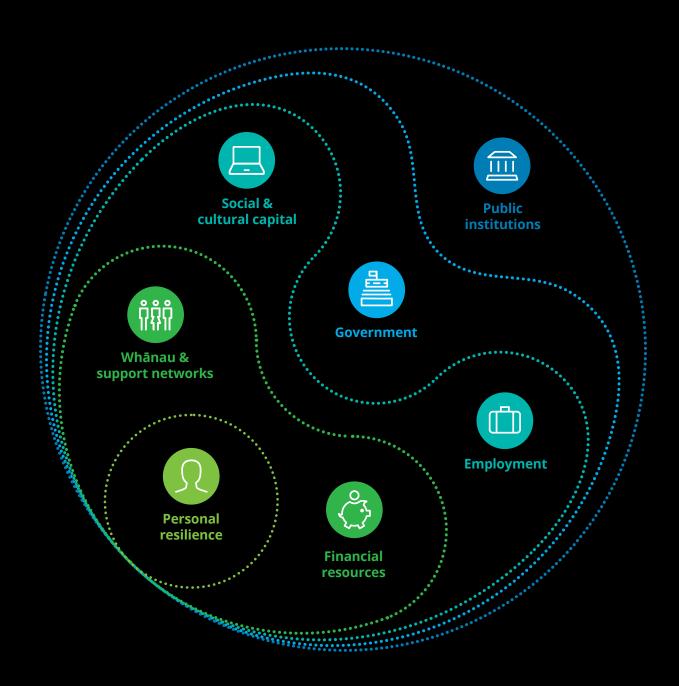
Dimensions of resilience

A framework for assessing household resilience



When faced with an unexpected challenge, whether economic, social or environmental, all households have a variety of potential resources to call upon in order to manage it.

To assess the resilience of households to shocks we need to consider all of these dimensions together, and understand how they interact with one another.

Resilience in New Zealand

We looked at the evidence for the factors that affect resilience across a number of dimensions to determine how New Zealand is performing.

Personal resilience

We have focused on two aspects of personal resilience which are also natural areas for government focus: health and human capital.

Physical and mental health affects many aspects of our resilience including: the ability to work and earn

Health

As noted in a Treasury survey, New Zealanders identified health as the most important aspect of wellbeing.¹⁵ Physical and mental health affects many aspects of our resilience including our ability to work and earn, to engage with our families and social networks, as well as the costs incurred from poor health.

How people feel about their own vulnerabilities and abilities is a valuable dimension to how we assess resilience. The 2016 New Zealand Health Survey¹⁶ found that 87.8% of respondents rated their health as excellent, very good or good.

There is a complicated but strong relationship between mental health and the ability to respond to shocks. If mental health is viewed as an "illness" then it has a debilitating influence on resilience. For example, drug and alcohol addiction would compromise the resilience of a given household. Conversely, mental health can also be viewed with a "wellness" frame of mind as enhancing resilience, for example, by teaching children about self-direction, and helping them stand up to peer pressure, we support them to do better in life.

The World Happiness Report¹⁷ demonstrated that in the United States, Britain and Australia, diagnosed depression and anxiety illness is more important than income, employment or physical illness as a determinant of happiness.

In New Zealand, 6.8% of adults reported experiencing psychological distress.¹⁸ Similar to other health indicators, including access to healthcare and health outcomes, these figures are higher for Māori and Pasifika, and higher still for people living in socio-economically deprived areas. People living in the poorest areas were two and a half times more likely to be seen by mental health and addiction services than those in the richest areas.¹⁹

Human capital

Investment in people's skills and capabilities is important in the sense that it will tend to enhance income, but also because it will better enable people to adapt to changing circumstances.

The picture is mixed for educational achievement in New Zealand. On the one hand, the share of secondary school students leaving with NCEA Level 2 or above has been steadily increasing. On the other hand, the proportion of New Zealand adults who have completed upper secondary education (74%) is below the OECD average of 76%. 21

And while New Zealand's comparative test scores under the Programme for International Student Assessment (PISA) remain above OECD averages, our 2016 results were the lowest scores since testing began in 2000.²² At the tertiary level, participation has been declining since 2005, falling from 13.5% to 10.2% in 2014.²³

Equality of educational attainment is also a stubborn issue for New Zealand. Socio-economic background remains highly correlated with educational attainment, with lower decile schools seeing much lower rates of school leavers reaching NCEA Level 2 or equivalent.²⁴ In tertiary education, Māori and Pasifika populations experience a persistent gap in tertiary education compared to the general population.²⁵

Beyond education levels there is a question around whether we have the right mix of skills for a changing future. Many of those we interviewed expressed concerns around the potential impact of technology as a substitution for employees, which would undermine the previous investments people have made in their skills and education.

Financial resources

As each generation of New Zealanders has enjoyed higher incomes relative to their parents, the general trend ought to be that in this aspect we are becoming more resilient over time.

For resilience, we are particularly interested in two aspects. What the buffer is between income and costs (particularly non-discretionary costs), which represents a household's ability to respond financially to a disruption. And how consistent income is (income volatility), which influences how reliable the buffer is at any given time and is critical for effective planning.

Inequality of income buffers

On average, real incomes – that is taking consideration of inflation – have risen in New Zealand by 31% between 1982 and 2015.²⁶

However, Figure 3 shows that when we look behind the averages at the household experience of cost rises, certain groups – including the lowest expenditure group – of New Zealand households are experiencing cumulative inflation greater than the average. Inflation is actually lowest for the highest expenditure households.

Figure 3: Cumulative inflation for selected household groups

Household living-costs price index, Quarterly, June 2008 – September 2016²⁷

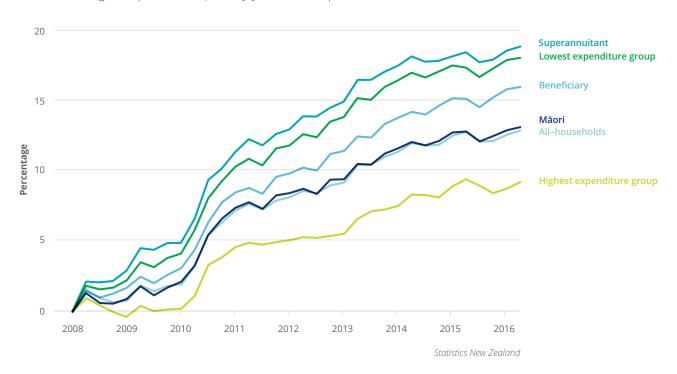
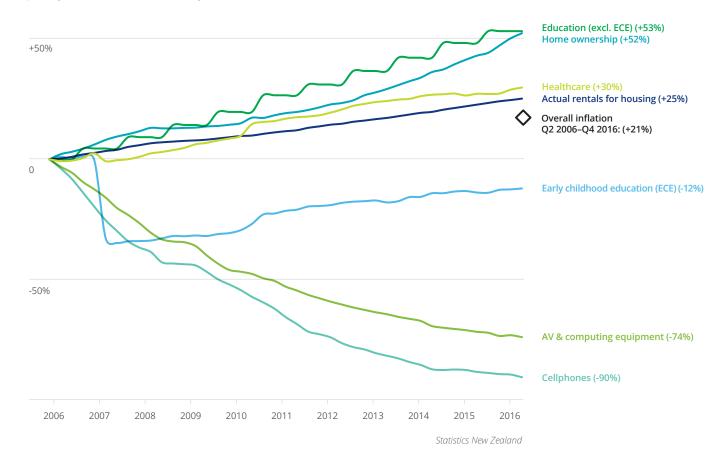


Figure 4: Divergence in selected CPI Components

June quarter 2006 to December quarter 2016



A reason for this is the price changes of the components that make up what households are spending on. Figure 4 shows that inflation over the period of 2006 to 2016 totalled 21% on the Consumer Price Index. However, necessities, such as health, housing and education are "dragging up" inflation, while luxuries, particularly electronics, have kept the overall rate down.²⁸

By their very nature, these necessities are difficult for households to substitute or avoid altogether and to do so would have an impact on immediate and future wellbeing. They are also likely to make up a larger proportion of spending for lower income groups.

The trend for early childhood education is an interesting illustration of the effects of government policy. Costs plummeted following the introduction of 20 hours government-funded care per week in 2007. However, increased costs since that point (+31%) have eaten into those gains considerably. Costs have also risen for both primary and secondary education (+58%) and tertiary and other post-school education (+48%).

Looking at the impact of just one of these necessities brings the disparity between households into focus. Ministry of Social Development figures show that the share of New Zealand households paying in excess of 30% of disposable income on housing has increased from 11% to 28% between 1988 and 2015.²⁹ This increase was strongly concentrated in the lower and middle income groups.*

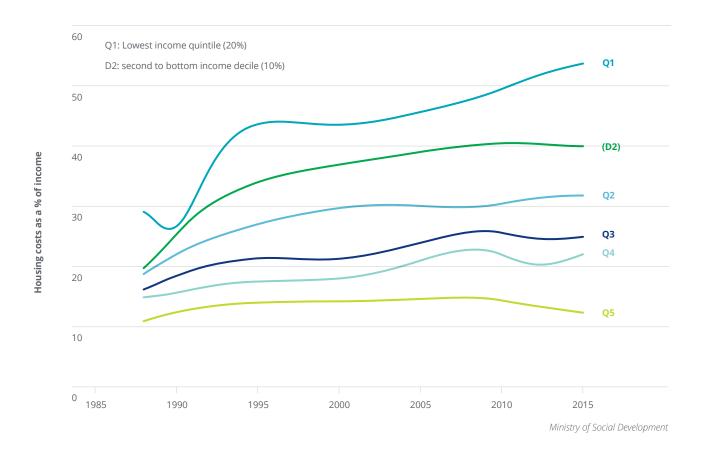


Figure 5: Housing costs as a percentage of income by income quintile

As Figure 5 shows, the share of disposable income going to housing costs is now in excess of 50% for the average household in the bottom 20% for income.³⁰

As a result, when we look at changes in income after housing costs we see that while the median New Zealand household has experienced an increase in disposable income of 32%, it hasn't grown at all for the bottom 10% of New Zealand households. In fact, they had a slightly higher real income in 1982 than they did in 2015 (\$11,256 vs \$11,200), while households at the 90th percentile have experienced growth of 62%.³¹

Income volatility

An unexpected decline in income relative to expenses tests the resilience of households as much as an unexpected bill. Unpredictable income also lowers resilience by impairing a household's ability to plan and make long-term investments.

Income volatility is a growing area of international research, with many United States studies finding that the share of households experiencing a fall in income year-to-year has increased markedly since the 1970s. ³² One study noted that for all the recent attention on income *inequality*, the *instability* of incomes had actually risen faster.³³

To get an idea of the degree of volatility of New Zealanders' incomes we looked at Statistics New Zealand data on the share of the population who fell two or more income deciles from one year to the next between 2000 and 2014.*

As an example, this would be someone in the top 10% of income earners one year whose income fell to somewhere in the bottom 80% in the second year, or someone in decile 5 (between 40% and 50% points of the income distribution) who fell into the bottom three deciles (the lowest 30%).

^{*}For a fuller discussion on the data and methodology see the Income Volatility Methodology Paper available to download at https://www2.deloitte.com/nz/en/pages/public-sector/articles/the-state-of-the-state-2017.html.

Volatility higher for lower-middle income New Zealanders

Figure 6 shows, unsurprisingly, that income follows the business cycle, peaking at 12.5% of the sample experiencing a two or more decile drop in 2009. However even in relatively benign economic conditions close to one in nine working age New Zealanders will suffer a significant fall in income in any given year.

The highest levels of volatility are concentrated around deciles 4, 5 and 6 – those earning between approximately \$16,000 and \$37,000 in 2014 dollars. For this group, the chance of a two decile drop has largely been in the range of 15-17% – more like a one in six chance. Interestingly, the volatility of this group did not subside in the wake of the GFC in the same way it has for the general population. Instead, the chances of a fall in income deciles remained elevated from 2008 onwards.

To put this in perspective, for a household with someone earning \$17,660 (the midpoint income for the decile 4) a two decile drop would represent a fall in income of \$7,820 to around \$9,840 (the decile 2 midpoint).* For decile 6, this would be a fall of \$12,775 (from \$30,435 to \$17,660). Of course, some of the people who we are looking at will have fallen more than two deciles hence the actual loss would be much greater.

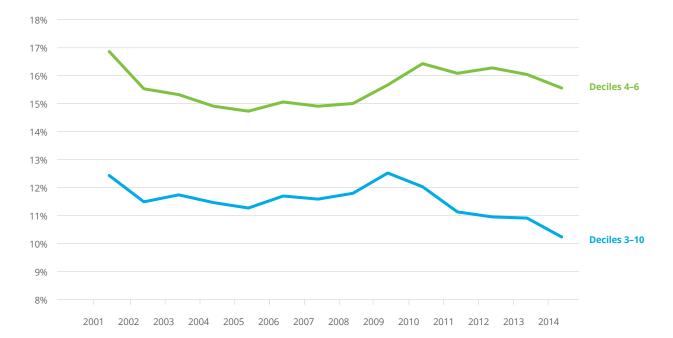
Behind the data

There are a couple of things to consider when looking at this data:

- 1. Individuals shifting downwards within income deciles must correspond to others moving upwards. Greater movement over time or income mobility is typically viewed as a sign of economic opportunity.³⁴ However, we should distinguish mobility from volatility. It is possible to have a greater degree of lifetime income mobility while still having a lesser degree of year-on-year fluctuation.
- 2. It could be argued that individuals (and by extension, households) are to some degree compensated for the greater risk of downwards shifts by the corresponding chance of upward movement. 35 However, there is good reason not to view those chances as being equivalent. Loss aversion means that people are more likely to put greater value on avoiding the loss than on the benefit of a gain of the same value. And unquestionably, it is a lot easier to adjust household finances to an increase in income than a decrease.
- 3. One limitation of the data is that it cannot distinguish between voluntary and involuntary changes in income, for example, intentionally moving to part-time work. Voluntary changes may be more likely to balance other aspects of resilience such as providing care for dependents or taking time out to re-train, which are not reflected in a purely income view. Still, it is a matter of concern if retraining or childcare entails an unmanageable drop in income.

Figure 6: Income volatility in New Zealand

New Zealanders (20-64 years) who fell two income deciles or more the following year, 2001-2014



^{*}Excluding bottom two income deciles, for whom a two-decile drop is not possible

Cash and credit

Households facing unexpected financial expenses are likely to first turn to their savings, or otherwise look to cover the shortfall through debt. Households' ability to 'smooth' fluctuations in this way is also unequal. In terms of savings, the poorest 40% of New Zealanders have less than \$3,100 in cash on average.³⁶

As of November 2016, household debt was at 165% of income, surpassing its previous peak in June 2009. As in many advanced countries this has built up in the last few decades, increasing steadily since the late-1980s when the level was closer to 50%.³⁷ For the bottom 10% of New Zealanders in particular, the assets they have on average (mainly home equity and household chattels) are often dwarfed by mortgage liabilities, bank loans, overdrafts and credit card debt.³⁸

It is important to keep this increase in household debt to income in context. With the official cash rate currently at an all-time low of 1.75% (as at March 2017), debt servicing costs are at 8.4% of disposable income. This is well down from the pre-GFC peak of 14% in 2008.³⁹ However, debt repayment obligations reduce discretionary income and do not go away when a shock disrupts a household's ability to repay. Therefore, for resilience debt, it is both a useful tool and a potential vulnerability.

Low- and middle-income New Zealanders are most likely to be more vulnerable to shocks and disruptions



There are households with very little financial resilience

It is not surprising that many households are in a poor position to deal with disruptions.

Forty percent of respondents to the Household Economic Survey for the year ending in June 2015 said that their income was not enough, or only just enough, to meet their everyday needs.⁴⁰

Nineteen percent of respondents in the Ministry of Social Development's assessment of material hardship for New Zealand children reported they could not pay an unexpected \$500 bill within a month without borrowing.⁴¹

Exacerbating the situation, we know that some of the ways households are forced to manage shortages almost certainly increase future risk. The scarcity mind-set means that we focus on the present scarcity and take decisions that put our future wellbeing at risk.⁴²

For instance 12% of respondents said that they could not afford home contents insurance, meaning that damage or theft of their possessions would be a more catastrophic event. As a result of having to pay for other essentials, 10% reported that they put up with feeling cold to save on heating costs, while 11% postponed a visit to the doctor and 26% postponed a visit to the dentist. Such measures enable households to get by, but they erode personal resilience by making a serious health issue more likely (with flow-on effects to income loss and so forth).43

Therefore, low- and middle-income New Zealanders are most likely to have worse wellbeing outcomes *and* be more vulnerable to disruptions.



Spotlight

The home: the bastion of Kiwi resilience

Much has been written about the unaffordability of housing in New Zealand. Our analysis does not seek to set out the causes of this situation or propose specific fixes. We are instead focused on the twin roles that housing plays in the resilience of New Zealand households.

In our interviews, the importance of having a safe, secure and warm home was a common theme. Interviewees talked about the positive impact that not having to move schools or doctors has on children, of the importance of good housing on health, and of the social benefits of having a safe place to go home to and a connection to the wider community. This is true for both renters and home owners.

But home ownership in and of itself is a major resilience factor for households, acting as a private safety net for many New Zealanders; a source of wealth and a key component of many people's retirement plans. ⁴⁴ The idea of housing as an investment, not just a place to live, has a number of impacts on household and national resilience.

Some households are putting themselves at greater risk to own a home. Around 87% of New Zealand's debt is mortgage-related, with the remainder divided between consumer debt and student loans. 45 Those who have high levels of debt relative to income will find it harder to make repayments in the event of a shock or a rise in interest rates. They will also be more at risk of negative equity wiping out investments in the event of a fall in house prices.

Some households are getting shut out of ownership altogether. Home ownership has fallen dramatically in the last generation, from 75% in the early 1990s to below 65%. Not only are these households deprived of a house as a resilience asset, but the long-term rental market suffers issues such as the lack of security of tenure, an inadequate stock of social housing and the low quality of some rental properties.⁴⁶

Taken together, we are seeing an overall transfer of resilience from some households to others. Those unable, or taking on high levels of debt, to buy a house are experiencing a reduction in resilience. These households are predominantly younger, Māori and Pasifika. ⁴⁷ Those who have been able to buy a house prior to price rises will be in a better position to ride out shocks as a result of rising real estate prices. And these households are predominantly older or have access to other forms of support – particularly parents and family. ⁴⁸

The cost of housing is one of the biggest national issues New Zealand faces and the reasons are complex. Government interventions have approached this issue from a number of directions. For example, the Reserve Bank's loan-tovalue ratio restrictions (though principally targeting the resilience of the banking sector) have had the effect of building resilience among home buyers by reducing the number of highly-leveraged mortgages. And the Social Housing Reform Programme has multiple objectives, including increasing overall housing supply - particularly social and affordable housing.

Rising house prices are a major driver of New Zealand's aggregate net wealth, and taxation settings continue to contribute to property being a favourable investment for New Zealanders. ⁴⁹ As a result, housing continues to be a source of inequality for New Zealanders.



Key housing facts

\$750 billion

has been added to the value of New Zealand's housing stock since 2002⁵⁰

\$390,000

average mortgage for a first home buyer in 2016⁵¹

8.2%

average increase in house prices above rate of inflation, 2002-2016⁵²

-32%

fall in share of Maori population living in a home owned by the household between 1991 and 2013⁵³

-38%

fall in share of Pasifika population living in a home owned by the household between 1991 and 2013⁵⁴

35%

of disposable income. Estimated debt servicing ratio for recent home-buyers⁵⁵

45-50%

of income. Estimated debt servicing ratio for Auckland home-buyers⁵⁶

Whānau and support networks

In 2015, Statistics New Zealand found that nearly all adults (97%) had at least one family member who provided them with support. Nearly half of those (46%) had five or more supportive family members. A study of Māori wellbeing showed that whānau relationships are particularly important to Māori and their sense of wellbeing.⁵⁷

Some households have less family resilience. Single parents and those not living in a family nucleus were much less likely to have large family support networks.⁵⁸

And there are households which experience social factors that have been shown to be risk factors for wellbeing and resilience. Issues such as family violence, alcohol and substance misuse are difficult to measure but are areas of major focus for New Zealand. For example, Child Youth and Family received 150,905 notifications from agencies or the public with concerns about the safety and treatment of children in 2015, a figure which has been relatively steady since 2011.⁵⁹

Employment

Stable employment contributes to resilience by providing households with security and predictability in meeting their basic needs. New Zealand has performed relatively well on this front in recent years. The ability to bounce back from the GFC, and avoid the levels of unemployment seen particularly in the Eurozone countries, is evidence that New Zealand is more resilient to global economic shocks than many others in the OECD.

One corollary to this good performance on employment growth has been poor productivity growth. New Zealand's GDP per capita lags behind the OECD average by around 20%,60 and since 1990 increases in New Zealand's per capita incomes have largely come from increased hours worked rather than increased output per hour.61 Higher productivity would contribute to a more resilient system in its own right. However, the fact that income growth has been occurring largely as a result of higher hours worked may mean that this is coming at the expense of other aspects of resilience, for instance, by contributing to higher levels of stress or reducing time spent at leisure or building social connections.62

Although the gig economy, that includes companies such as Uber or AirBnB, has not had the same impact here as it has overseas, it brings with it pros and cons for household resilience. The opportunity for flexible income with low barriers to participation may offer households extra income in a time of need, or even an alternative to unemployment.

However the fact that these forms of employment lack the protections of a traditional employment relationship such as annual leave, sick leave or protections against unjustified dismissal deprives households of important factors for household resilience. These models of work have also been associated with greater use of payday loans, credit cards and pawn shops.⁶³

New Zealand has already experienced a notable transformation in the nature of work. From 1985 to 2000, the share of part-time workers increased from around 17% of all workers to over 23% and has remained in the low-20s ever since. Combined with temporary and self-employed workers, non-standard employment accounts for a third of the working population.⁶⁴

The gig economy brings with it pros and cons for household resilience



Spotlight Intergenerational resilience

Voices of the Millennials

A fair start

New Zealand invests in a range of universal services – maternal care, early childhood education, schools, and free GP visits for under 13s – which improve the wellbeing of young New Zealanders. These services increase wellbeing as well as build resilience in the next generation of New Zealanders.

Through models such as Whānau Ora and family case conferencing, New Zealand has been a world leader in child and youth practices which consider protective factors – such as resilience and strengthening families – alongside risk factors.

And yet New Zealand could be doing much better on measures of child deprivation. Child poverty is considerably higher than it was in the 1980s. Fourteen percent of Kiwi kids live in households that go without seven or more things they need.⁶⁵ And 28% of kids live in households with low incomes (defined as 60% of the median income after housing costs).⁶⁶

The Working for Families tax package, has helped lower-income working families out of poverty. Even so, a reasonable estimate suggests that between 2009 and 2015, around 40% of children below the income poverty line had at least one or more adults in the household in full-time or self-employment.⁶⁷ However, it has done little for child poverty in workless households.

If we do not address child deprivation – in income, health, education and social outcomes – the next generation of New Zealand households may be less resilient than their parents.

Millennial aspirations and challenges

Deloitte's 2017 Millennial Survey found many in this demographic, especially in developed economies, are anxious about their future. They are concerned about a world that presents numerous threats and question their personal prospects.

As part of this report we spoke to Millennials across New Zealand about their personal aspirations and the challenges they saw.

As good as our parents

Much of what the next generation wants is what their parents want. Things like a house, a comfortable quality of life, a satisfying job and travel. But many interviewees expressed doubt about their ability to achieve them.

New horizons

We heard some consistent themes about how life goals – and the challenges that Millennials face – are changing too. In particular in employment, where we heard about the importance of meaningful work and a balanced life. Mostly respondents were positive about the impact of technology. But there was concern that more competition for jobs will make it harder to find the work they want. And as a result we heard worries about the value (and burden) of their investment in tertiary education.

In the face of new and uncertain challenges, ensuring the next generation of New Zealand households are in the best position to have the lives that they want means investing deliberately in the resilience of children and young people.

'I have serious doubts about my ability to own property of my own"

"The entry level jobs you can get straight out of school are not enough to support you to live comfortably like they were for previous generations"

"I am confident in my ability to complete my study, though I do not know if the debt I have accrued is a worthwhile investment"

"When my parents finished school, you could get a steady job without a degree. Now a degree is almost the expectation at entrance level"

Social and cultural capital

In a cohesive and inclusive society, individuals can call on resources beyond their own immediate reserves in order to help them successfully manage a variety of shocks.

Interviewees for this report identified that cultural connectedness – providing a relationship to community through language, history and social structures – is also a fundamental dimension to social capital. Statistics New Zealand found that for Māori, the more important that people felt it was to be involved in Māori culture, the higher their levels of life satisfaction.⁶⁸

Internationally, New Zealand performs well on measures of social capital. In a measure used in both the OECD Better Life Index and the Social Progress Index, 99% of New Zealanders believed they know someone they could rely on in a time of need.⁶⁹ Our high levels of social capital are evidenced by high levels of volunteerism, and social trust. We also typically rate highly in areas such as education and home ownership, both of which are associated with high levels of social capital.⁷⁰

Recent experiences show us how social capital can provide a source of resilience. Examples include the work of the Student Volunteer Army and the response of Ngai Tahu in the wake of the Canterbury earthquakes, the response of Takahanga Marae in the aftermath of the more recent Kaikōura earthquake and the action of Te Puea Memorial Marae in response to concerns over higher levels of homelessness in Auckland.⁷¹

But there are limitations to social capital. For example, networks are often concentrated in particular regions, industries or communities, and may have similar vulnerabilities to shocks which affect many households. This means that organisations that we assumed might be there to help us in times of need might find themselves overwhelmed.

Support that is targeted to groups with specific needs can increase the resilience of households

Government

Policy influences household resilience in a wide range of ways. Although they are not always explicitly described in this way, many of the core functions of government serve to build resilience among households.

Redistribution

Government has a poverty relief function through the welfare state. This takes the form of measures including job-seekers support, social housing and a public health system. These help households to manage shocks they may not be able to manage on their own.

Another core function is to act as a system of insurance and of redistribution across people's lifetimes, for example by taxing us during our working years and providing for us in retirement. This helps people to manage shocks that due to risk and uncertainty may not be well managed by individuals.⁷²

Both of these functions increase the resources, and therefore resilience, of individuals in the event of particular shocks. The extent of redistribution can have a notable effect on the equality of household income growth. When discussing the \$1.6 billion transferred to low and middle income households with children as part of the Working for Families tax credit, one Ministry for Social Development report noted that the 2004 to 2007 period was the only one in the 25 years to 2007 in which the incomes of low- to middle-income households grew more quickly than those of households above the median.73

Universal and targeted services

In addition, government provides universal services that, while primarily directed at other objectives, build personal resilience factors – through skills and wellbeing – of all New Zealanders.

Support that is targeted to groups with specific needs can increase the resilience of households. For example, the Whānau Ora model is explicitly building resilience with whānau. And progress in implementing social investment, with its focus on better outcomes for New Zealanders most in need, provides the opportunity to further build resilience into targeted provision.

99% of New Zealanders know someone they can rely on in a time of need

New Zealand ranks #1 in economic quality in the 2016 Legatum Prosperity Index

Managing the economy

Government has a macro-level role in responding to systemic shocks. The Legatum Prosperity Index explicitly focuses its assessment on "stable, sound economics" – in other words the resilience of the economic sector. Using this methodology New Zealand ranks number one in economic quality (and overall) in 2016.

The primary tool for stabilising the economy is monetary policy, which is set in accordance with the Reserve Bank's mandate for ensuring the soundness of the financial system and targeting stable prices in the medium term. With global interest rates on a downward trend in recent decades, central banks are likely to have less room to cut rates in the event of a shock. This suggests that there will be a greater role for fiscal policy like stimulus spending, working together with monetary policy, to respond to shocks.⁷⁴

The New Zealand Government has used stimulus spending effectively as a discretionary tool in response to adverse circumstances.⁷⁵

A positive feature of New Zealand's economic performance in recent times has been low public debt. The dual shocks of the GFC and Christchurch earthquakes showed that large-scale crises can quickly lead to a deterioration in public finances. Paying down debt in the good times will mean that future governments will be much less constrained in their actions when faced with a systemic shock.

The Government's recently announced plans to pay down net debt to 10–15% of GDP by 2025 have been explained explicitly in terms of enhancing resilience and putting New Zealand in a better position to respond to multiple shocks.⁷⁶

While restoring this fiscal buffer is a worthwhile objective in the medium term, taking a broader view of resilience raised some additional issues. One sector of the economy paying down debt must be matched by another sector doing the opposite. 77 We might hope our trading partners pick up this slack but still-weak global demand makes that uncertain. The risk of a focus on improving government's resilience is that we may shift further risk onto households who, as we discussed on page 23, are already experiencing a high debt-to-income ratio.

The balance of paying for government services out of current taxation (Pay as You Go) or accumulated funds (Save as You Go) has implications for national resilience in terms of funding future liabilities from future revenue. However, they also concern the predictability of income for households that rely on them. For instance, defined-benefit social programmes, such as the New Zealand Superannuation scheme, transfer risk from the individual to the rest of society by not having individual's entitlements subject to the performance of a fund, as under a defined contribution scheme.

The trade-off is that prefunded, defined contribution schemes (such as Kiwisaver) allow the contributions to be invested in a diverse portfolio of assets. As a defined contribution scheme, ACC also has the benefit of paying injured claimants a fixed share of their income, thereby matching the level of support more closely with that party's non-discretionary expenses.

Regulation

Regulation can also decrease individual risk in a variety of ways, such as imposing standards and minimum entitlements in employment relationships (under the Employment Relations Act 2000), restricting some activities in the interest of public health and safety (e.g. the Hazardous Substances and New Organisms Act 1996) or enforcing property rights (the Property Law Act 2007).

The Government's plans to pay down net debt are explained explicitly to enhance resilience and put New Zealand in a better position to respond to multiple shocks

Institutions

Institutions, meaning both informal norms and formal rules of governance, underpin the wider social system in which households operate. It follows that the more households can rely on a society's institutions, and the better those institutions can manage and adapt to change, the easier it will be for households to do the same.

Trust and engagement: a measure of quality

Trust in collective processes can better enable resilience-building to be pursued ahead of narrow individual interests. Examples include restricting bank lending or rebuilding the Natural Disaster Fund. And engagement with decision-making processes can help ensure that such decisions are informed by the experiences of households and are responsive to changes at that level.⁷⁹

New Zealand has not experienced the levels of populist disillusionment and discontent currently being felt elsewhere that are fuelling political upheaval like the UK's decision to leave the European Union and the 2016 United States election results.

Despite this, the picture of how New Zealanders view their public institutions is relatively mixed. On the one hand New Zealand is above the OECD average for voter turnout, 80 and in 2016 returned to the joint-top ranking in Transparency International's Corruption Perception Index. But on the other hand a 2016 survey by Victoria University of Wellington's Institute for Governance and Policy Study found trust varied substantially across institutions, and New Zealanders as a whole did not agree that citizens' interests are equally and fairly considered by government.

Thinking and acting intergenerationally enables institutions to consider long term consequences and impacts

Resilient institutions

The resilience of our institutions – their ability to continue to deliver core functions and adapt to change in the face of disruption – underpins the resilience of our social system, including that of households and of business.

Public institutions which can deliver through disruption

Ensuring resilient institutions, which are able to operate in the face of shocks, requires a different mode of thinking than the ways in which we typically assess the public sector. The values associated with designing organisations for resilience (adaptivity, high levels of slack, diversity, multiple objectives) are not the same as those associated with efficiency.⁸¹ As Brian Walker of the Resilience Alliance has argued, "most losses in resilience are the unintended consequences of narrowly focused optimisation".⁸²

An area of strength for New Zealand has been our resilience to macroeconomic shocks. In March 2017, Moody's noted that New Zealand's exchange rate and monetary policy regimes allowed the country to bounce back well from recent shocks. A proactive Reserve Bank, the effective use of fiscal policy and strong public finances were also strong points, offsetting our dependence on agriculture and reliance on foreign capital.⁸³

Public institutions which can adapt to change

Adaptive institutions that can continue to serve the interests of households in the face of changing circumstances exhibit two key characteristics.

First, institutional capability to shape incentives means that they can effectively lock people into ways of living that are not sustainable or that do not fit with changing conditions.⁸⁴ Resilience is likely to be enhanced by institutions that allow for an openness to experimentation and innovation and that effectively incorporate new information from diverse sources.⁸⁵

Second, the capability to think and act intergenerationally enables institutions to consider long term consequences and impacts. Long-term thinking is built into many of our public sector institutions including ACC, the Ministry for Vulnerable Children, Oranga Tamariki and the recently announced Social Investment Agency. Many other government departments report on future concerns as a matter of course, as do public offices with specifically future-focused mandates such as the Commissioners for the Environment, Retirement and Children.⁸⁶

Analysis and decision-making focused on anticipating future challenges includes the requirement that the Treasury considers the long term (40 year) fiscal position every four years,87 and the work done by the Department of the Prime Minister and Cabinet (DPMC) on future risks for New Zealand. The stewardship requirement of the State Sector Act 1988 now requires chief executives of government departments to consider the "active planning and management of medium-and long-term interests" with regard to their organisations as a whole, the assets held and the legislation administered.88 As was noted previously, Treasury's living standards framework attempts to operationalise a model of wellbeing centred on four capital stocks (economic, natural, social and human).89

Despite these measures, there are questions as to their adequacy. Victoria University of Wellington's Jonathan Boston notes that many future-oriented objectives lack clarity on implementation, adequate resources or measures to ensure compliance.⁹⁰ On the specific issue of risk, he notes that New Zealand lacks a unified approach to the identification, monitoring and reduction of risk.⁹¹

Resilience is not currently the primary, or even a stated, objective of government actions which influence households



A greater government focus on resilience

Government policy and public institutions already influence household resilience.

Good public policy should be about many things, but resilience is not currently the primary, or even a stated, objective of the actions which influence households.

This means that we might undervalue resilience when we choose what to invest in. For example, we need evidence of the value of being able to react quickly in order to better assess where short-term efficiency gains may reduce an institution's capacity to respond to a disruption.

We also need to consider where policy will have unintended consequences for the resilience of New Zealand households, and therefore their future wellbeing. For example, a trend towards more casual work may provide new employment opportunities, but if people are putting off a doctor's appointment because they have no paid sick leave, the impact may be felt in greater health problems and demands on the public health system in the long run.

Additionally, we should consider how policy can shape the distribution of risk and resilience between households, for example, the appreciating financial position of outright home owners against the increased vulnerability of a household with a small deposit on a new home.

Partly as a result of this, the overall impact of government is a mixed picture. Improvements, and declines, in resilience are often byproducts of policy. While the existing system of government support is integral to the resilience of New Zealand households, there is more that government can do to help those households who will struggle to successfully adapt to change.

Evaluating resilience as an explicit objective of policy and decision-making, together with a conscious focus on those households with the least resilience, are necessary to ensure that more New Zealand households are fit for the future.