

The benefits of reducing persistent disadvantage

Research Note

September 2022

Author: Jason Timmins

NEW ZEALAND
PRODUCTIVITY COMMISSION
Te Kōmihana Whai Hua o Aotearoa



The New Zealand Productivity Commission Research Note The benefits of reducing persistent disadvantage

Te Kōmihana Whai Hua o Aotearoa¹

The Commission – an independent Crown entity – completes in depth inquiry reports on topics selected by the Government, carries out productivity related research and promotes understanding of productivity issues. The Commission aims to provide insightful, well-formed and accessible advice that leads to the best possible improvement in the wellbeing of New Zealanders. The New Zealand Productivity Commission Act 2010 guides and binds the Commission.

Information on the Productivity Commission can be found on www.productivity.govt.nz or by contacting +64 4 903 5150.

How to cite this document: Author name (year) Title New Zealand Productivity Commission Research Note. Available from www.productivity.govt.nz

Date: September 2022

Author: Jason Timmins

ISBN: 978-1-98-851990-6

Copyright: This copyright work is licensed under the Creative Commons Attribution 4.0 International License. In essence you are free to copy, distribute and adapt the work, as long as you attribute the source of the work to the New Zealand Productivity Commission (the Commission) and abide by the other license terms. To view a copy of this license, visit www.creativecommons.org/licenses/by/4.0/. Please note this license does not apply to any logos, emblems, and/or trademarks that may be placed on the Commission's website or publications. Those specific items may not be reused without express permission.

Disclaimer

The contents of this report must not be construed as legal advice. The Commission does not accept any responsibility or liability for an action taken as a result of reading, or reliance placed because of having read any part, or all, of the information in this report. The Commission does not accept any responsibility or liability for any error, inadequacy, deficiency, flaw in or omission from this report. The opinions, findings, recommendations, and conclusions expressed in this report are those of the author(s).

¹ The Commission that pursues abundance for New Zealand

Contents

Contents	i
Overview	1
1 Why is it important to reduce persistent disadvantage?	2
2 Reducing persistent disadvantage benefits all New Zealanders	4
2.1 The benefits for individuals and collectives can be social or economic	4
2.2 Enhanced capabilities and opportunities (mana āheinga) support future social and economic wellbeing.....	5
2.3 Enhanced prosperity (mana whanake) through an increase in economic output, productivity and contribution to our communities.....	7
2.4 Greater intergenerational prosperity and system stewardship (mana whanake)	9
2.5 Enhanced identity and belonging (mana tuku iho) through greater social cohesion and trust within communities	11
2.6 Enhanced connectedness (mana tautuutuu) through stronger democratic processes by giving more people a voice in decision making.....	11
References	12
Figures	
Figure 2.1 The economic and social benefits of reducing disadvantage for individuals and the broader community.....	4

Overview

Key points

- Reducing persistent disadvantage creates social and economic benefits for individuals that can spillover to collectives (eg, family, whānau and communities).
- There are likely to be substantial benefits for all New Zealanders from reducing persistent disadvantage.
- We find that the benefits of reducing persistent disadvantage for all New Zealanders are:
 - enhanced capabilities and opportunities (mana āheinga) creates more knowledge, skills and resources available to support future social and economic wellbeing;
 - enhanced prosperity (mana whanake) occurs through an increase in economic output, productivity and contribution to our communities;
 - greater intergenerational prosperity and system stewardship (mana whanake) means the better use of public resources by freeing up government investment to support prevention, instead of dealing with emergencies;
 - enhanced identity and belonging (mana tuku iho) creates greater social cohesion and trust within communities;
 - enhanced connectedness (mana tautuutuu) means stronger democratic processes by giving more people a voice in decision making.

1 Why is it important to reduce persistent disadvantage?

Successive New Zealand governments have a long history of wanting to give everyone a “fair go” in life. In April 1938 the Prime Minister Michael Savage proclaimed to a cheering crowd, “I can promise the people of this country that before very long they will have reached a condition of social security unsurpassed in any other country of the world” (Hanson, 1980, p. 81). Unfortunately, 80 years later this vision has yet to be realised for everyone in Aotearoa New Zealand.

Persistent disadvantage is a lost opportunity for New Zealand. It wastes the talents and contributions of people who are unable to fully support their family and whānau, and fully participate in their communities and the wider economy. These lost opportunities don't just impact individuals who face persistent disadvantage every day, it makes all New Zealanders worse off. It results in employers not being able to find enough good workers and hospitals spending too much of their time and resources on emergency treatments.

How does persistent disadvantage impact on wellbeing?

This research note is a supplementary paper published alongside the Commission's interim report *A Fair chance for all: breaking the cycle of persistent disadvantage* (New Zealand Productivity Commission, 2022).

The interim report uses a mauri ora (wellbeing) approach that draws on the four dimensions of wellbeing that contribute to people living fulfilling lives, as described in He Ara Waiora. These are mana tuku iho (identity and belonging); mana tauutuutu (connection and balance); mana āheinga (aspiration and capability) and mana whanake (prosperity). The absence of one or more of these dimensions can lead to persistent disadvantage.

The wellbeing of individuals is vital for the wellbeing of collectives

He Ara Waiora recognises that people are shaped by the collectives (families, whānau and communities) they live in, which provide support to help people thrive. The wellbeing of collectives is therefore vital for the wellbeing of individuals, and vice versa.

The benefits from reducing persistent disadvantage are likely to be substantial for individuals and collectives

Many people have told us that the benefits from reducing persistent disadvantage can be substantial, not just on the lives of individuals, but also on the lives of their collectives and all New Zealanders. For example, it is estimated that two-thirds of the annual economic benefit, around \$5.3 billion (in 2011 dollars), of reducing child poverty would go to the wider community (see Box 1).

Box 1 **Two-thirds of the economic benefit of reducing child poverty would be spread across everyone in society**

Several studies have looked at the lost economic and social benefits of child poverty. A New Zealand study in 2011 estimated that child poverty costs New Zealand \$8 billion per year (Pearce, 2011), which is equivalent to 4.5% of GDP (in 2011). Similar estimates have been produced in other countries. In the US, child poverty is estimated to cost society 5.4% of GDP (McLaughlin & Rank, 2018).

Identifying and measuring all the potential costs of child poverty is challenging. However, even the most conservative estimates of the cost of child poverty are still relatively large. The New Zealand study produced a range of estimates of the cost of child poverty from \$6.3 billion to \$16.3 billion. The most conservative estimate of \$6.3 billion is equivalent to 3.5% of New Zealand's GDP in 2011, and \$16.3 billion is equivalent to 9.1% of GDP.

A further breakdown of these estimates reveals that, if child poverty was eradicated, around a third of the benefit goes directly to the individual in terms of higher employment income (in adulthood). However, two-thirds of the economic benefit would accrue to the broader community in the form of increased tax revenue (from the increased employment income), lower spending by government in welfare, health and crime sectors, and benefits of avoiding costs in people's day-to-day lives (Holzer et al., 2008).

Source: Holzer et al. (2008); McLaughlin & Rank (2018); Pearce (2011)

What this research note does

The purpose of this research note is to examine how improvements in an individual's wellbeing can create benefits for others in their collectives. There are very few studies that have attempted to quantify the total individual and wider community benefits of reducing persistent disadvantage. This is due to data limitations and the difficulty in attributing the experience of persistent disadvantage on people's outcomes². Instead, the note summarises some of the evidence about the types and size of the benefits of reducing persistent disadvantage that are expected to flow from the individual to their family, whānau, and the wider community.

We use the four dimensions of wellbeing, set out in He Ara Waiora, to provide examples of the types of benefits that could be expected to spillover to all New Zealanders from enhancing the mauri ora (wellbeing) of individuals. We find that:

- enhanced prosperity (mana whanake) occurs through an increase in economic output, productivity and contribution to our communities through paid work and unpaid work;
- enhanced capabilities and opportunities (mana āheinga) creates more resources available to support future social and economic wellbeing, including increased support within communities, investment in skills and knowledge, new technologies, and innovation;
- greater intergenerational prosperity and system stewardship (mana whanake) means the better use of public resources by freeing up government investment to support prevention, instead of dealing with emergencies that arise from people exposed to disadvantage;
- enhanced identity and belonging (mana tuku iho) creates greater social cohesion and trust within communities;
- enhanced connectedness (mana tautuutuu) means stronger democratic processes by giving more people a voice in decision making.

² For a discussion on the challenges of measuring the costs of persistent disadvantage see McLachlan et al. (2013)

2 Reducing persistent disadvantage benefits all New Zealanders

This section sets out examples of the types of benefits that could be expected to spillover to all New Zealanders across the four dimensions of wellbeing, set out in He Ara Waiora, by reducing persistent disadvantage and enhancing the mauri ora (wellbeing) of individuals.

2.1 The benefits for individuals and collectives can be social or economic

The wellbeing benefits of reducing persistent disadvantage for individuals and collectives (eg, families, whānau and the broader community) can be divided into two groups: economic (eg, increase in income, consumption, and wealth that enhances prosperity) and the improvements in people's quality of life or social benefits (eg, improvements in health and education). Figure 2.1 illustrates the different types of economic and social benefits associated with reducing persistent disadvantage and who benefits, which includes individuals and the broader community.

Figure 2.1 The economic and social benefits of reducing disadvantage for individuals and the broader community



Source: Adapted from McLachlan et al., 2013, p. 157

The economic and social benefits can spillover from the individual to the collective (and vice versa). The economic benefits for individuals generally come from additional income they receive (eg, from employment) that can increase their level of consumption and wealth. For the broader community, there are economic spillovers, such as increased economic growth from higher individual incomes. A

larger economy can support a community to increase their investment in future social and economic wellbeing.³

The social benefits of reducing persistent disadvantage increase the quality of life of individuals, which also create spillovers to the broader community. For example, an increase in the capabilities, opportunities, and connectedness can mean individuals are better able to engage in their local community, such as participating in community groups or helping others grow their own capabilities and sense of belonging (New Zealand Treasury, 2021).

Finally, reducing the need for government services to support people living in persistent disadvantage can enhance intergenerational prosperity by enabling communities to increase their investment in future social and economic wellbeing. These savings could instead be invested in activities that support future generations to thrive, such as preventative health services and education (increasing capabilities and opportunities). Alternatively, a government could decide to return any reductions in spending by lowering taxes (increasing incomes and financial prosperity).

Box 2 It is important to assess all the benefits from policies and programmes to reduce persistent disadvantage

While it may be difficult to quantify the overall benefit to New Zealand of reducing persistent disadvantage, it is still important to consider and quantify the benefits that will be produced by policies and programmes designed to reduce persistent disadvantage (McLachlan et al., 2013). This includes considering all the potential benefits for individuals and their collectives from a new programme or policy when the government makes spending decisions. Once implemented, it is also important to check that a particular policy or programme is delivering the expected benefits through ongoing monitoring and (where needed) evaluating the impact on people's lives and the lives of their family, whanau and community. The findings from the monitoring and evaluation can be fed back to the learning and improvement system, resulting in better outcomes (greater benefits) over time.

2.2 Enhanced capabilities and opportunities (mana āheinga) support future social and economic wellbeing

Growing up and living in persistent disadvantage makes it much harder for an individual to develop the capabilities (eg, knowledge and skills) and access the opportunities (eg, employment) they need. For example, our interim report found New Zealanders experiencing persistent disadvantage were more likely to have no formal qualifications (New Zealand Productivity Commission, 2022). Persistent disadvantage also makes it harder for individuals to find the time, resources and energy to improve their capabilities and access opportunities during their life. These constraints mean that, overall, New Zealanders are less able to contribute to enhancing the prosperity of their collectives and future generations.

Better health and education means people can contribute to increasing economic growth in their community

People who lack capabilities and opportunities find it harder to participate in the labour market and earn higher wages. This constrains an individual's income and their ability to contribute to economic activity and growth in the wider community. Better health and education play an important role in a person's wellbeing by supporting them to participate in and connect with their communities and enhancing their capability to decide on and realise their aspirations (New Zealand Productivity Commission, 2015).

³ This may not be the case if the benefits from an increase in the economy are not distributed across all individuals in New Zealand.

A person's health can also influence their participation in paid work and their productivity (ie, higher wages⁴). An Australian study found that preventing a mental health condition had the largest positive effect on labour force participation, increasing it from 26 to 30 percent for men and 22 to 25 percent for women (Laplagne et al., 2007). The study also found that a major injury reduced labour force participation by 14 percent for men and 16 percent for women. Persistent disadvantage can also shorten people's lives, reducing their lifetime economic activity within their family, whānau and communities (Blakely et al., 2004).

By way of example, in New Zealand, the benefit of avoiding or better managing type 2 diabetes is estimated to be equivalent to \$2.1 billion annually (see Box 3). The economic benefits for individuals include lower medical costs and higher employment income. For the broader community, the benefits arise from a reduction in government funded treatment for diabetes (these savings could be redirected back into the health system), higher tax revenue and an increase in an individual's unpaid contributions to the wellbeing of their family, whānau and wider community.

Box 3 Type 2 diabetes creates disadvantage by reducing income and making it harder for people to join in

Type 2 diabetes is a largely preventable condition that can be effectively managed, and in some cases reversed. However, in New Zealand type 2 diabetes is an increasing problem, which disproportionately impacts people already living in disadvantage. Spending on diabetes in New Zealand is significant, with one out of 20 health dollars spent on treating type 2 diabetes.

Type 2 diabetes affects 4.7 percent of the population and is projected to increase to 6.6-7.4 percent over the next 20 years. Diabetes can lead to disability and a shorter life, which in turn can contribute to people experiencing further disadvantage by reducing their income and making it harder for them to be socially included.

A recent study estimated that the annual unrealised benefit of avoiding or better managing type 2 diabetes to New Zealand is \$2.1 billion annually (PWC, 2021). Overall, about a quarter of the unrealised benefit was from higher incomes due to lower medical costs (\$68 million in self-funded health costs) and higher employment income (\$562 million). The other three-quarters of the unrealised benefit represents a loss to the wider community. It is made up of health services to treat people with diabetes (\$999 million), that could be redirected back into the health system, tax revenue of \$164 million (from lost employment income), and \$334 million from individuals' unpaid contributions to their family, whānau and community (eg, caring for others and volunteering).

There are also social benefits of avoiding or better managing type 2 diabetes that make it harder for people to join in. For example, diabetes is one of the most significant contributors to New Zealander's steadily increasing disability. A diagnosis of type 2 diabetes is also implicated in worsening mental health and reducing social contact. People with diabetes are twice as likely to experience anxiety or depression than those without. Finally, people living with type 2 diabetes reported significant negative effects on their perceived quality of life. The Diabetes New Zealand Stigma Survey found that one in three respondents under 65 reported that having type 2 diabetes made them feel 'ashamed' or 'a failure'.

Source: PWC (2021)

Improving education achievement also has a large impact on participation and productivity in the labour force. In same Australian study discussed above, Laplagne et al. (2007) found that having a

⁴ The competitive model of the spot labour market predicts that all workers will be remunerated at the marginal productivity of the market-clearing worker. However, in the real world the wage-productivity relationship often breaks down. In New Zealand, real wage rises have been found to vary widely from labour productivity increases over several business cycles (Rosenberg, 2010). Technological progress, global value chains, public policies and institutions can all influence the link between productivity and wages (OECD, 2018)

degree or higher qualification increases labour force participation by 20 percent for women and 9 percent for men, compared to those who did not complete year 12 education.

People with higher levels of education achievement have higher incomes

Higher-level qualifications not only improve labour force participation, but they provide significant income and earnings benefits in New Zealand (Scott, 2020). Scott (2020) found people who left school in 2009 with NCEA Level 2 or higher, on average, earned twice as much nine years later as someone who left school at the same time with no qualifications. In addition, degree and higher-level education leads to higher annual earnings as well as higher earnings growth. Someone who finished their education in 2009 with a degree were earning 40% to 50% more in 2018 than someone who finished with NCEA Level 2 (school qualification).

Providing people with opportunities to increase their knowledge and skills can help them increase their earnings from employment and reduce their risk of being income poor. A person can improve their knowledge and skills on-the-job or by undertaking further study in education. However, while earnings may increase, employment impacts may be modest in the medium to long-term. A New Zealand research report found that studying for a tertiary qualification increases the likelihood of employment in the post-study period (5 years) by 1-3 percentage points and raises annual earnings by about 5% for men and 12% for women (Hyslop et al., 2020).

Overall, the benefits of lifting education achievement are likely to be substantial for Aotearoa New Zealand's economic growth. For example, the New Zealand Treasury (2012) estimated the benefits of lifting overall education achievement among youth on economic growth (GDP):

[I]f overall student achievement could be lifted by 25 PISA points (putting New Zealand with the top performers in the OECD), GDP would be expected to be higher than it otherwise would be by 3-15% by 2070. This is a large growth impact from a single contributing factor. (p. 2)

2.3 Enhanced prosperity (mana whanake) through an increase in economic output, productivity and contribution to our communities

Enhancing the capabilities and opportunities of individuals means they have the ability and resources to contribute to the growth in prosperity of their collectives through paid and unpaid activities.

Paid work increases economic output

Reducing persistent disadvantage raises incomes, which flows through to higher economic activity and greater prosperity for the community. Economic growth comes from greater participation in the labour market, higher productivity in paid work, and lower unemployment, which creates an increase in employment income. Productivity increases in paid work come from a person moving from unemployment to employment, which will increase their (paid work) productivity from zero to their new wage rate. Productivity can be further increased if an individual has the opportunity to invest further in their knowledge and skills either on the job or by undertaking education and training.

How much would incomes and economic output increase if persistent disadvantage was reduced in Aotearoa New Zealand? There are no comprehensive estimates to draw on, but research that has examined differences in income between Māori and non-Māori provides an example of the impact on economic output. The Commission's Fair chance for all inquiry interim report identified that Māori were more likely to experience persistent disadvantage, and thus more likely to live in income poverty (New Zealand Productivity Commission, 2022). A recent study found that at every age level Māori receive a much lower income than the average New Zealander (see Box 4).

Reducing disadvantage would likely have a strong effect on lifting income among Māori, which would lead to an increase in the overall output in the economy. For example, it has been estimated that lifting the average incomes for Māori to the average income in Aotearoa New Zealand would increase total annual income (and economic output) by \$2.6 billion (see Box 4).

Box 4 The Māori income gap is \$2.6 billion

At every age level, Māori receive a much lower average income, \$10,000 less per year for those aged from 40 to 60 years old, than the average New Zealander (based on 2013 Census data). In total, the Māori population earn \$2.6 billion per year less than they would if they all earned the average income for their age. Increasing wages for Māori to the national average for their age, would remove this inequity, and generate additional tax revenue of around \$700 million per year.

Currently, more than 40 percent of the Māori population is under 20 years old, compared to the Aotearoa average of less than 30 percent. Because of this large difference in youth population, the Māori share of the working age population will grow in the coming years. Currently, 13 percent of the Aotearoa labour force are Māori, but Statistics New Zealand estimate that by 2038 almost one fifth of the working age population will be Māori. The projected growth in the Māori population means that, if the Māori income gap stays the same, by 2038, the annual Māori income gap will increase to \$4.3 billion.

Source: Schulze & Green (2017)

Employment can reduce income poverty and deprivation

A recent New Zealand study found that individuals who moved off government income support into paid work experienced a modest increase in monthly income and appeared, on average, to experience an improvement in their material living standards. The study followed a group of people who had spent 6 or more months on a benefit, before moving into full-time employment. The increase in monthly income was positive, but modest in size. Monthly incomes increased from \$2,400 on a benefit to \$3,100 in employment (Rea et al., 2019).

The increase in income from moving off an income benefit into employment also reduced material hardship. When on a benefit, 50% of respondents said they had enough or more than enough income to meet their every-day needs for accommodation, food, clothing and other necessities. This increased to 73% for those surveyed after moving off a benefit (Rea et al., 2019).

Box 5 Employment may not be the only answer to reducing income poverty

In the beginning, employment in a new job may result in a small income increase for people not currently working. This is because moving into employment may mean a reduction in government income support and could also increase a person's living costs (eg, childcare and commuting costs). This issue was recognised in the Welfare Expert Advisory Group's 2019 report to the New Zealand Government on redesigning the income welfare system. The report recommends that:

A key principle for the redesign of the income support system is to ensure that people are always better off in paid work, and that high effective marginal tax rates are avoided as much as possible (Kiro et al., 2019, p. 95).

In the long-run, employment is likely to lead to a positive increase in income. Employment can enhance a person's skills and abilities, which in turn can reduce a person's likelihood of unemployment and increase an individual's labour market productivity and wages.

However, employment may not always provide a pathway for an individual to increase their wages, particularly for people in low paid jobs. A New Zealand study found that for workers who were continuously on low pay (in the bottom 20 percent of earnings) over the previous 12 months, only around a third moved into a higher paid job (Plum et al., 2021). In other words, most people in low paid jobs for 12 months or more, remain in low paid jobs.

Increased (unpaid) contributions to collectives

While increased participation and productivity in paid work is important to support society's wellbeing through economic growth, unpaid activities also play a vital role within families, whānau and communities. These unpaid activities include caring for others and volunteering in the local community.

People not engaged in paid work could be engaged in other productive activities that are not captured by some measures of economic output (eg, GDP), such as running a household, caring for children or other family members, or volunteering in their community. These activities can contribute to the quality of life and wellbeing of individuals, families and whānau, as well as to the wider community. There can also be economic benefits, such as providing opportunities for parents to be employed caring for their children.

The increases in unpaid work from reducing disadvantage may be as large as the income gains from paid work. A recent study (see Box 3) found that the value of the lost hours of unpaid work each year for people living with type 2 diabetes was equivalent to \$334 million, compared with \$562 million for the annual cost of lost employment income.

2.4 Greater intergenerational prosperity and system stewardship (mana whanake)

Increased prosperity helps individuals and communities grow sustainable, intergenerational prosperity. This can include financial resources, such as income and wealth, but also the capabilities and opportunities of individuals within a collective, such as knowledge and skills. Increased investment can be made by individuals, collectives (including businesses) and the government.

Increasing capabilities and opportunities supports intergenerational prosperity

Being healthy and having the knowledge and skills people need, gives them the power to grow not just their own prosperity during their lifetime, but also the prosperity of future generations. In other words, reducing persistent disadvantage in one generation can create benefits that flow into the next generation and beyond. Over time, successive generations will be able to get a better start in life than previous generations.

In particular, a parent's knowledge and skills can help support their child's development by increasing their material living standards and increasing their access to opportunities to learn. A recent New Zealand research report using the Growing Up in New Zealand study found that a mother's education is the strongest predictor of a child's access to resources, such as income, quality of housing and neighbourhood status (Prickett et al., 2022). Children of mothers with no school qualifications are nearly 100 times more likely to experience below average level of resources (eg low incomes, poor quality housing, and living in deprived neighbourhoods) during early childhood, compared to experiencing access to above average level of resources. The report found that children with above average access to resources had higher wellbeing and development at age 8 years, compared to children who experienced below average level of resources.

An example of the intergenerational benefits into adulthood from improving the capabilities and opportunities of a single generation comes from the Perry pre-school programme, which was a high-quality preschool programme run in a small city outside Detroit in the 1960s. The children of parents who attended the preschool program were better educated, healthier, and better employed, compared to the children of parents who did not participate. Sixty seven percent of children of the participants in the pre-school programme completed high school, compared to just 40 percent of the children of non-participants. Employment was also higher among the children of participants, with 59 percent in employment, compared to 42 percent of the children of non-participants (Heckman & Karapakula, 2019).

Reducing persistent disadvantage increases the resources available to support future social and economic wellbeing

The impact of reducing persistent disadvantage on the economy, by increasing an individual's employment income, is higher aggregate consumption of goods and services, compared to what is being consumed in the presence of persistent disadvantage. This leads to an increase in revenue for companies who can invest in their businesses to expand their products and services, including investing in skills and knowledge, new technologies, innovation, and expanding into new local and overseas markets. The increased investment supports the hiring of more employees, which in turn can increase demand for workers (raise wages), increase consumer spending and expand international trade.

An increase in economic output also means the government has more money to invest (from higher tax revenues) in the wellbeing of individuals and their family, whānau and community, such as improving education and health services or investing in local amenities (see Box 6). For example, lifting average Māori incomes to the average New Zealander would generate additional tax revenue of \$700 million (see Box 4).

Box 6 **Improving access to transport networks helps ensure people do not miss out on the services they need**

Living in a community with poor access to transport can deprive New Zealanders of the services they need to thrive. In New Zealand, 123,000 people (1.6% of children and 2.7% of adults) were unable to visit their GP when they needed to because they were unable to access transport. A lack of transport was a significant barrier for disabled peoples (1/9 affected), women (3.6%) and Māori and Pacific people (6.6%).

Source: Fitzgerald (2012)

Governments can focus on prevention, instead of dealing with emergencies

A high prevalence of persistent disadvantage can lead to governments having to spend money on things society would prefer to avoid, such as treating preventable health conditions and responding to crime. Alternatively, a government could decide to return any reductions in spending by lowering taxes (increasing incomes and financial prosperity).

Many emergencies can be prevented and are more likely to impact on people already living in disadvantage. For example, households in New Zealand living on a low income (community service card holder) and who live in an uninsulated house were found to require around \$400 (2011 dollars) of additional health services each year due to more overnight stays in hospital and higher medical costs, such as treating asthma (Barnard et al., 2011). The total cost of hospitalisations caused by overcrowded, cold and damp housing in Aotearoa New Zealand has been estimated to be \$36 million each year (see Box 7). Reducing disadvantage would mean that GPs and hospitals could focus on preventive health care, which would benefit everyone, instead of dealing with emergencies that arise from people exposed to disadvantage.

Box 7 Overcrowded, cold, damp and mouldy homes costs \$36 million annually from admitting people to hospital

In 2013/14, 10.1% of people lived in an overcrowded home, 21.2% of people reported living in a cold home and 31.8% reported living in a damp and mouldy home in Aotearoa New Zealand. It is estimated that between 2010 and 2017, 5,666 patients were admitted annually to hospital with health conditions attributable to household overcrowding, cold and damp or mould. Over a year, these patients accounted for 6,276 hospitalisations, 36,649 nights in hospital, at a cost of nearly \$36 million.

These estimates only account for the direct costs of being treated in hospital and exclude costs of visiting a GP or getting a prescription. They also exclude costs associated with missing work or school. These costs are likely to be substantial as shown by the diabetes example in Box 3.

Source: Riggs et al. (2021)

2.5 Enhanced identity and belonging (mana tuku iho) through greater social cohesion and trust within communities

Enhancing community connections helps create social and neighbourhood trust, which is associated with higher levels of wellbeing (Helliwell and Putnam 2005). People find it harder to participate and connect with their community if they are living in disadvantage. A study in the UK found that social participation and trust in society falls with declines in income (Ferragina et al., 2017).

Increasing social participation and community connections can improve the material living standards of their residents from better coordination and cooperation, such as looking after each other's children, providing advice, or helping a neighbour repair a leaky tap. They can also encourage greater voluntary participation in and establishment of community clubs, organisations and events that support the community (eg, being a member of the local school fundraising committee).

2.6 Enhanced connectedness (mana tautuutuu) through stronger democratic processes by giving more people a voice in decision making

People living in disadvantage are less likely to exercise their rights as citizens by participating in democratic institutions, such as voting and having their voice heard in decision making. This means that decisions are more likely to reflect the values and needs of those not living in disadvantage. A New Zealand study identified a number of barriers that people living in low socio-economic circumstances faced to participating in elections by voting. These included the disruption to their usual routine (eg, changing work patterns that make it hard to plan their time), not enrolling because of concerns about the potential use of the electoral roll by debt collectors, and emotional barriers caused by feelings of exclusion and negative feelings against the state (Galicki, 2018).

In New Zealand, non-voters are more likely to be unemployed or not have enough income to live on. In New Zealand's 2014 general election just over one-third (35.2%) of unemployed people did not vote, while a fifth (19.9%) of employed people abstained from voting (Ministry of Social Development, 2016). Income was also associated with voter turnout in the 2014 election. Ninety one percent of people who reported they had enough money to meet their everyday needs voted, compared to 76 percent of people who did not have enough money to meet their daily needs (Stats NZ, 2018).

References

- Barnard, L. T., Preval, N., Howden-Chapman, P., Arnold, R., Young, C., Grimes, A., & Denne, T. (2011). *The impact of retrofitted insulation and new heaters on health services costs, pharmaceutical utilisation and costs and mortality* (Working Paper No. MED1358321). Motu Economic and Public Policy Research. www.motu.nz/assets/Documents/our-work/urban-and-regional/housing/The-Impact-of-Retrofitted-Insulation-and-New-Heaters-on-Health-Services-Utilisation-and-Costs-Pharmaceutical-Costs-and-Mortality-Evaluation-of-Warm-Up-New-Zealand-Heat-Smart.pdf
- Blakely, T., Kawachi, I., Atkinson, J., & Fawcett, J. (2004). Income and mortality: The shape of the association and confounding New Zealand Census-Mortality Study, 1981–1999. *International Journal of Epidemiology*, *33*(4), 874–883. <https://doi.org/10.1093/ije/dyh156>
- Ferragina, E., Tomlinson, M., & Walker, R. (2017). Poverty and participation in twenty-first century multicultural Britain. *Social Policy & Society*, *16*(4), 535–559. <https://doi.org/10.1017/S1474746416000440>
- Fitzgerald, G. (2012). *The social impacts of poor access to transport in rural New Zealand* (NZ Transport Agency Research Report No. 484). Waka Kotahi NZ Transport Agency.
- Galicki, C. (2018). Barriers to voting and the cost of voting among low socioeconomic, young and migrant voters in New Zealand. *Political Science*, *70*(1), 41–57. <https://doi.org/10.1080/00323187.2018.1473014>
- Heckman, J. J., & Karapakula, G. (2019). Intergenerational and Intragenerational Externalities of the Perry Preschool Project. *NBER Working Paper Series*, 25889-. <https://doi.org/10.3386/w25889>
- Holzer, H., Whitmore Schanzenbach, D., Duncan, G., & Ludwig, J. (2008). The economic costs of childhood poverty in the United States. *Journal of Children & Poverty*, *14*(1), 41–61. <https://doi.org/10.1080/10796120701871280>
- Hyslop, D., Le, T., & Riggs, L. (2020). *Returns to adult education and training in New Zealand* (Motu Working Paper No. 20–03). Motu Economic and Public Policy Research. https://20.37.206.126/wpapers/20_03.pdf

- Kiro, C., Asher, I., O'Reilly, P., McGlinchey, T., Waldegrave, C., Brereton, K., Reid, R., McIntosh, T., Nana, G., Hickey, H., & Tautai, L. T. (2019). *Whakamana tāngata: Restoring dignity to social security in New Zealand*. Kia Piki Ake Welfare Expert Advisory Group.
https://ndhadeliver.natlib.govt.nz/delivery/DeliveryManagerServlet?dps_pid=IE40597708
- Laplagne, P., Glover, M., & Shomos, A. (2007). *Effects of health and education on labour force participation* [Staff Working Paper]. Australian Productivity Commission.
www.pc.gov.au/research/supporting/health-education-labour-participation/healthandeducation.pdf
- McLachlan, R., Gilfillan, G., & Gordon, J. (2013). *Deep and persistent disadvantage in Australia* [Productivity Commission Staff Working Paper]. Australian Productivity Commission.
www.pc.gov.au/research/staff-working/deep-persistent-disadvantage
- McLaughlin, M., & Rank, M. (2018). Estimating the economic cost of childhood poverty in the United States. *Social Work Research, 42*(2), 73–83. <https://doi.org/10.1093/swr/svy007>
- Ministry of Social Development. (2016). *The social report 2016 – Te pūrongo oranga tangata* [Report].
www.socialreport.msd.govt.nz/general-information.html
- New Zealand Productivity Commission. (2015). *More effective social services* [Final report].
www.productivity.govt.nz/assets/Documents/8981330814/Final-report-v2.pdf
- New Zealand Productivity Commission. (2022). *Fair chance for all interim report—Breaking the cycle of persistent disadvantage*.
- New Zealand Treasury. (2012). *Treasury's advice on lifting student achievement in New Zealand: Evidence Brief*. <https://www.treasury.govt.nz/sites/default/files/2012-03/sanz-evidence-mar12.pdf>
- New Zealand Treasury. (2021). *The Living Standards Framework 2021*.
www.treasury.govt.nz/publications/tp/living-standards-framework-2021-html
- OECD. (2018). Chapter 2: Decoupling of wages from productivity: What implications for public policies? In *OECD economic outlook: Vol. 2018 Issue 2* (pp. 51–65). OECD Publishing.
https://doi.org/10.1787/eco_outlook-v2018-2-3-en
- Pearce, J. (2011). *An estimate of the national costs of child poverty in New Zealand*. Analytica.
<https://static-cdn.edit.site/users-files/82a193348598e86ef2d1b443ec613c43/an-estimate-of-the-costs-of-child-poverty-in-nz-10-august-2011.pdf?dl=1>

- Plum, A., Pacheco, G., & Dasgupta, K. (2021). When there is no way up: Reconsidering low-paid jobs as stepping-stones. *Economic Record*, 97(318), 387–409. <https://doi.org/10.1111/1475-4932.12609>
- PwC. (2021). *The economic and social cost of Type 2 Diabetes*. Diabetes New Zealand. www.diabetes.org.nz/news-and-update/new-report-cost-of-diabetes-staggering-but-fixable
- Rea, D., Anastasiadis, S., Benny, V., Chokkanathapuram, A., Lee, W.-J., Smith, C., & Vandenbroucke, B. (2019). *Measuring the living standards of people receiving income-tested main benefits* [Working Paper]. Ministry of Social Development and Social Investment Agency. <https://swa.govt.nz/assets/Publications/reports/Measuring-the-living-standards-of-people-receiving-income-tested-main-benefits.pdf>
- Riggs, L., Keall, M., Howden-Chapman, P., & Baker, M. G. (2021). Environmental burden of disease from unsafe and substandard housing, New Zealand, 2010-2017. *Bulletin of the World Health Organization*, 99(4), 259–270. <https://doi.org/10.2471/BLT.20.263285>
- Rosenberg, B. (2010). *Real wages and productivity in New Zealand*. New Zealand Council of Trade Unions Te Kauae Kaimahi. <https://ojs.victoria.ac.nz/LEW/article/download/1714/1557/2184>
- Schulze, H., & Green, S. (2017). *Change agenda: Income equity for Māori*. Tokono Te Raki: Māori Futures Collective. www.maorifutures.co.nz/wp-content/uploads/2019/11/Income-Equity-for-Maori.pdf
- Scott, D. (2020). *Education and earnings: A New Zealand update* [Report]. Ministry of Education.
- Stats NZ. (2018). *Voting and political participation* [Report]. www.stats.govt.nz/assets/Reports/Voting-and-political-participation/voting-and-political-participation.pdf