshold, before and after housing costs New Zealand 1982–2015 NZHES years

▼ EXCERPT FROM SIMPSON, J., DUNCANSON, M., OBEN, G., WICKEN, A. & GALLAGHER, S., *CHILD POVERTY MONITOR 2016 TECHNICAL REPORT* (2016)[46]

Simpson, J., Duncanson, M., Oben, G., Wicken, A. & Gallagher, S. *Child Poverty Monitor 2016 Technical Report* (2016)

'The below 50% income poverty is another measure sometimes used to describe severe poverty. The percentage of children aged 0–17 years living in households with incomes below 50% of the contemporary median after accounting for housing costs (AHC), has not changed since 1994 when it rose very fast. The only exception has been in 2007 when the percentage dropped to 16% before returning to 20% the following year.'

Figure 18. Percentage of dependent children aged 0–17 years living below the 50% of median income poverty threshold, before and after housing costs New Zealand 1982–2015 NZHES years



Source: Perry 2016 derived from Statistics NZ Household Economic Survey (NZHES) 1982–2015

46 Simpson, J., Duncanson, M., Oben, G., Wicken, A. & Gallagher, S. (2016). *Child Poverty Monitor 2016 Technical Report,* p. 24. Retrieved 16 January 2017 from www.ourarchive.otago.ac.nz/bitstream/handle/10523/7006/2016%20CPM.pdf?sequence=4&isAllowed=y.

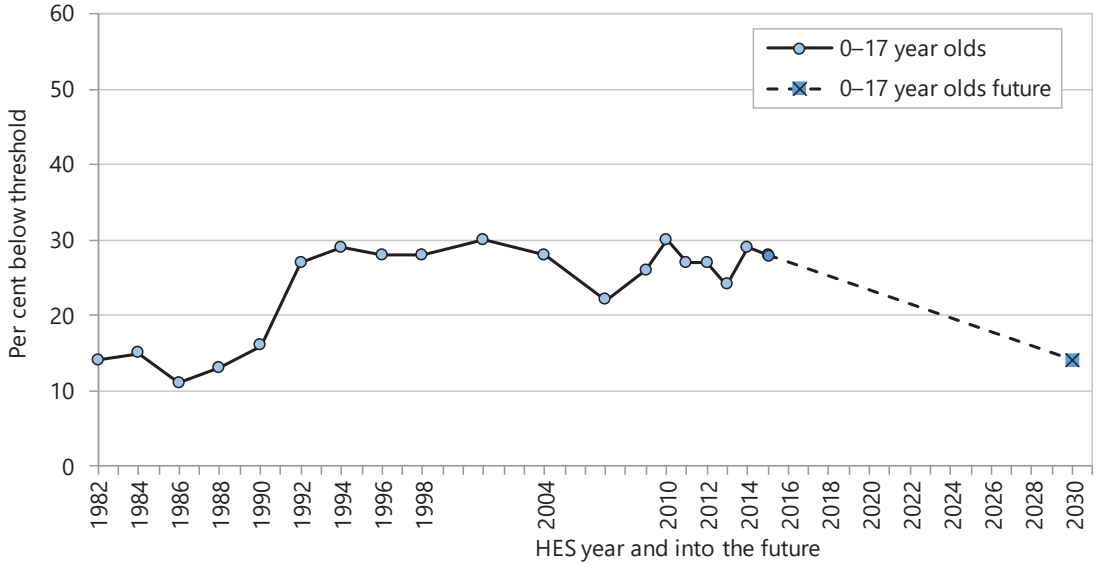
37. Dependent 0–17 year olds in households living below the 60% income poverty threshold (contemporary median) after housing costs, extrapolated beyond 1982–2015 NZHES years, New Zealand

▼ EXCERPT FROM SIMPSON, J., DUNCANSON, M., OBEN, G., WICKEN, A. & GALLAGHER, S., *CHILD POVERTY MONITOR 2016 TECHNICAL REPORT* (2016)[47]

Simpson, J., Duncanson, M., Oben, G., Wicken, A. & Gallagher, S. *Child Poverty Monitor 2016 Technical Report* (2016)

'New Zealand signed "Agenda 2030", the United Nations strategy for sustainable development globally. One of its goals is to reduce poverty. A target relevant to New Zealand is reducing the national measures of poverty by at least 50% by 2030. Figure 20 shows a 50% reduction of the income poverty threshold for <60% of the median income (contemporary measure) from 2015 to 2030. This would indicate that only 13.5% of dependent children would be in households living below the 60% median income threshold (AHC). This percentage is similar to those seen in the 1980s.'

Figure 20. Dependent 0–17 year olds in households living below the 60% income poverty threshold (contemporary median) after housing costs, extrapolated beyond 1982–2015 NZHES years, New Zealand



Source: Perry 2016 derived from Statistics New Zealand Household Economic Survey (NZHES) 1982–2015 (extrapolated)

47 Simpson, J., Duncanson, M., Oben, G., Wicken, A. & Gallagher, S. (2016). *Child Poverty Monitor 2016 Technical Report,* p. 26. Retrieved 16 January 2017 from www.ourarchive.otago.ac.nz/bitstream/handle/10523/7006/2016%20CPM.pdf?sequence=4&isAllowed=y.

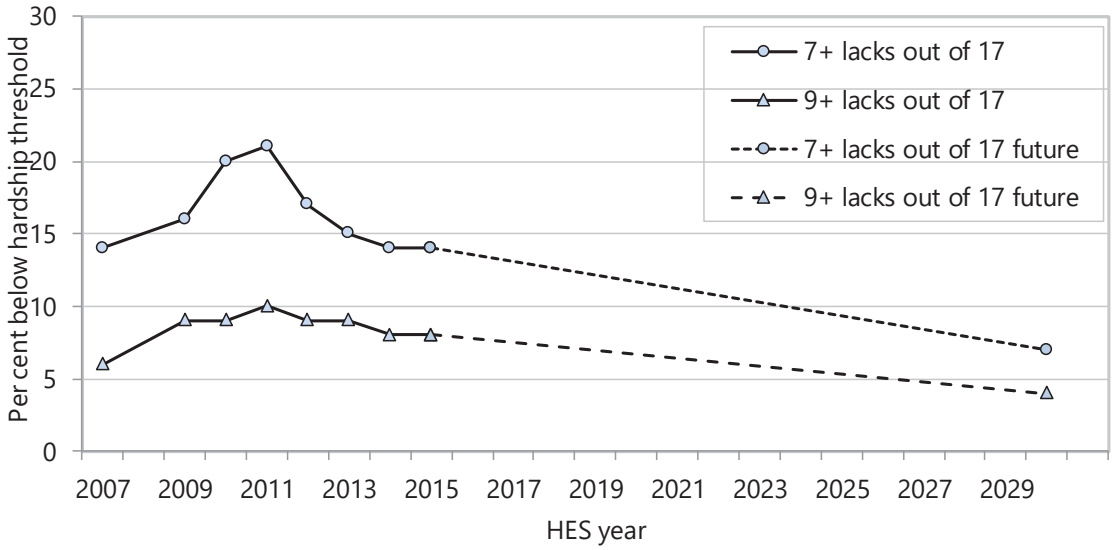
38. Dependent 0–17 year olds in households living in material hardship by selected 7+ and 9+, extrapolated beyond 1982–2015 NZHES years, New Zealand

▼ EXCERPT FROM SIMPSON, J., DUNCANSON, M., OBEN, G., WICKEN, A. & GALLAGHER, S., *CHILD POVERTY MONITOR 2016 TECHNICAL REPORT* (2016)[48]

Simpson, J., Duncanson, M., Oben, G., Wicken, A. & Gallagher, S. *Child Poverty Monitor 2016 Technical Report* (2016)

'Figure 21 shows a 50% reduction in the percentage of dependent children living in households experiencing material hardship at the level of MWI ≤9 (or 7+ on DEP-17) from 2015 to 2030. If the United Nations Agenda 2030 sustainable development target on reducing this measure of poverty was met, in 2030, New Zealand's proportion of children in households living in material hardship (using the measure of MWI ≤9) would be a maximum of 7%.'

Figure 21. Dependent 0–17 year olds in households living in material hardship by selected 7+ and 9+, extrapolated beyond 1982–2015 NZHES years, New Zealand

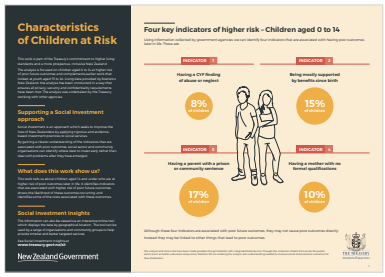


Source: New Zealand Household Economic Survey (NZHES) via Perry 2016 Hardship defined using Economic Living Standards Index (ELSI) and Material Wellbeing Index, MWI ≤9 which is ≡ 7+ on DEP-17;

48 Simpson, J., Duncanson, M., Oben, G., Wicken, A. & Gallagher, S. (2016). *Child Poverty Monitor 2016 Technical Report,* pp. 26–27. Retrieved 16 January 2017 from www.ourarchive.otago.ac.nz/bitstream/handle/10523/7006/2016%20CPM.pdf?sequence=4&isAllowed=y

39. Four key indicators of higher risk – Children aged 0 to 14

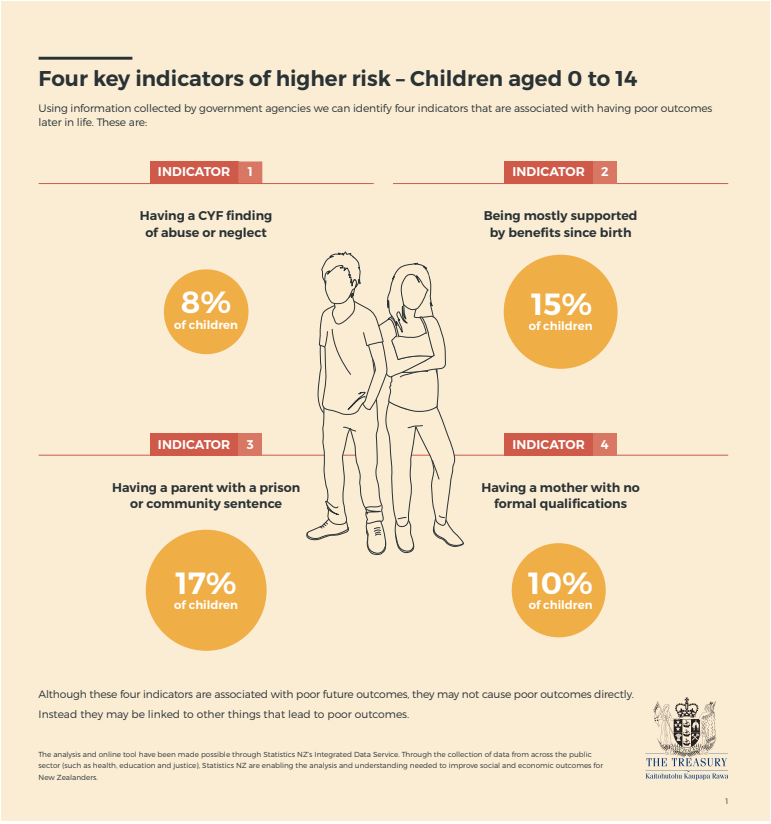
▼ EXCERPT FROM NEW ZEALAND TREASURY, *CHARACTERISTICS OF CHILDREN AT RISK* (2016)[49]



New Zealand Treasury, *Characteristics of Children at Risk* (2016)

Graphs 39–43 tell us about 'children aged 14 and under who are at higher risk of poor outcomes later in life'. This data 'identifies indicators that are associated with higher risk of poor future outcomes, shows the likelihood of these outcomes occurring, and identifies some of the costs associated with these outcomes'.

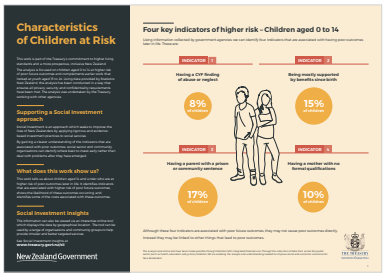
Four key indicators of higher risk – Children aged 0 to 14



49 New Zealand Treasury. (2016). *Characteristics of Children at Risk*, p. 1. Retrieved 21 January 2017 from www.treasury.govt.nz/publications/research-policy/ap/2016/16-01/ap16-01-infographic.pdf.

40. Key indicators are associated with higher risk of poor future outcomes in life

▼ EXCERPT FROM NEW ZEALAND TREASURY, *CHARACTERISTICS OF CHILDREN AT RISK* (2016)[50]



New Zealand Treasury, *Characteristics of Children at Risk* (2016)

'Children who have these indicators are more likely to leave school with no qualifications, spend time on a benefit, and to receive a prison or community sentence. The greater the number of indicators a child has, the more likely this will happen. This analysis focuses on children with two or more of the four indicators (n.b. this is just one way of looking at risk.) Poor outcomes also lead to greater lifetime government spending. Investing this money earlier could improve these outcomes.'

Key indicators are associated with higher risk of poor future outcomes in life

Projected outcomes for children aged 0 to 14*	Referred to Youth Justice services	Achieved no school qualifications	On a sole parent benefit by age 21	On a main benefit for at least 5 years from age 25 to 34	Received a prison or community sentence from age 25 to 34	Total projected cost** per person by age 35
Other children						
No key indicators — 69% 602,577 children	2%	12%	2%	5%	5%	$33,100
One key indicator — 17% 149,229 children	6%	22%	8%	12%	12%	$98,800
Children at higher risk						
Two key indicators — 9% 77,820 children	13%	35%	13%	20%	19%	$171,100
Three key indicators — 4% 35,712 children	20%	44%	18%	26%	26%	$233,800
Four key indicators — 1% 7,842 children	25%	50%	20%	29%	29%	$270,800

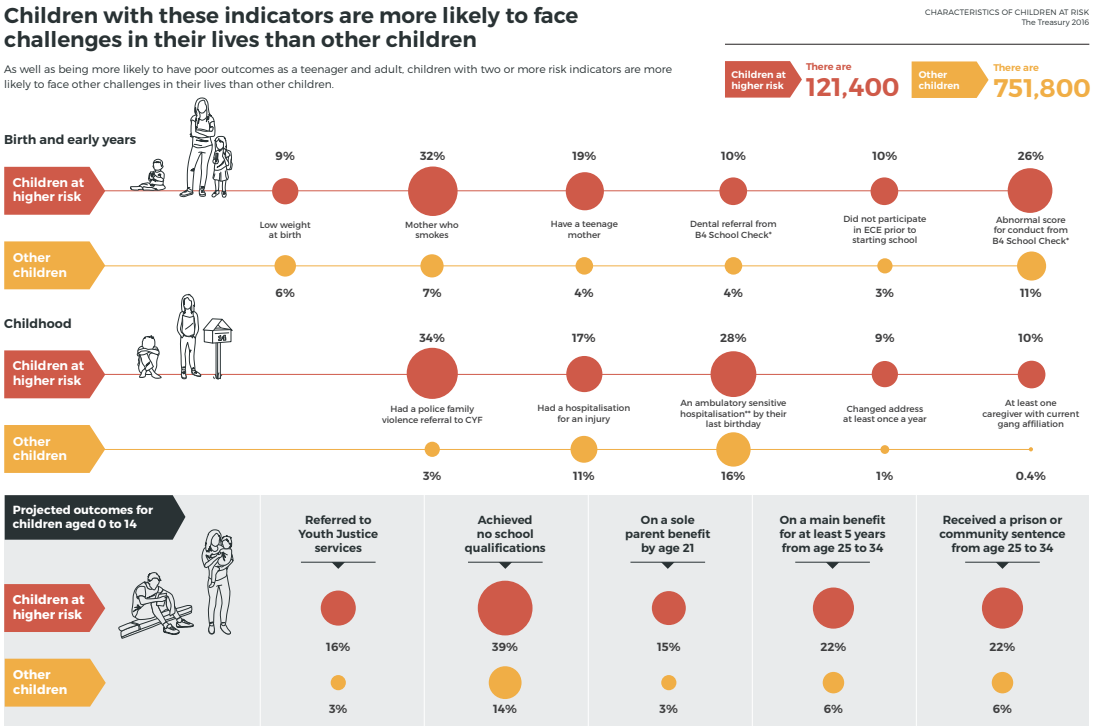
50 New Zealand Treasury. (2016). *Characteristics of Children at Risk*, p. 2. Retrieved 21 January 2017 from www.treasury.govt.nz/publications/research-policy/ap/2016/16-01/ap16-01-infographic.pdf.

41. Children with these indicators are more likely to face challenges in their lives than other children

▼ EXCERPT FROM NEW ZEALAND TREASURY, *CHARACTERISTICS OF CHILDREN AT RISK* (2016)[51]

New Zealand Treasury, *Characteristics of Children at Risk* (2016)

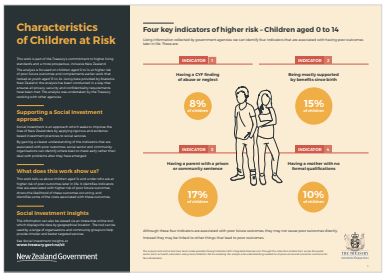
Children with these indicators are more likely to face challenges in their lives than other children



51 New Zealand Treasury. (2016). *Characteristics of Children at Risk*, p. 3. Retrieved 21 January 2017 from www.treasury.govt.nz/publications/research-policy/ap/2016/16-01/ap16-01-infographic.pdf.

42. The risk and type of poor outcomes varies by gender and ethnicity

▼ EXCERPT FROM NEW ZEALAND TREASURY, *CHARACTERISTICS OF CHILDREN AT RISK* (2016)[52]

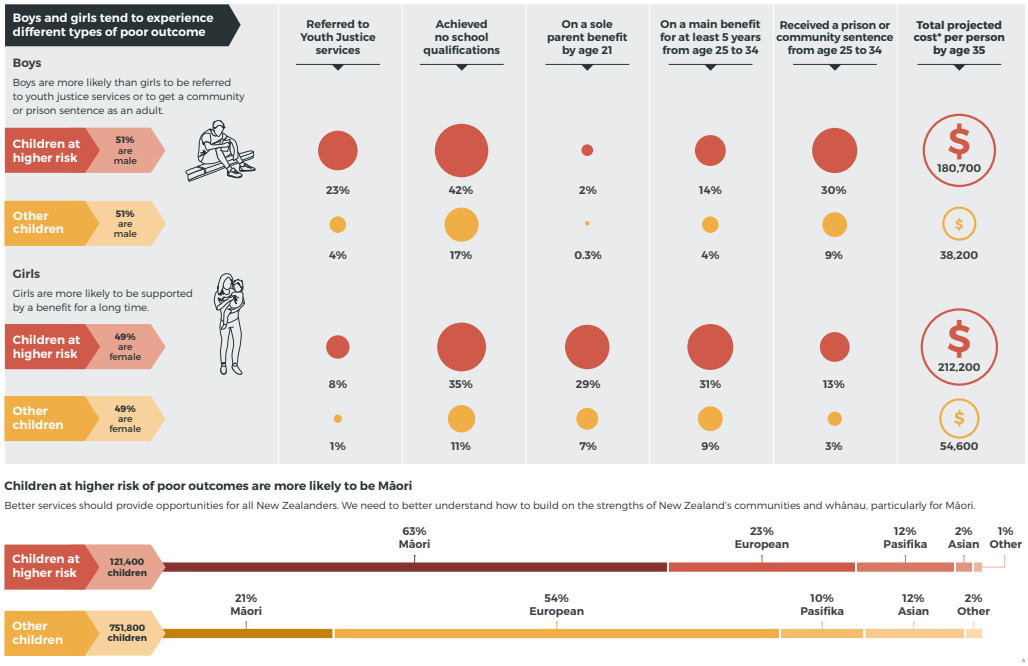


New Zealand Treasury, *Characteristics of Children at Risk* (2016)

'A key difference between girls and boys is the different types of poor outcomes they experience on average. Boys in the priority population are much more likely to have contact with Youth Justice, and to receive community or custodial sentences, while girls are more likely to be long-term benefit recipients, including receiving sole parent support.'[53]

'Analysis showed that for children aged 0-5 years being known to CYF (ie, the broader CYF contact measure), the proportion of time supported by welfare benefits, having a parent with a corrections sentence history, ethnicity, and gender were the characteristics most strongly associated with poorer outcomes.' [54]

The risk and type of poor outcomes varies by gender and ethnicity



52 New Zealand Treasury. (2016). *Characteristics of Children at Risk*, p. 4. Retrieved 21 January 2017 from www.treasury.govt.nz/publications/research-policy/ap/2016/16-01/ap16-01-infographic.pdf.

53 New Zealand Treasury. (2016). *Characteristics of Children at Greater Risk of Poor Outcomes as Adults* (Analytical Paper 16/01), p. 21. Retrieved 21 January 2017 from www.treasury.govt.nz/publications/research-policy/ap/2016/16-01/ap16-01.pdf.

54 New Zealand Treasury. (2016). *Characteristics of Children at Greater Risk of Poor Outcomes as Adults* (Analytical Paper 16/01), p. 38. Retrieved 21 January 2017 from www.treasury.govt.nz/publications/research-policy/ap/2016/16-01/ap16-01.pdf.

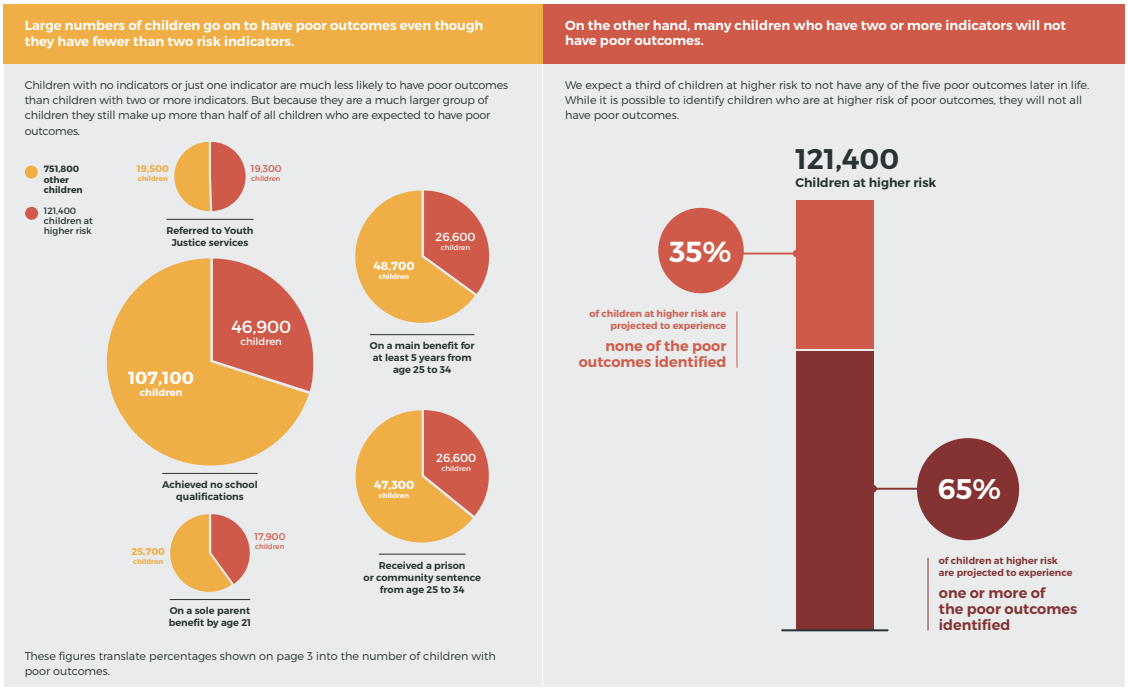
43. Risk indicators don't always lead to poor outcomes

▼ EXCERPT FROM NEW ZEALAND TREASURY, *CHARACTERISTICS OF CHILDREN AT RISK* (2016)[55]

New Zealand Treasury, *Characteristics of Children at Risk* (2016)

'Risk indicators are predictive of poor outcomes. This provides information for agencies and service providers to help develop and deliver more effective services. But many children can overcome disadvantaged backgrounds, and others have poor outcomes despite their relative advantage. Measuring risk is inexact and services will always need to be flexible enough to provide support based on individual need.'

Risk indicators don't always lead to poor outcomes



55 New Zealand Treasury. (2016). *Characteristics of Children at Risk*, p. 5. Retrieved 21 January 2017 from www.treasury.govt.nz/publications/research-policy/ap/2016/16-01/ap16-01-infographic.pdf.

ii) Youth poverty (15–24 years)

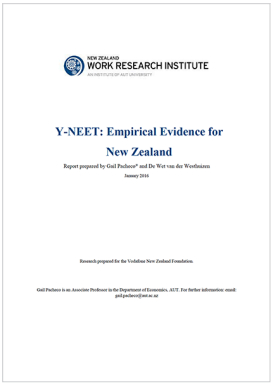
Y-NEETs are youth between the ages of 15 and 24 who are currently not in education, employment or training. Due to the nature of poverty in New Zealand largely being persistent (shown in the Socioeconomic Mobility section), it is imperative to recognise those who are currently Y-NEET. Data is currently lacking on the outcomes of people who in the past were Y-NEET, however it is clear that 'Young people who are neither in employment nor in education or training are at risk of becoming socially excluded – individuals with income below the poverty-line and lacking the skills to improve their economic situation.'[56]

There are large regional differences in Y-NEET rates, shown in graph 51, with the cities holding the four largest shares of New Zealand's population facing much higher rates than the rest of the country.

56 Organisation for Economic Co-operation and Development. (2017). *Youth not in employment, education or training (NEET)*. Retrieved 16 January 2017 from www.data.oecd.org/youthinac/youth-not-in-employment-education-or-training-neet.htm.

44. OECD average and New Zealand Y-NEET rate by age group, 2005–2013

▼ EXCERPT FROM PACHECO, G. & VAN DER WESTHUIZEN, D. W., *Y-NEET: EMPIRICAL EVIDENCE FOR NEW ZEALAND* (2016)[57]


NEW ZEALAND WORK RESEARCH INSTITUTE

Y-NEET: Empirical Evidence for New Zealand

Report prepared by Gail Pacheco* and De Wet van der Westhuizen

January 2016

Research prepared for the Vodafone New Zealand Foundation.

Gail Pacheco is an Associate Professor in the Department of Economics, AUT. For further information: email: gail.pacheco@aut.ac.nz

Pacheco, G. & Van der Westhuizen, D.W. *Y-NEET: Empirical Evidence for New Zealand* (2016)

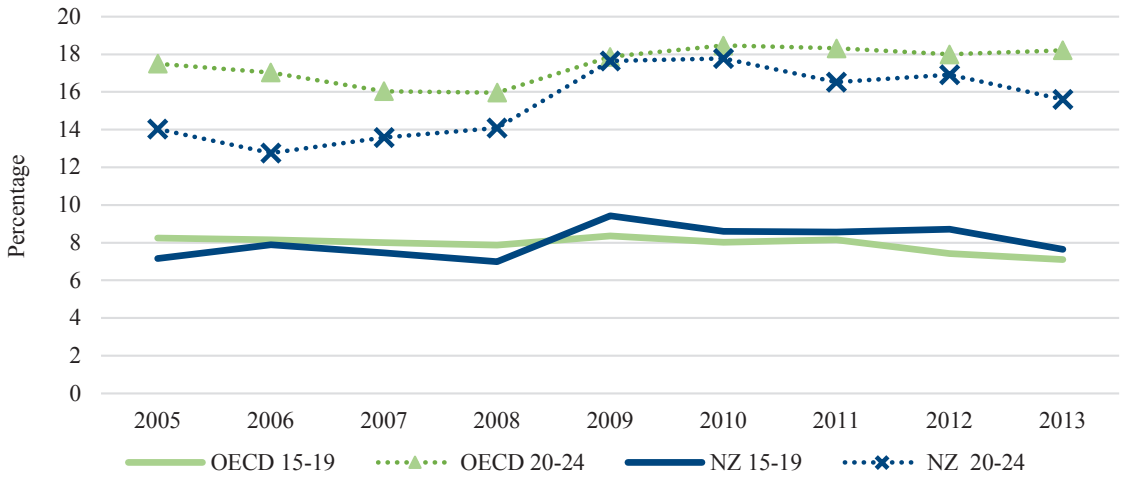
'Y-NEET data is published by the OECD for various age groups, including those youth aged 15-19 and 20-24 years. At present, data is only available for the years 2005-2013. Given the 15-19 year old group is not directly comparable to estimates provided earlier in this report, all comparisons in this section will rely wholly on OECD figures.

It is worth noting, that the OECD data estimates a higher Y-NEET rate for NZ youth aged 20-24 in 2013 (16%), when compared to the HLFS data used earlier in this study (14%). This variation could be driven by OECD data being based on a different quarter than the quarter used in this study (September). For example, the rate of Y-NEETs aged 20-24 years in 2013 using HLFS data for March is 17%, and for June 16%, both more consistent with the OECD estimate of 16%.

Examining the information in Figure 39 reveals that NZ has generally had a lower Y-NEET rate when compared to the OECD average. This is most notably the case for NZ Y-NEETs aged 20-24 years, where the NZ Y-NEET rate was 16% for this age group, compared to 18% for the OECD average. In contrast, the NZ Y-NEET rate for youth aged 15-19 has been higher than the OECD average since 2009.

Similar to previous observations from this study, there was a sharp rise in the NZ Y-NEET rate for both age groups in 2008. For the OECD average, a relatively sharp increase is also evident for 2008, and although increasing, the rate of increase for OECD Y-NEETs aged 15-19 was less severe. These increases can potentially be attributed to the impacts of the GFC on the youth labour market.'

Figure 10: OECD average and New Zealand Y-NEET rate by age group, 2005–2013

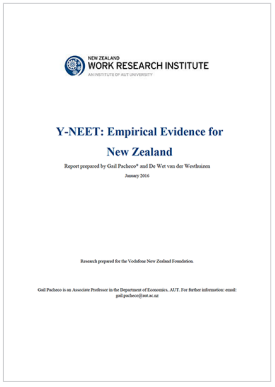


Source: Organisation for Economic Co-operation and Development (2015). Author's compilation.

57 Pacheco, G. & Van der Westhuizen, D.W. (January 2016). *Y-NEET: Empirical Evidence for New Zealand*, p. 12. New Zealand Work Research Institute. Retrieved 16 January 2017 from www.foundation.vodafone.co.nz/wp-content/uploads/2016/10/YNEET-REASEARCH.pdf.

45. Y-NEET rate by OECD country, 2013

▼ EXCERPT FROM PACHECO, G. & VAN DER WESTHUIZEN, D. W., *Y-NEET: EMPIRICAL EVIDENCE FOR NEW ZEALAND* (2016)[58]


NEW ZEALAND WORK RESEARCH INSTITUTE

Y-NEET: Empirical Evidence for New Zealand

Report prepared by Gail Pacheco* and De Wet van der Westhuizen

January 2016

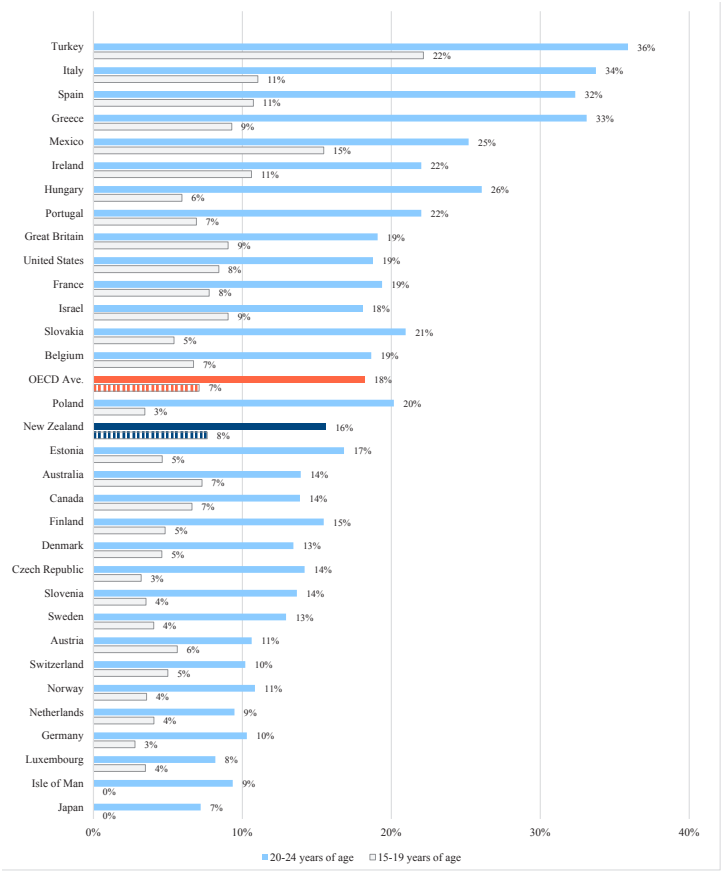
Research prepared for the Vodafone New Zealand Foundation.

Gail Pacheco is an Associate Professor in the Department of Economics, AUT. For further information: email: gail.pacheco@aut.ac.nz

Pacheco, G. & Van der Westhuizen, D.W. *Y-NEET: Empirical Evidence for New Zealand* (2016)

'Figure 11 presents the Y-NEET rates, by age group, for all OECD countries in 2013 (the latest year or data available). When compared to the OECD average, 14 countries had a higher Y-NEET rate than NZ, including the United States, Great Britain and Ireland. European countries such as Denmark, Sweden and Norway have generally had a lower Y-NEET rate when compared to the OECD average.'

Figure 11: Y-NEET rate by OECD country, 2013

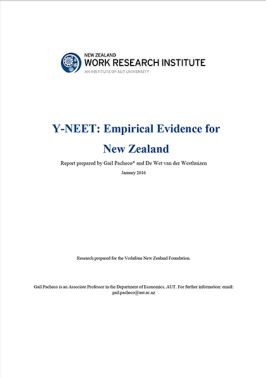


Source: Organisation for Economic Co-operation and Development (2015). Authors compilation.

58 Pacheco, G. & Van der Westhuizen, D.W. (January 2016). *Y-NEET: Empirical Evidence for New Zealand*, p. 13. New Zealand Work Research Institute. Retrieved 16 January 2017 from www.foundation.vodafone.co.nz/wp-content/uploads/2016/10/YNEET-REASEARCH.pdf.

46. New Zealand Y-NEET rate by age group, 2004–2015

▼ EXCERPT FROM PACHECO, G. & VAN DER WESTHUIZEN, D. W., *Y-NEET: EMPIRICAL EVIDENCE FOR NEW ZEALAND* (2016)[59]


NEW ZEALAND WORK RESEARCH INSTITUTE

Y-NEET: Empirical Evidence for New Zealand

Report prepared by Gail Pacheco* and De Wet van der Westhuizen

January 2016

Research prepared for the Vodafone New Zealand Foundation.

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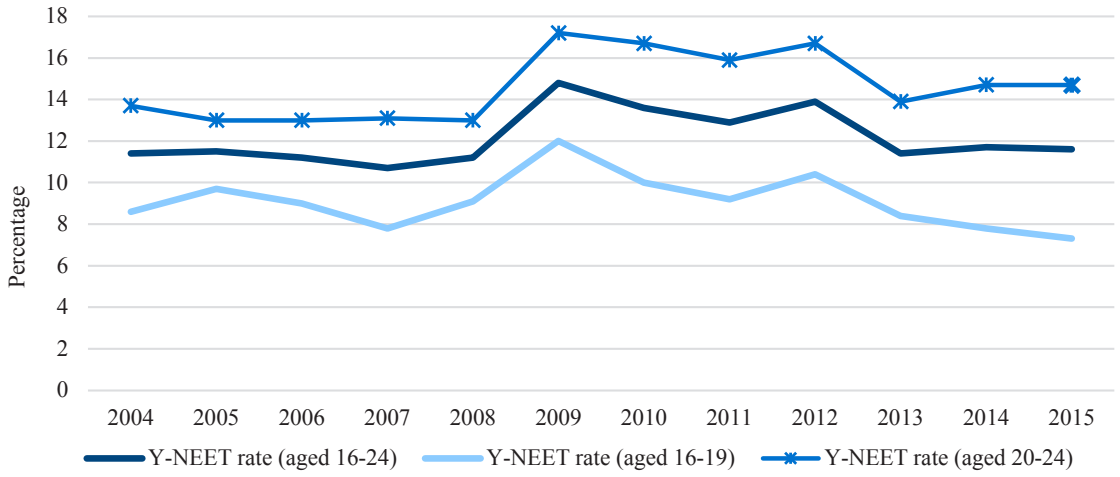
Pacheco, G. & Van der Westhuizen, D.W. *Y-NEET: Empirical Evidence for New Zealand* (2016)

'Overall, Y-NEETs were generally more likely to be aged 20-24 years. In each year between 2004 and 2015, the number of Y-NEETs aged 20-24 years ranged from 37,000 to 51,000, compared to 18,000 to 30,000 Y-NEETs aged 16-19 years. For both age groups, the percentage of Y-NEETs sharply increased in 2008, which can potentially be attributed to the impacts of the GFC on the youth labour market (Eurofound, 2012a; Milner, Morrell, & LaMontagne, 2014). From 2013, the rate of Y-NEETs aged 16-19 years has followed a downward trajectory, decreasing from 8% to 7%. In contrast, the rate for Y-NEETs aged 20-24 years increased from 14% to 15% over the same time period.'

Figure 2: New Zealand Y-NEET rate by age group, 2004-2015

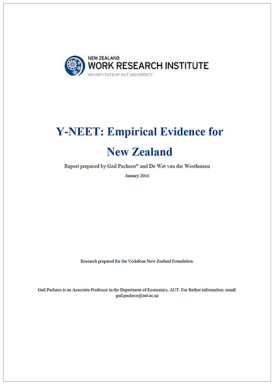


Source: HLFS. Author's compilation.

59 Pacheco, G. & Van der Westhuizen, D.W. (January 2016). *Y-NEET: Empirical Evidence for New Zealand*, p. 3. New Zealand Work Research Institute. Retrieved 16 January 2017 from www.foundation.vodafone.co.nz/wp-content/uploads/2016/10/YNEET-REASEARCH.pdf.

47. New Zealand Y-NEETs by detailed age groups, 2015

▼ EXCERPT FROM PACHECO, G. & VAN DER WESTHUIZEN, D. W., *Y-NEET: EMPIRICAL EVIDENCE FOR NEW ZEALAND* (2016)[60]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'Table 1 illustrates that youth aged 20-24 years made up the largest proportion of the Y-NEET population in 2015, totalling 73%. Y-NEETs aged 22-24 accounted for 45% of all Y-NEETs in NZ, compared to 16-17 year olds, who accounted for just 6%.'

Table 1: New Zealand Y-NEETs by detailed age groups, 2015

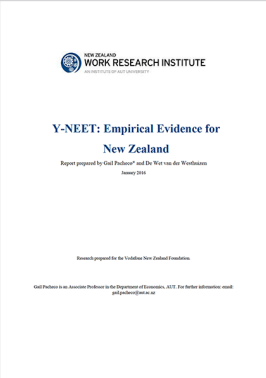
Age Group	Number of Y-NEET	Percentage
16-17	4,300	6%
18-19	13,700	20%
20-21	19,200	28%
22-24	30,200	45%
Total	**67,400**	**100%**

Notes: Source: HLFS. Author's compilation.

60 Pacheco, G. & Van der Westhuizen, D.W. (January 2016). *Y-NEET: Empirical Evidence for New Zealand*, pp. 3–4. New Zealand Work Research Institute. Retrieved 16 January 2017 from www.foundation.vodafone.co.nz/wp-content/uploads/2016/10/YNEET-REASEARCH.pdf.

48. Y-NEETs by gender, 2004–2015

▼ EXCERPT FROM PACHECO, G. & VAN DER WESTHUIZEN, D. W., *Y-NEET: EMPIRICAL EVIDENCE FOR NEW ZEALAND* (2016)[61]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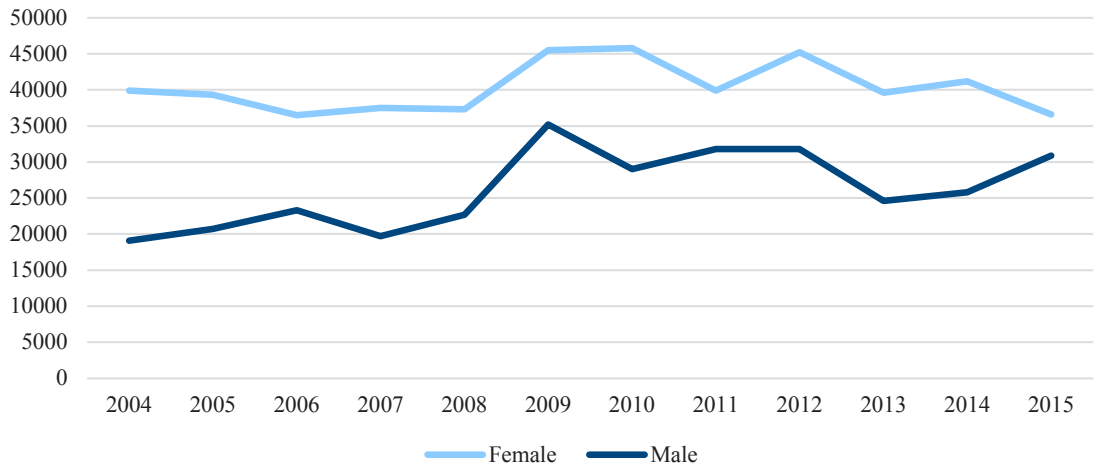
'Figure 3 presents the number of youth with Y-NEET status by gender from 2004 to 2015. Females have consistently made up a larger percentage of Y-NEETs. In each year from 2004 to 2015, females accounted for over 50% of the Y-NEET population when compared to males. Examining the trend for each gender suggests that the Y-NEET gender profile is changing over time. In 2004, there were close to 40,000 females compared to 19,100 males. By 2015, the number of females decreased to 36,600, while the number of males increased to 30,900. There appears to be a clear convergence of the female and male rates, as shown in Figure 3.'

Figure 3: Y-NEETs by gender, 2004–2015

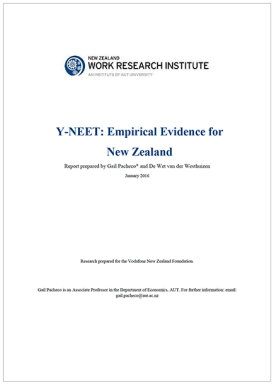


Source: HLFS. Author's compilation.

61 Pacheco, G. & Van der Westhuizen, D.W. (January 2016). *Y-NEET: Empirical Evidence for New Zealand*, p. 4. New Zealand Work Research Institute. Retrieved 16 January 2017 from www.foundation.vodafone.co.nz/wp-content/uploads/2016/10/YNEET-REASEARCH.pdf.

49. Y-NEETs by type and gender, 2015

▼ EXCERPT FROM PACHECO, G. & VAN DER WESTHUIZEN, D. W., *Y-NEET: EMPIRICAL EVIDENCE FOR NEW ZEALAND* (2016)[62]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'There are notable differences in the prevalence of different types of Y-NEET status by gender. Males had a relatively skewed distribution towards being unemployed when compared to females, who were relatively evenly distributed across the different types of Y-NEET status. For male Y-NEETs, 60% were unemployed, compared to only 35% of their female counterparts. Interestingly, in 2015, 65% of females were NILF, with the majority of that group (37%) having caregiving responsibilities, while the comparable figure for males was 4%. This is perhaps the most striking difference between the genders and not surprising given females are generally more likely to take on caregiving responsibilities.'

Table 2: Y-NEETs by type and gender, 2015

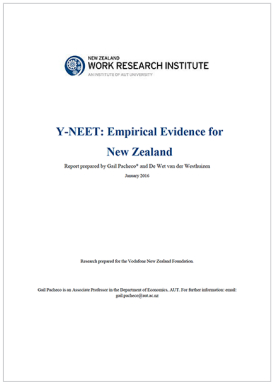
Y-NEET Type	Male	Female
NILF – Caregiving	4%	37%
NILF – Not caregiving	36%	28%
Unemployed	60%	35%

Notes: Source: HLFS. Author's compilation.

62 Pacheco, G. & Van der Westhuizen, D.W. (January 2016). *Y-NEET: Empirical Evidence for New Zealand*, pp. 4–5. New Zealand Work Research Institute. Retrieved 16 January 2017 from www.foundation.vodafone.co.nz/wp-content/uploads/2016/10/YNEET-REASEARCH.pdf.

50. Y-NEETs by highest qualification, 2015

▼ EXCERPT FROM PACHECO, G. & VAN DER WESTHUIZEN, D. W., *Y-NEET: EMPIRICAL EVIDENCE FOR NEW ZEALAND* (2016)[63]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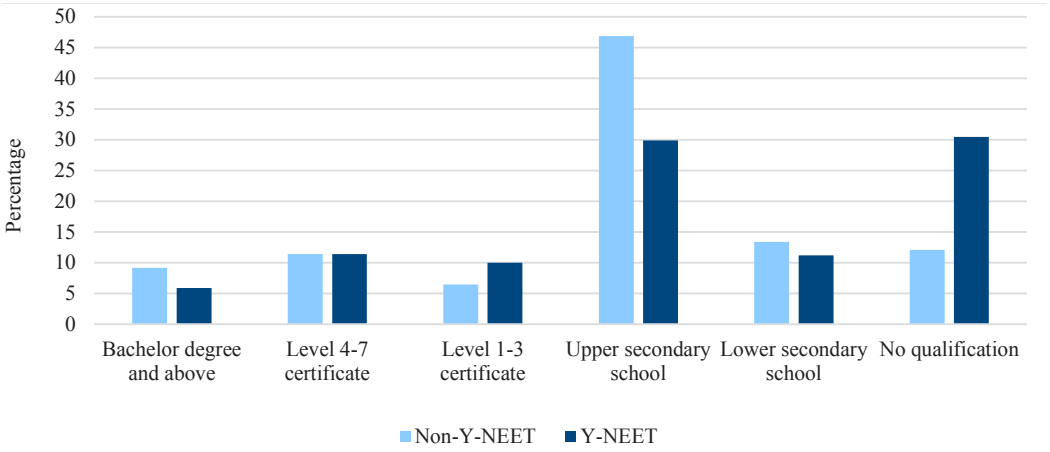
'Education has long been considered a prominent determinant of labour market outcomes given the role it plays in knowledge and skills development. Consequently, lower levels of education risk poorer labour market outcomes, as well as entry to further learning and training opportunities (Hill, 2003).

Figure 4 compares highest qualifications of Y-NEETs against youth who have not experienced NEET status in 2015. Y-NEETs were generally more likely to have no qualification when compared to non-NEET youth, 31% to 12%, respectively. Furthermore, Y-NEETs were generally less-likely to have achieved Bachelor level qualifications or above. For non-NEET youth, 9% had Bachelor level qualifications or above, compared to 6% of their Y-NEET counterparts. Although Y-NEETs were generally more likely to have achieved Level 1-3 certificate qualifications, without further participation in education they risk longer term differences in levels of income earned when compared non-NEET youth (Samoilenko & Carter, 2015).'

Figure 4: Y-NEETs by highest qualification, 2015

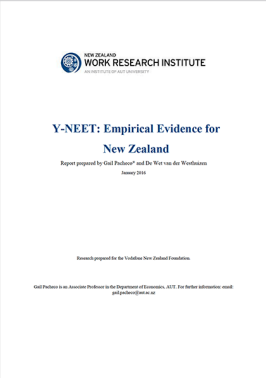


Source: HLFS. Author's compilation.

63 Pacheco, G. & Van der Westhuizen, D.W. (January 2016). *Y-NEET: Empirical Evidence for New Zealand*, p. 5. New Zealand Work Research Institute. Retrieved 16 January 2017 from www.foundation.vodafone.co.nz/wp-content/uploads/2016/10/YNEET-REASEARCH.pdf.

51. Y-NEET rate by local government region, 2015

▼ EXCERPT FROM PACHECO, G. & VAN DER WESTHUIZEN, D. W., *Y-NEET: EMPIRICAL EVIDENCE FOR NEW ZEALAND* (2016)[64]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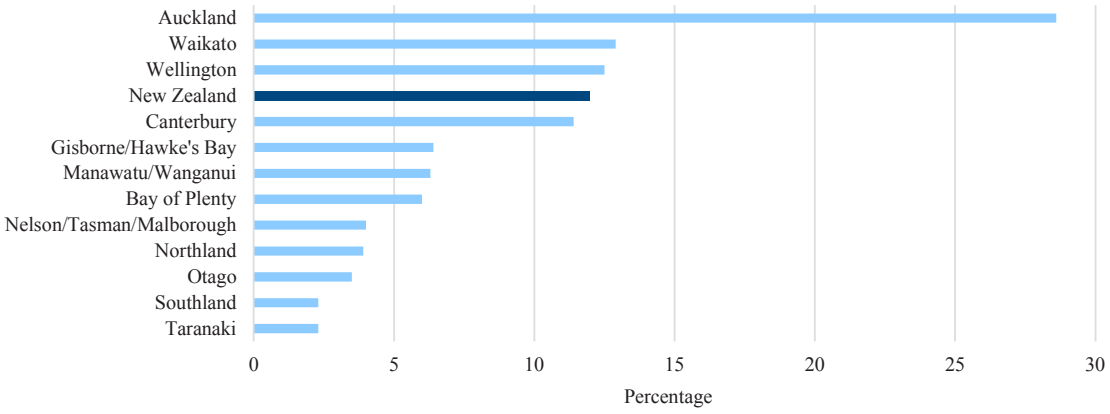
'In 2015, 12% of youth aged 16-24 in NZ were classified as Y-NEET. Figure 44 disaggregates the Y-NEET population by local government region (LGR). Approximately 65% of all Y-NEETs resided in either Auckland, Waikato, Wellington or Canterbury LGR. The Wellington and Waikato LGRs each had a Y-NEET rate of 13%, which was higher than the NZ rate of 12%. The highest Y-NEET rate by far was that of Auckland at 29%, and Taranaki and Southland shared the lowest rate of 2%.'

Figure 7: Y-NEET rate by local government region, 2015

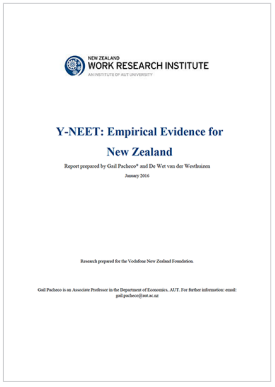


Source: HLFS. Author's compilation.

64 Pacheco, G. & Van der Westhuizen, D.W. (January 2016). *Y-NEET: Empirical Evidence for New Zealand*, p. 7. New Zealand Work Research Institute. Retrieved 16 January 2017 from www.foundation.vodafone.co.nz/wp-content/uploads/2016/10/YNEET-REASEARCH.pdf.

52. Y-NEETs by ethnicity, 2015

▼ EXCERPT FROM PACHECO, G. & VAN DER WESTHUIZEN, D. W., *Y-NEET: EMPIRICAL EVIDENCE FOR NEW ZEALAND* (2016)[65]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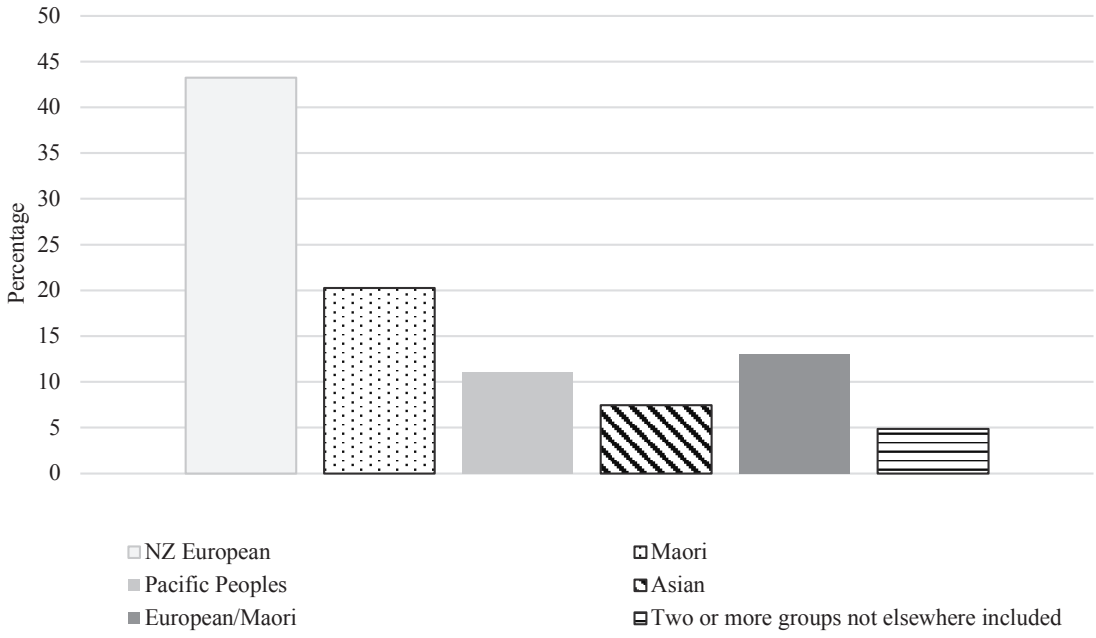
'Of the Y-NEET population in 2015, the largest ethnic group was NZ Europeans at 43%. Māori were the second most prominent group at 20%, followed by those who identified themselves as of European/Māori ethnicity (13%). Data for the MELAA, Other, and residual categories required suppression due to the small number of Y-NEETs who identified themselves with these ethnicities.'

Figure 8: Y-NEETs by ethnicity, 2015

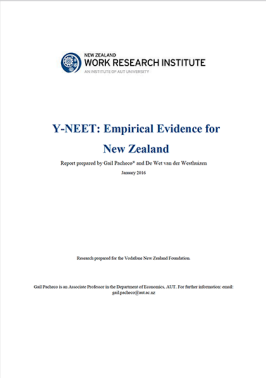


Source: HLFS. Author's compilation.

65 Pacheco, G. & Van der Westhuizen, D.W. (January 2016). *Y-NEET: Empirical Evidence for New Zealand*, p. 8. New Zealand Work Research Institute. Retrieved 16 January 2017 from www.foundation.vodafone.co.nz/wp-content/uploads/2016/10/YNEET-REASEARCH.pdf.

53. Y-NEET parental status by gender, 2015

▼ EXCERPT FROM PACHECO, G. & VAN DER WESTHUIZEN, D. W., *Y-NEET: EMPIRICAL EVIDENCE FOR NEW ZEALAND* (2016)[66]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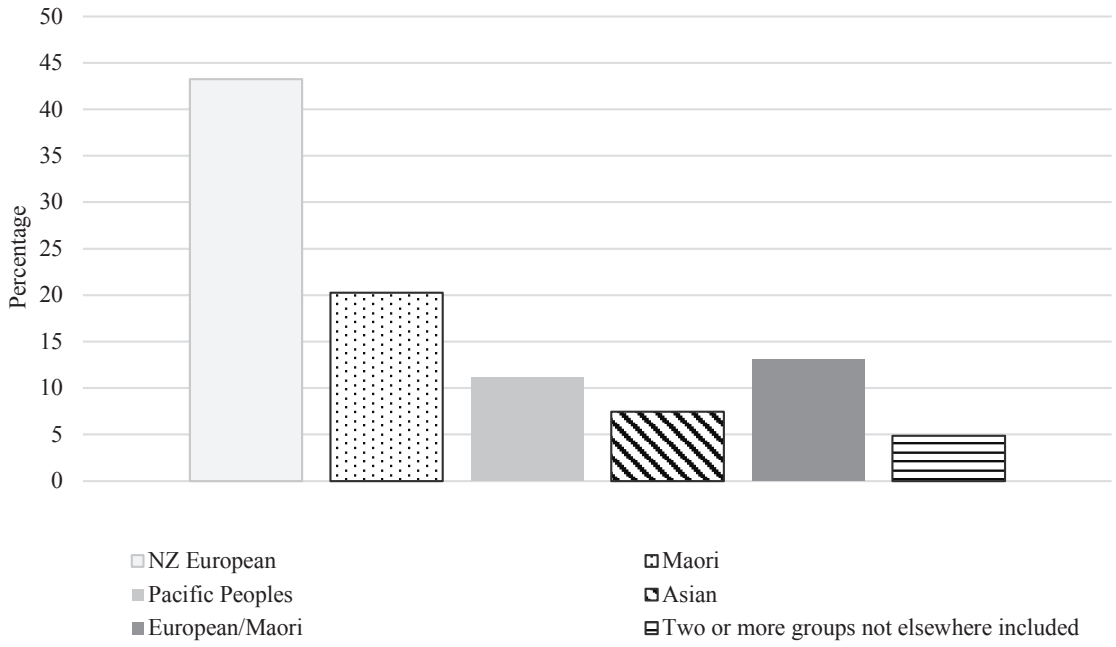
'Figure 9 presents the overall parental status of Y-NEETs, as well as a breakdown of parental status by gender in 2015. It is evident that there were almost twice as many Y-NEETs with children than without, 66% and 34%, respectively.'

'As Figure 9 shows, both male and female Y-NEETs were more likely to have children, than not, in 2015. Additionally, female Y-NEETs had a higher likelihood compared to their male counterparts, 72% to 60%, respectively. As seen previously, female Y-NEETs take on the majority of caregiving responsibilities, with 37% being NILF and caregiving, compared to only 4% of males (as shown in Table 2).'

Figure 9: Y-NEET parental status by gender, 2015

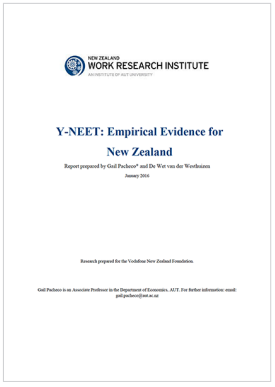


Source: HLFS. Author's compilation.

66 Pacheco, G. & Van der Westhuizen, D.W. (January 2016). *Y-NEET: Empirical Evidence for New Zealand*, p. 9. New Zealand Work Research Institute. Retrieved 16 January 2017 from www.foundation.vodafone.co.nz/wp-content/uploads/2016/10/YNEET-REASEARCH.pdf.

54. Predictors of long-term Y-NEET

▼ EXCERPT FROM PACHECO, G. & VAN DER WESTHUIZEN, D. W., *Y-NEET: EMPIRICAL EVIDENCE FOR NEW ZEALAND* (2016)[67]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'On the international front, several empirical studies have delved into identifying factors which predict the likelihood of individuals becoming Y-NEET. One UK based study by the Audit Commission (2010), identified nine personal characteristics which predicted whether a young person would become Y-NEET for six months or more. Of these factors, having previous spells of Y-NEET was the strongest predictor of future long-term Y-NEET. Those who have previously been Y-NEET were 7.9 times more likely to be Y-NEET is *[sic]* the future for more than six months (Audit Commission, 2010).'

'Other factors such as bullying at school, lack of parental support (Gracey & Kelly, 2010) and regional variation in levels of social-deprivation (Sachdev, Harries, & Roberts, 2006) have also been identified as predictors of becoming long term Y-NEET.'

Table 4: Predictors of long-term Y-NEET

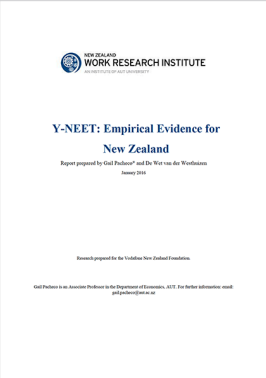
Personal Characteristics	Increase in likelihood of being NEET
NEET one or more times before	7.9 times more likely
Pregnant or a parent	2.8 times more likely
Supervised by youth offending team	2.6 times more likely
Less than 3 months post-16 education	2.3 times more likely
Disclosed substance abuse	2.1 times more likely
Caregiving responsibilities	2.0 times more likely
Requirement for special education needs	1.5 times more likely
Limited learning difficulty exists	1.3 times more likely
Ethnicity – White British	1.2 times more likely

Notes: Source: Audit Commission (2010). Authors compilation.

67 Pacheco, G. & Van der Westhuizen, D.W. (January 2016). *Y-NEET: Empirical Evidence for New Zealand*, p. 14. New Zealand Work Research Institute. Retrieved 16 January 2017 from www.foundation.vodafone.co.nz/wp-content/uploads/2016/10/YNEET-REASEARCH.pdf.

55. Short-term costs for Y-NEETs

▼ EXCERPT FROM PACHECO, G. & VAN DER WESTHUIZEN, D. W., *Y-NEET: EMPIRICAL EVIDENCE FOR NEW ZEALAND* (2016)[68]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'As Table 5 shows, the per capita short term cost for each individual that is Y-NEET is estimated as $21,996. The analogous figure for Auckland is a little higher, and this is likely due to higher average wages forgone by Y-NEET in Auckland, relative to the rest of NZ. Auckland Maoris *[sic]* were found to be associated with the highest per capita costs, and this is likely attributable to their greater propensity to disengage from education earlier, begin caregiving responsibilities (and consequently withdraw from the labour market) at an earlier age, and on average, undergo lengthier spells of unemployment, relative to NZ European for instance.

Several caveats must accompany these estimates. There is no differentiation across length of NEET spell, in terms of calculating economic costs for those that experience a short spell (under 6 months), versus those that experience an extended period of being NEET. These costs are also only short term in nature.'

Table 5: Short term costs for Y-NEETs

Region	NZ[25]	Auckland	Auckland		
Ethnicity			NZ European	Maori	Pacific Peoples
Total cost per capita[26] ($)	21,996	23,661	18,178	28,289	22,242
15-19 year olds	10,084	11,347	10,853	18,624	14,411
20-24 year olds	27,911	28,599	21,112	32,162	25,378

Source: Pacheco and Dye (2014)

68 Pacheco, G. & Van der Westhuizen, D.W. (January 2016). *Y-NEET: Empirical Evidence for New Zealand*, p. 19. New Zealand Work Research Institute. Retrieved 16 January 2017 from www.foundation.vodafone.co.nz/wp-content/uploads/2016/10/YNEET-REASEARCH.pdf.

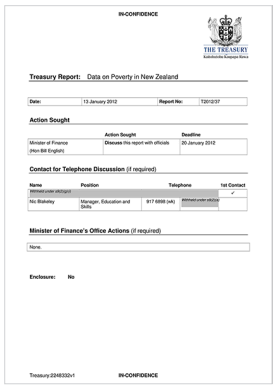
iii) Elderly poverty (65+ years)

While child (0–17 years) and youth (15–24) poverty have been significant focus areas of research in recent years, elderly (65+ years) poverty has had very little attention. Elderly people are unable to continue generating income, relying instead on assets built up over their lifetime and on superannuation. Given New Zealand's aging population and house price rises followed by rate increases, we are at risk of more elderly becoming 'asset-rich and income-poor'.

As shown by Graph 57 from the New Zealand Initiative, 'The marked difference between the experience between the experiences of the 65+ group and the rest is also evident in comparing the 2007 and 2011 rates. New Zealand Superannuation gives the elderly an easier ride through economic downturns.' During the period 1992–2007 however, there was a steady increase of the proportion of elderly below the 60% of median (AHC), while the trend for the rest of the population has been on a steady decrease.

56. Change in proportion below 60% of median (AHC) over time by age group

▼ EXCERPT FROM NEW ZEALAND TREASURY, *DATA ON POVERTY IN NEW ZEALAND* (REPORT NO. T2012/37) (2012)[69]



IN-CONFIDENCE

THE TREASURY

Treasury Report: Data on Poverty in New Zealand

Date:	13 January 2012	Report No:	T2012/37

Action Sought

	Action Sought	Deadline
Minister of Finance (Hon Bill English)	Discuss this report with officials	20 January 2012

Contact for Telephone Discussion (if required)

Name	Position	Telephone	1st Contact
Withheld under s9(2)(g)(ii)			✓
Nic Blakeley	Manager, Education and Skills	917 6868 (s4A)	Withheld under s9(2)(g)

Minister of Finance's Office Actions (if required)

None.

Enclosures: No

Treasury:2248332v1 IN-CONFIDENCE

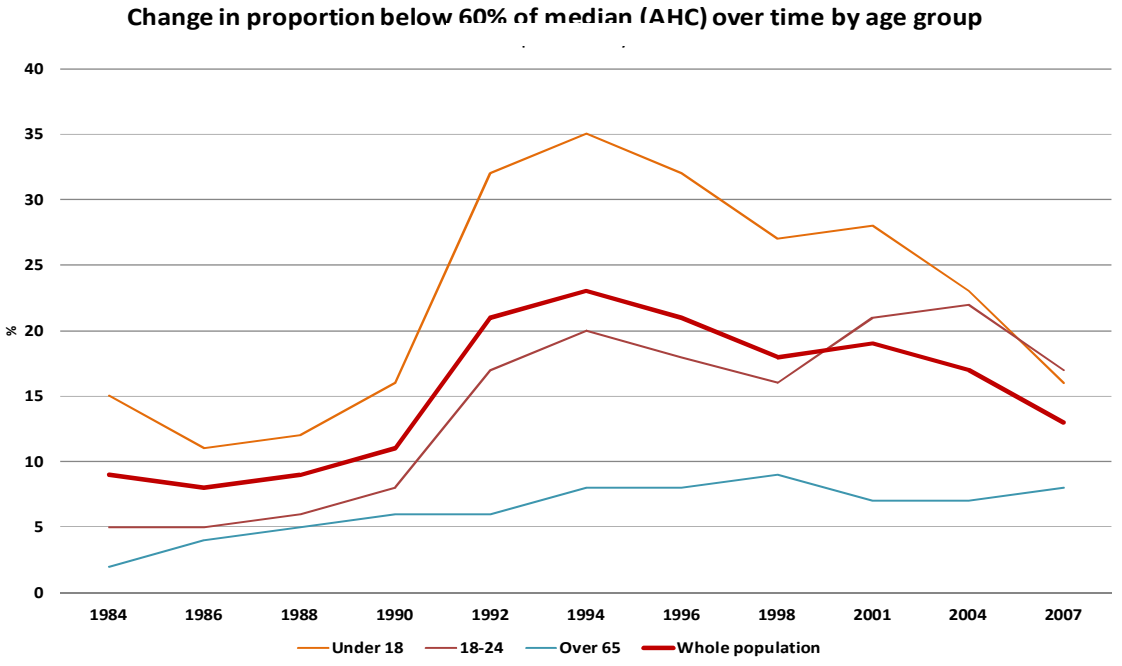
New Zealand Treasury, *Data on Poverty in New Zealand* (Report No. T2012/37) (2012)

'The following static results are from the annual Household Incomes Report (Perry 2011), based on Statistics New Zealand's Household Economic Survey (HES), and various living standards reports (e.g. Perry 2009), based on MSD's Living Standards Surveys (LSS). This is based on data that has been collected every two or three years to give a repeated static analysis of the level of hardship'

'Using the 60% threshold, since 2004 the constant and relative measures have continued to diverge, with fewer people in poverty using a constant value measure but levels of relative poverty remaining largely static. This divergence reflects the absolute increase in real incomes for low income households throughout this period. However this has been matched by increases in median incomes, so there has been little relative change.'

Annex 2 – Further Static Data on Poverty in New Zealand

Poverty by Age Group

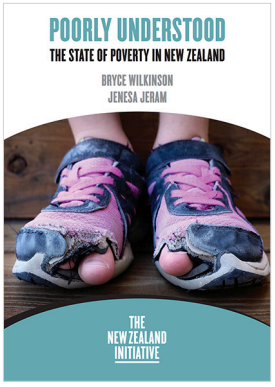


Source: Adapted from Perry 2011

69 New Zealand Treasury. (2012). *Data on Poverty in New Zealand* (Report No. T2012/37), pp. 4, 13. Retrieved 21 January 2017 from www.dpmc.govt.nz/sites/default/files/2017-03/2397303-mcop-tr-data-on-poverty-in-nz.pdf.

57. Material hardship measures, 2007–14

▼ EXCERPT FROM THE NEW ZEALAND INITIATIVE, *POORLY UNDERSTOOD: THE STATE OF POVERTY IN NEW ZEALAND* (2016)[70]



The New Zealand Initiative, *Poorly Understood: The state of poverty in New Zealand* (2016)

'Table 9 shows trends in two material hardship measures between 2007 and 2014. In 2014, the severe hardship rates (DEP-17 9+) for the entire population, those under age 18, and those who were 65+ were 5%, 8%, and 1%, respectively. For the less severe threshold measure (DEP-17 7+) it was 8%, 14%, and 2%, respectively.

The marked difference between the experiences of the 65+ group and the rest is also evident in comparing the 2007 and 2011 rates. New Zealand Superannuation gives the elderly an easier ride through economic downturns.'

Table 9: Material hardship measures, 2007–14

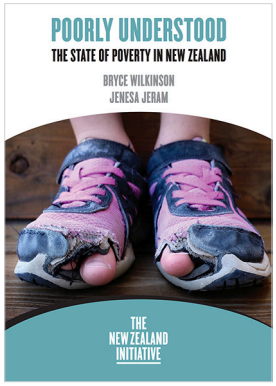
	Less stringent threshold			More stringent threshold		
	7+ on DEP-17			9+ on DEP-17		
	ALL	0–17	65+	ALL	0–17	65+
2007	10	14	4	4	6	1
2009	11	16	4	5	9	3
2010	12	20	3	5	9	1
2011	13	21	3	6	10	1
2012	11	17	5	5	9	2
2013	9	15	2	5	9	1
2014	8	14	2	5	8	1

Source: Bryan Perry, "The Material Wellbeing of New Zealand Households: Trends and Relativities Using Non-Income Measures, with International Comparisons" (Wellington: Ministry of Social Development, 2015), Table G.2, 59.

70 The New Zealand Initiative. (2016). *Poorly Understood: The state of poverty in New Zealand*, p. 16. Retrieved 21 January 2017 from www.nzinitiative.org.nz/dmsdocument/4.

58. Hardship rates within New Zealand using EU-13 and DEP-17, 2008

▼ EXCERPT FROM THE NEW ZEALAND INITIATIVE, *POORLY UNDERSTOOD: THE STATE OF POVERTY IN NEW ZEALAND* (2016)[71]



The New Zealand Initiative, *Poorly Understood: The state of poverty in New Zealand* (2016)

Table 8 'compares hardship rates for different groups within New Zealand.'

'The figures in the 'SP > 65' row show that the incidence of measured material hardship in New Zealand is by far the greatest among sole parent households under the age of 65. The incidence of hardship among children in 'primarily benefit dependent' households is particularly high: 51% of children in such households lack on at least 7 of the MSD's 17 deprivation indicators, and 28% on at least 10 of these indicators. Children in 'benefit-dependent households' are seven times more likely to experience hardship on at least 10 indicators than children in households where market income is the dominant source of spending power. (Compare the figures in the last two rows of the last column in Table 8.)'

Table 8: Hardship rates within New Zealand using EU-13 and DEP-17, 2008

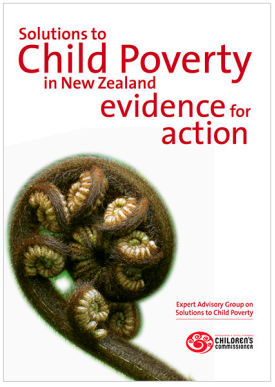
LSS 2008	'Standard' EU hardship		'More severe' EU hardship	
	EU-13 (5+)	DEP-17 (7+)	EU-13 (7+)	DEP-17 (10+)
ALL	11	11	4	4
0–17	18	17	8	8
65+	3	2	~1	~1
2P <65	11	9	4	3
SP <65	35	38	17	22
Couple <65	5	5	2	1
European (total)	8	8	3	3
Māori (total)	24	25	9	11
Children (market)	11	10	4	4
Children (benefit)	51	51	24	28

Source: Bryan Perry, "Measuring and Monitoring Material Hardship for New Zealand Children: MSD Research and Analysis Used in Advice for the Budget 2015 Child Hardship Package," Table D.11 (Wellington: Ministry of Social Development, 2015), 31.

71 The New Zealand Initiative. (2016). *Poorly Understood: The state of poverty in New Zealand*, p. 14. Retrieved 21 January 2017 from www.nzinitiative.org.nz/dmsdocument/4.

59. Material deprivation for children and other age groups, 2007 to 2011, Economic Living Standards Index (ELSI)

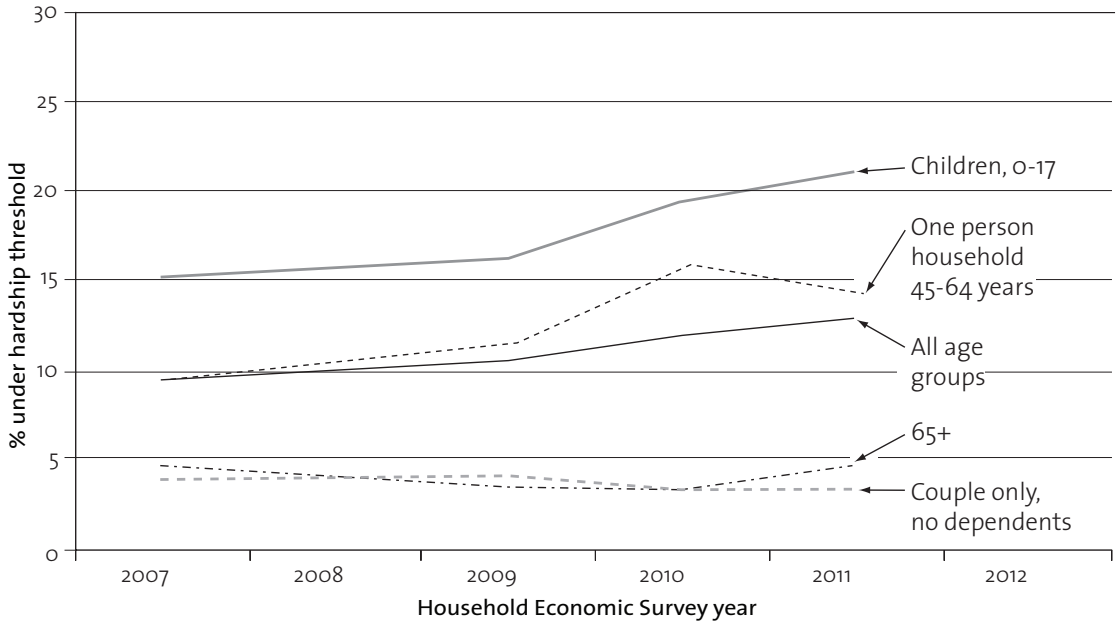
▼ EXCERPT FROM EXPERT ADVISORY GROUP ON SOLUTIONS TO CHILD POVERTY, *SOLUTIONS TO CHILD POVERTY IN NEW ZEALAND* (2012)[72]



Expert Advisory Group on Solutions to Child Poverty, *Solutions to Child Poverty in New Zealand* (2012)

Figure 1.5 highlights 'some of the available deprivation data based on the Economic Living Standards Index (ELSI). Perry's analysis suggests that about 20 percent of children experiences material deprivation in 2011, close to 5 percent higher than in 2007 (prior to the global financial crisis).'

Figure 1.5: Material deprivation for children and other age groups, 2007 to 2011, Economic Living Standards Index (ELSI)

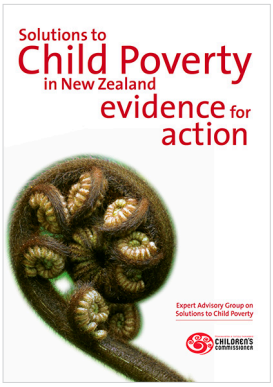


Source: Perry, 2012, p166

72 Expert Advisory Group on Solutions to Child Poverty. (2012). *Solutions to Child Poverty in New Zealand*, p. 8. Retrieved 21 January 2017 from www.occ.org.nz/assets/Uploads/EAG/Final-report/Final-report-Solutions-to-child-poverty-evidence-for-action.pdf.

60. Deprivation rates in 13 countries comparing children with older people and the total population in 2007 (Europe) and 2008 (New Zealand)

▼ EXCERPT FROM EXPERT ADVISORY GROUP ON SOLUTIONS TO CHILD POVERTY, *SOLUTIONS TO CHILD POVERTY IN NEW ZEALAND* (2012)[73]



Expert Advisory Group on Solutions to Child Poverty, *Solutions to Child Poverty in New Zealand* (2012)

'Table 1.3 highlights that child deprivation rates in New Zealand are higher than in most Western European countries, but lower than in the poorer countries of Eastern Europe. Such results are not entirely suprising. They reflect the fact that living standards in New Zealand are somewhat lower than in many Western European countries while income inequality is greater.'

Table 1.3: Deprivation rates* in 13 countries comparing children with older people and the total population in 2007 (Europe) and 2008 (New Zealand)

Country	Children 0-17	Aged 65+	Total population
Netherlands	6	3	6
Norway	6	1	5
Sweden	7	3	6
Spain	9	11	11
Germany	13	7	13
Slovenia	13	18	14
Ireland	14	4	11
United Kingdom	15	5	10
New Zealand	18	3	13
Italy	18	14	14
Czech Republic	20	17	20
Hungary	42	35	38
Poland	39	41	44

* The deprivation rates in this table are based on the proportion of households who lack at least three items from a list of nine because they cannot afford them. All nine items are regarded as essential by the majority of the population.

Source: Perry, 2009, pp30-33

73 Expert Advisory Group on Solutions to Child Poverty. (2012). *Solutions to Child Poverty in New Zealand*, p. 11. Retrieved 21 January 2017 from www.occ.org.nz/assets/Uploads/EAG/Final-report/Final-report-Solutions-to-child-poverty-evidence-for-action.pdf.

G: International

By looking into the social policies and priorities of other countries, New Zealand may become more aware of opportunities to improve its ability to tackle poverty, and of key areas to focus on. An example of the benefit of international influence is the shift away from purely income-focused studies to include data such as the EU-13 measure of material deprivation, allowing for more focus on exact areas that policy needs to focus resources towards.

To this end, the main focus was on the Menino Survey of Mayors (2016). The survey provided insight into the 'key contemporary challenges, leadership styles, and expectations for the future' from 102 mayors across the United States. The report showed an internationally increased urgency to act on poverty, as we are now seeing in New Zealand.

61. 2016 Menino Survey of Mayors

▼ EXCERPT FROM BOSTON UNIVERSITY INITIATIVE ON CITIES, *2016 MENINO SURVEY OF MAYORS* (2016)[74]

Boston University Initiative on Cities, *2016 Menino Survey of Mayors* (2016)

'Mayors stated that while addressing issues of income inequality, the shrinking middle class and immigration are on their respective municipal agendas, their most pressing economic concern is poverty. Collectively, nearly half the mayors explained that those living in or near poverty are the most excluded group in their cities and a quarter identified the poor as the group they most need to do more to help. Notably, 20 percent of mayors believe the single best thing they can do for those in poverty is to address housing concerns and education'

- 'Relative to two years ago, socioeconomic issues — like poverty, affordability, and income disparities – are more frequently mentioned as top policy priorities by America's mayors.
- Mayors rank poverty, rather than income inequality or the shrinking middle class, as the most pressing economic concern. This focus was shared by both Democrat and Republican mayors, although Democrats were 15 percentage points more likely to be concerned with poverty.
- Mayors are concerned about economic challenges ranging from unequal transit access to racial wealth gaps, but they are most frequently concerned about the lack of middle class jobs for those without a college degree and a lack of living wage jobs.'[75]

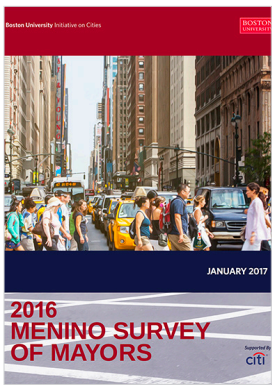
Data Point: Program & Policy priorities

74 Boston University Initiative on Cities. (2016). *2016 Menino Survey of Mayors*. Retrieved 16 January 2017 from www.surveyofmayors.com.

75 Citigroup Inc. (2017). *New Menino Survey of Mayors, from Boston University Initiative on Cities, Reveals Poverty as Top Issue for Cities Across the Country*. Retrieved 2 July 2017 from www.citigroup.com/citi/news/2017/170110a.htm.

62. Top two 'constituencies' city government needs to do more to help

▼ EXCERPT FROM BOSTON UNIVERSITY INITIATIVE ON CITIES, *2016 MENINO SURVEY OF MAYORS* (2017)[76]



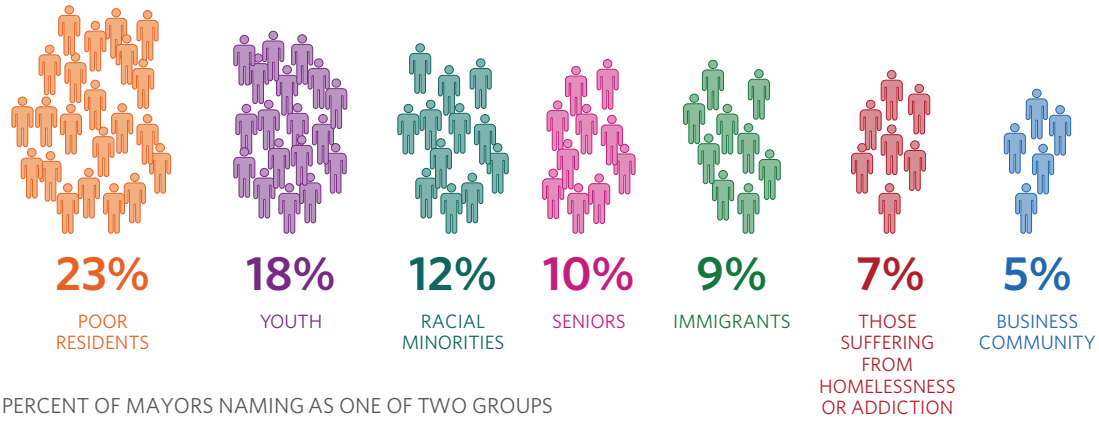
Boston University Initiative on Cities, *2016 Menino Survey of Mayors* (2017)

Mayors 'considered the people they believe need more help or attention from government. As with policy priorities, mayors answered an open-ended question: Which two constituencies (however you define them) do you think your city government most needs to do more to help? The responses, coded into manageable categories, are displayed in Figure 9.

Mayors feel they need to do more to support a wide range of under-served constituencies, with the poor and youth among the most frequently cited.

Although there was no single group with for whom a large proportion of mayors were concerned, nearly a quarter cited poor residents and 18 percent felt they needed to do more to support youth.'

Figure 9: Top two "constituencies" city government needs to do more to help

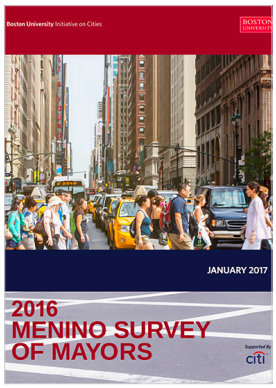


Excludes options named more than once but less than 5% of the time:
Those affected by neighborhood change, Politically marginalized, Middle class, Those with low transit access, The disabled, Non profit groups, Ex felons

76 Boston University Initiative on Cities. (2017). *2016 Menino Survey of Mayors*, p. 25. Retrieved 16 January 2017 from www.bu.edu/ioc/files/2017/01/2016-Menino-Survey-of-Mayors-Final-Report.pdf.

63. Mayors' top economic concern

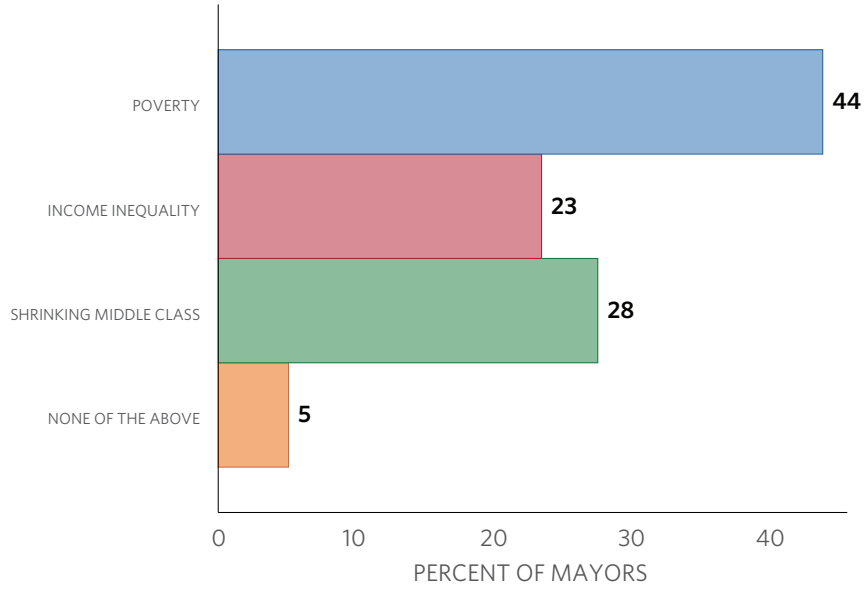
▼ EXCERPT FROM BOSTON UNIVERSITY INITIATIVE ON CITIES, *2016 MENINO SURVEY OF MAYORS* (2017)[77]



Boston University Initiative on Cities, *2016 Menino Survey of Mayors* (2017)

'When asked whether they worried most about poverty, income inequality, the shrinking middle class, or none of the above, a plurality of mayors (over 40 percent) selected poverty.'

Figure 20: Mayors' top economic concern



77 Boston University Initiative on Cities. (2017). *2016 Menino Survey of Mayors*, p. 37–38. Retrieved 16 January 2017 from www.bu.edu/ioc/files/2017/01/2016-Menino-Survey-of-Mayors-Final-Report.pdf.

64. International comparison of material deprivation among 0–17 year olds

▼ EXCERPT FROM SIMPSON, J., DUNCANSON, M., OBEN, G., WICKEN, A. & GALLAGHER, S., *CHILD POVERTY MONITOR 2016 TECHNICAL REPORT* (2016)[78]

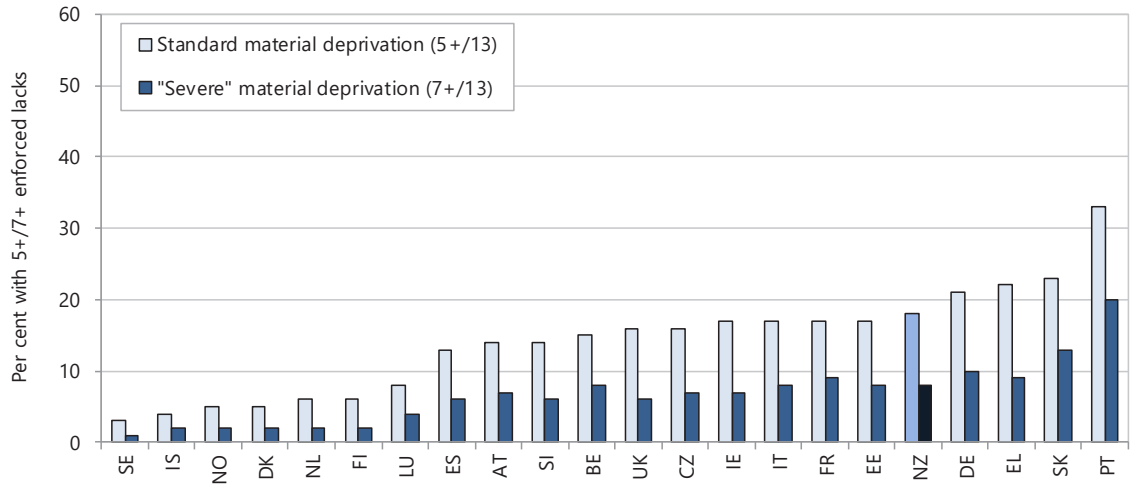
Simpson, J., Duncanson, M., Oben, G., Wicken, A. & Gallagher, S. *Child Poverty Monitor 2016 Technical Report* (2016)

'For some time there has been increasing interest in international comparisons on not only economic performance but also measures reflecting income hardship. Greater awareness is shown in further measures of poverty such as material hardship that begin to address the limitations of comparison of income alone. The value of including non-income items on living standards and items around social inclusion was accepted for conceptual and reasons.'

'Two measures of material deprivation are used in this section from the EU-13: the enforced lack of 5+ items (standard material deprivation) and the enforced lack of 7+ items (severe material deprivation) out of the 13.

New Zealand had 18% of 0-17 year olds who have a 5+ score making it 18th out of the comparable 22 countries. Eight per cent of 0-17 year olds were in households with a 7+ score (severe material deprivation), with New Zealand 14th equal (Figure 23). In comparison, New Zealand material deprivation rates for those aged 65+ years are much lower. Three per cent of 65+ year olds have enforced lack scores of 5+ items out of 13 items and only 1% have a score of 7+ items.'

Figure 23. International comparison of material deprivation among 0–17 year olds



Source: Perry (2016) International comparisons using EU-SILC 2009 for EU countries and NZ LSS 2008 for New Zealand;

Abbreviations: AT Austria, BE Belgium, CZ Czech Republic, DE Germany, DK Denmark, EE Estonia, EL Greece, ES Spain, FI Finland, FR France, IE Ireland, IT Italy, LU Luxembourg, NL Netherlands, NO Norway, NZ New Zealand, PT Portugal, SE Sweden, SI Slovenia, SK Slovakia, UK United Kingdom

78 Simpson, J., Duncanson, M., Oben, G., Wicken, A. & Gallagher, S. (2016). *Child Poverty Monitor 2016 Technical Report,* p. 28. Retrieved 16 January 2017 from www.ourarchive.otago.ac.nz/bitstream/handle/10523/7006/2016%20CPM.pdf?sequence=4&isAllowed=y.

Conclusion

Over the past decade, an increasing amount of data has been collected on poverty. This data has enabled organisations such as the New Zealand Treasury to create studies showing key areas and groups at increased risk of falling into a cycle of poverty. What is necessary now is to maintain longitudinal data collection programmes such as Statistics New Zealand's Survey of Family, Income and Employment (SoFIE) and the Integrated Data Infrastructure (IDI), which are increasingly being used by the New Zealand Treasury and other governmental departments. The aim of these programmes is to allow the creation of more area- and time-specific policies that will have greater impact on reducing the difference between being 'on track' and 'off track'.

Further, these policies need to be analysed based on their effectiveness if we are to empower New Zealanders to attain higher living standards. We cannot afford to wait for action on poverty, as the status quo is not leading us towards reaching the Sustainable Development Goals set by the United Nations in *Transforming our world: The 2030 Agenda for Sustainable Development*.[79]

To help us move in the right direction, some areas highlighted in this report that would benefit from further research are as follows:

- Regional differences of educational and employment opportunities,
- Characteristics of people avoiding intergenerational poverty,
- Longitudinal studies of Y-NEETs in New Zealand,
- Effectiveness of social services on alleviating poverty and
- Elderly poverty rates, specifically conditions of the asset-rich and income-poor.

Regional differences between educational and employment opportunities are of the utmost importance, as more people from regional areas struggle with the movement into cities such as Auckland and Wellington for tertiary education. In addition to the difficulties associated with receiving a tertiary education, many students face poor employment opportunities on their return home after graduating. New Zealand needs to focus on spreading economic growth to the regions and addressing regional infrastructure deficiencies that hinder economic growth.

In reports such as the New Zealand Treasury's *Using IDI Data to Estimate Fiscal Impacts of Better Social Sector Performance*, comparing children born in 'high risk' scenarios with other children shows a substantial difference in outcomes. The continuation of these studies is necessary for reliably analysing progress and highlighting possible steps to reduce poverty and improve opportunities for all New Zealanders, regardless of their situation at birth. Such possible steps include reducing the number of students leaving school before 18 or increasing NCEA level 2 attainment.

The proportion of Y-NEETs in New Zealand indicates a worrying trend for the future. In 2015 approximately 12% of 16–24 year olds were not in education, employment, or training. Mroz and Savage analysed the long-term effects of youth unemployment, finding links to adverse impacts such as reduced wage rates and weakened labour force participation rates in the future.[80] However, they also found that after unemployment spells as a young person, there is an increased likelihood of training in the future. We need to promote the availabilty of options for people after such periods of unemployment, such as night courses in preparation for tertiary education.

There is a need to analyse the real outcomes of welfare programmes in a New Zealand context. A study in China found that social welfare programmes reduced poverty rates by approximately 32% over the period 1989 and 2009.[81] The study also found that income inequality increased after government assistance. New Zealand needs a research base to help us understand where funding will be most effective.

79 United Nations. (2015). *Transforming our world: The 2030 agenda for sustainable development*. Retrieved 2 July 2017 from sustainabledevelopment.un.org/content/documents/21252030%20Agenda%20for%20Sustainable%20Development%20web.pdf.

80 Mroz, T. & Savage, T. (2004). *The Long-term Effects of Youth Unemployment*. Retrieved 2 July 2017 from www.researchgate.net/profile/Thomas_Mroz2/publication/227637196_The_Long-Term_Effects_of_Youth_Unemployment/links/0a85e53c556f6c391d000000/The-Long-Term-Effects-of-Youth-Unemployment.pdf.

81 Lu, S., Lin, Y. T., Vikse, J. H., & Huang, C. C. (2013). Effectiveness of social welfare programmes on poverty reduction and income inequality in China. *Journal of Asian Public Policy*. Retrieved 2 July 2017 from www.socialwork.rutgers.edu/sites/default/files/huamin_research_report_6.pdf.

Conversations about poverty in New Zealand tend to focus either on child poverty or homelessness while the increasing issue of elderly poverty goes largely unnoticed. As our demographics shift towards an aging population and the cost of living in New Zealand continues to rise, the proportion of people who are asset-rich but income-poor increases. They are a group affected by the increasing cost of housing as rates increase with the value of their properties. Those who do not have sufficient income to pay are left only with the option to move to a cheaper area, often away from family and established support systems. In order to prepare for a future in which everyone can be supported according to their needs, elderly people facing poverty needs to be a research priority.

Bibliography

Publishing agency	Title	Year	Page in this paper
Auckland University of Technology New Zealand Work Research Institute	Y-NEET: Empirical Evidence for New Zealand	2016	53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64
Boston University Initiative on Cities	2016 Menino Survey of Mayors	2017	73, 74
Boston University Initiative on Cities	2016 Menino Survey of Mayors	2016	72
Education Counts	School Leaver Destinations	2016	26
Expert Advisory Group on Solutions to Child Poverty	Solutions to Child Poverty in New Zealand: Evidence for Action	2012	69, 70
Ministry of Social Development	The Social Report 2016	2016	32, 33
The New Zealand Initiative	Poorly Understood: The state of poverty in New Zealand	2016	67, 68
New Zealand Institute of Economic Research	Understanding inequality	2013	7, 8, 19
New Zealand Treasury	Characteristics of Children at Risk	2016	29, 39, 47, 48, 49, 50, 51
New Zealand Treasury	He Tirohanga Mokopuna: 2016 Statement on the Long-Term Fiscal Position	2016	9, 25
New Zealand Treasury	Using IDI Data to Estimate Fiscal Impacts of Better Social Sector Performance [Analytical Paper 16/04]	2016	4, 5, 6, 24, 28, 35
New Zealand Treasury	Data on Poverty in New Zealand [Report No. T2012/37]	2012	66
New Zealand Treasury	A descriptive analysis of income and deprivation in New Zealand [Report No. T2012/866]	2012	11, 12, 13, 14, 15
Organisation for Economic Co-operation and Development	How's Life in New Zealand?	2016	36
Statistics New Zealand	Housing affordability	2015	21
Statistics New Zealand	Income inequality	2015	22
Statistics New Zealand	Population with low incomes	2015	20
University of Otago Department of Public Health and University of Otago Divison of Health Sciences	NZDep2013 Index of Deprivation	2014	37, 38
University of Otago New Zealand Child Youth Epidemmiology Service	Child Poverty Monitor 2016 Technical Report	2016	10, 17, 18, 30, 31, 41, 42, 43, 44, 45, 46, 75

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