

Employment, labour markets and income

Technological change and the future of work

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**Technological change and the
future of work**

Draft report 2

November 2019

The New Zealand Productivity Commission

Te Kōmihana Whai Hua o Aotearoa¹

The Commission – an independent Crown entity – completes in-depth inquiries on topics selected by the Government, carries out productivity-related research and promotes understanding of productivity issues. The Commission aims to provide insightful, well-informed 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.

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How to cite this document: New Zealand Productivity Commission (2019). *Employment, labour markets and income*. Technological change and the future of work, Draft report 2.

Date: November 2019

ISBN: 978-1-98-851940-1 (online)

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About this inquiry

This inquiry explores the impacts of new and changing technology on the quantity and nature of work. It builds on research and modelling carried out by governments, academics and other organisations in New Zealand and throughout the world. It aims to answer two main questions:

- What are the current and likely future impacts of technological change and disruption on the future of work, the workforce, labour markets, productivity and wellbeing?
- How can the Government better position New Zealand and New Zealanders to take advantage of innovation and technological change in terms of productivity, labour-market participation and the nature of work?

This is the second of five draft reports. It examines:

- the conditions necessary for a dynamic labour market (Chapter 1);
- the gig economy and employment relationships (Chapter 2);
- income support for displaced workers (Chapter 3);
- labour-market programmes – government programmes designed and targeted to help people find or sustain employment (Chapter 4); and
- re-orienting labour-market policies for increased technology adoption (Chapter 5).

The inquiry will release five draft reports

The five draft reports address different aspects of this inquiry's terms of reference.²

Report 1 – September 2019 ***New Zealand, technology and productivity***

- Defining technology, technological change and disruption
- What factors affect technology adoption and diffusion?
- What are the labour-market effects of technology diffusion to date?
- What might future technology adoption and labour market change look like?
- Preparing for an uncertain future

Report 2 – November 2019 ***Employment, labour markets and income***

- How has technology affected NZ's labour market?
- Are digital platforms and gig jobs changing the nature of work?
- How well do employment laws balance protections and flexibility?
- How can income support for displaced workers be improved?
- Can the Government better support those affected by labour-market change?
- What might improve NZ's technology adoption rates, and its labour market?

Report 3 – December 2019 ***Training New Zealand's workforce***

- How well does NZ's training and skills system support people in work to retrain and acquire new skills over time?
- What changes would make the system more responsive to the needs of a dynamic labour market?

Report 4 – December 2019 ***Firms, innovation and labour markets***

- How can governments better encourage technology uptake by firms – and hence productivity growth?
- What encourages and discourages labour-market mobility and dynamism?
- What would it take to shift NZ's labour market towards higher technology adoption, productivity and wages?

Report 5 – December 2019 ***Educating New Zealand's future workforce***

- How well does the NZ education system prepare people for future uncertainty?
- Does the national curriculum help or hinder?
- How well does the system promote flexibility and adaptability in students?
- Are there attributes of the system that close off student options too early?

² See the inquiry's [issues paper](#) or [draft report 1](#) for the terms of reference, or visit www.productivity.govt.nz/assets/Documents/8170d4518e/Terms-of-reference_Technology-disruption-and-the-future-of-work.pdf.

Register your interest

The Commission seeks your help in gathering ideas, opinions and information to ensure this inquiry is well informed and relevant. The Commission will keep registered participants informed as the inquiry progresses. You can register for updates at www.productivity.govt.nz/have-your-say/subscribe, or by emailing your contact details to info@productivity.govt.nz.

Make a submission by 7 February 2020

The Commission is interested in hearing comment, feedback and other evidence on the draft reports, and is conscious that different people and groups will have differing levels of interest in each of them. The Commission therefore welcomes separate submissions on each of the reports, submissions that respond to cross-cutting themes in multiple reports, or a single submission that covers all five. Please pick the format and approach that suits you best.

The **due date for submissions** on the five draft reports is **7 February 2020**.

Anyone can make a submission. Your submission may be written or in electronic or audio format. A submission may be a short note on one issue or a substantial response covering multiple issues. Please provide relevant facts, figures, data, examples and documents where possible to support your views. Multiple, identical submissions will not carry more weight than the merits of your arguments. Your submission may incorporate relevant material provided to other reviews or inquiries.

Your submission should include your name and contact details and the details of any organisation you represent. The Commission will not accept submissions that, in its opinion, contain inappropriate or defamatory content.

Sending in your submission

Please make your submission via www.productivity.govt.nz/have-your-say/make-a-submission. The Commission appreciates receiving submissions in PDF format.

What the Commission will do with submissions

The Commission wants to have as much information as possible on the public record. Submissions will become publicly available documents on the Commission's website. This will occur shortly after receipt, unless your submission is marked "in confidence" or you wish to delay its release for a short time. Please contact the Commission before submitting "in confidence" material.

Other ways you can participate

The Commission welcomes feedback about this inquiry. Please email your feedback to info@productivity.govt.nz or contact the Commission to arrange a meeting with inquiry staff.

The inquiry team is running a blog on technological change and future of work topics until December 2019. Individual staff members post regularly at www.productivity.govt.nz/futureworknzblog/. You can subscribe at www.productivity.govt.nz/have-your-say/subscribe. Comments and guest posts are welcome.

Final report in March 2020

The Commission will deliver a **final report to the Government in March 2020** bringing together themes, findings, recommendations and participant feedback from the draft reports.

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Overview

New Zealand has undergone significant labour-market change over the past forty years. It has adjusted to a decline in manufacturing and is now predominantly a services economy. The economy has absorbed a growing labour force. Today, New Zealand has high labour-market participation, relatively low unemployment and very low long-term unemployment.

These labour-market outcomes are highly positive. But the story has a flip side – growth in the incomes of New Zealanders has been constrained by the country's poor productivity performance. Economic growth has been mostly through more people participating in the labour market, rather than through the adoption of productivity-enhancing technology.

Gig work poses no threat to traditional employment arrangements

NZPC (2019) found nothing in the overseas or New Zealand data to suggest an imminent or widescale disruption to the New Zealand labour-market from automation or other technologies. This report finds that despite the high-profile emergence of some platform-mediated gig work, there is scant evidence in New Zealand of an increasing trend to more platform-mediated work, casual work, self-employment, contracting or holding multiple jobs. Any expansion of platform-mediated work does not appear to be at the expense of traditional employment arrangements. Most workers undertake platform-mediated work for short periods, and for supplementary income, rather than as a main job.

Stats NZ and other government agencies could improve their measurement of non-standard work and of work mediated by digital labour platforms. The legal test that distinguishes between employees and contractors should focus more directly on the fundamental nature of the work relationship – the extent of employer or platform control, worker autonomy and choice, and the extent of lock-in.

Income security may be a better policy goal than job security

Changes in the demand for workers and skillsets are a constant and longstanding feature of the New Zealand labour market and will continue to occur regardless of the pace of future technology adoption.

Labour-market policy should ideally encourage labour-market dynamism and the flexibility of the economy to create new jobs, while also providing security for workers when jobs are lost. Some countries try to achieve the latter by pursuing *job security* – that is, policies that reduce the likelihood of workers being displaced from their current job. Yet, policies that increase job security can limit innovation, technology adoption and wider job creation. An alternative is to adopt policies that instead offer *income security*. Such policies reduce the negative impacts of redundancy, restructuring or prolonged periods of unemployment.

Various policies, institutions and arrangements contribute to income security. Some New Zealanders have redundancy provisions in their employment contracts. Many displaced workers rely on partner (or other family) income or their private savings. This is because eligibility for government benefits in New Zealand is based on household (not individual) income and targeted at households with very low incomes.

New Zealand and Australia are outliers among OECD countries in that benefits targeted at low-income households are the only form of government-funded or mandated support specifically available to unemployed workers. All other OECD countries have some form of public or government-mandated unemployment insurance (UI) system. The absence of an income smoothing mechanism like UI, combined with means-testing of benefits, means that some New Zealanders face a more significant and immediate drop in income on job loss, compared to similarly placed workers in many other OECD countries.

There is a case to improve income security for displaced workers with income smoothing policies that cushion the financial shock of job loss. Doing so could:

- make workers less fearful about switching jobs and more accepting of labour-market settings that promote dynamism in the economy but reduce job security;

- achieve better labour-market matching – by enabling those who lose their jobs to take more time to search for a better, high-paying job that is a good match for their skills; and
- improve attitudes towards technology – as effective support systems can reduce fears about job loss and so make workers more welcoming of policies that embrace technology.

Promising options for providing greater levels of income security in New Zealand include:

- *portable individual redundancy accounts*, which workers can draw on should they lose a job;
- an *unemployment insurance* scheme, either government-run or a regulated commercial market; or
- changes to *benefits and tax credits* that provide increased, time-limited, income support after job loss.

All these options would involve significant changes to policy, processes and institutions. Comprehensive analysis and policy work will be needed to fully understand the relative costs and benefits of options.

Labour-market programmes help displaced workers and others

Governments have a wide variety of programmes and other supports (*labour-market programmes*) that have, at least in part, employment-related objectives. These are intended to help the unemployed, those at risk of unemployment, or those seeking additional work; or to achieve wider labour-market outcomes.

Employment and income support services are closely integrated within the Ministry of Social Development (MSD). Consequently, many MSD programmes are not available to, or designed for, workers who have lost their job and seek a new one, for workers at risk of unemployment, or those seeking to enter the workforce

There would be benefits for displaced workers, at-risk workers and the labour market more generally, if suitable and cost-effective labour-market programmes were available to a wider group of people.

There is insufficient information at the present time on the cost-effectiveness of existing programmes to justify expansion. The measured introduction of small-scale pilots could generate the information required to assess the value of current and new programmes, for a wider group of people. Subsequent expansion should be conditional on robust evaluation. Expanded programmes could be integrated with the income-smoothing options canvassed in this report.

A new labour-market model for New Zealand

High-income economies are characterised by highly skilled workers with high capital-intensity jobs and the rapid uptake of emerging technologies. These features drive a high output per hour worked – that is, high labour productivity – and support high incomes and living standards. By contrast, the New Zealand economy appears stuck with low wages, low productivity growth and low technology adoption, compared to better-performing countries.

Firms are more likely to adopt technology if the adjustment costs they face, including labour-related costs, are low relative to the benefits they anticipate from technology adoption. Labour-market settings, particularly those that favour workers' job security, can increase these costs. Countries that have adopted policies that promote income security over job security – known as “flexicurity” – tend to be more open to technology adoption on both sides of the employment relationship.

A move to flexicurity is attractive on many fronts, including increasing technology adoption, and improving productivity and living standards. Such a move would require parties with bargaining power to reconsider long-held positions. But finding a way to do so could improve productivity, wages and living standards.

The Tripartite Forum on the Future of Work appears to be a suitable vehicle to further explore a route towards a labour-market model more supportive of technology adoption and productivity growth.

1 Technology and the New Zealand labour market

Key points

- Distinguishing the effects of technology from other sources of labour-market change is difficult and not necessarily helpful for policy making.
- Over the past two decades New Zealand has had low rates of unemployment while having its highest ever rates of labour-force participation. Under-employment is also low and largely short term. These are strengths of New Zealand's current labour market. Government should avoid policies that might undermine them.
- However, New Zealand has persistently weak labour productivity growth. Growth since 1996 has averaged 1.4%, slowing to just 1.0% between 2008 and 2018. New Zealand's economic growth since 1996 has been achieved mostly through growing the labour force.
- Low productivity is at the root of New Zealand's low incomes. Policy settings that accelerate technology adoption would increase productivity, living standards and wellbeing.
- Global adoption of new technologies will directly or indirectly affect New Zealand's firms and labour market. Attempts to protect New Zealand firms and their workers from such forces are unlikely to succeed.
- The benefits and costs of greater technology adoption will likely fall unevenly on workers and households, and some may have limited capacity to adjust.
- Policies intended to protect current workers can often inhibit technological change and limit opportunities for people at the margins of the labour market. But with careful design, government can promote technological change while supporting people affected by labour-market change.

This inquiry's first draft report, *New Zealand, technology and productivity* (NZPC, 2019) examined concerns based on recent predictions that modern economies, including New Zealand, face significant labour-market disruption from emerging technologies. It noted that widespread and large-scale technological change over the past two-and-a-half centuries has not reduced the centrality of work to society, or the overall quantity of work and employment. Emerging technologies, particularly artificial intelligence, robots, software bots and autonomous vehicles, have not had significant effects on labour markets to date.

This does not mean that the New Zealand labour market is static. Over the past few decades it has seen substantial change to both the labour force and to firms' demand for labour; and adapted to that change without consequences that might qualify as "disruption".³ Expected technological change in the next decade or so should be within the capacity of New Zealand's well-functioning labour market to absorb.

New Zealand, technology and productivity concluded that New Zealand needs to embrace technology, not treat it as a threat. More and faster technology adoption will improve New Zealanders' living standards. Embracing technology implies supporting people who are less able to adjust, preparing young people for the future, and setting policies and institutions that encourage the creation and uptake of new knowledge,

³ NZPC (2019) defined technological disruption as unexpected change that creates significant adjustment costs across the economy. Yet technological change is both normal and ongoing, and planning for and adapting to it should be business as usual for individuals, firms and governments. A desirable feature of an economy is its ability to cope with technological change without disruption.

⁴ 'Firm' in this report refers to for-profit businesses, not-for-profit organisations, cooperatives and government entities that employ (or could employ) people, whether motivated by profit or by mission.

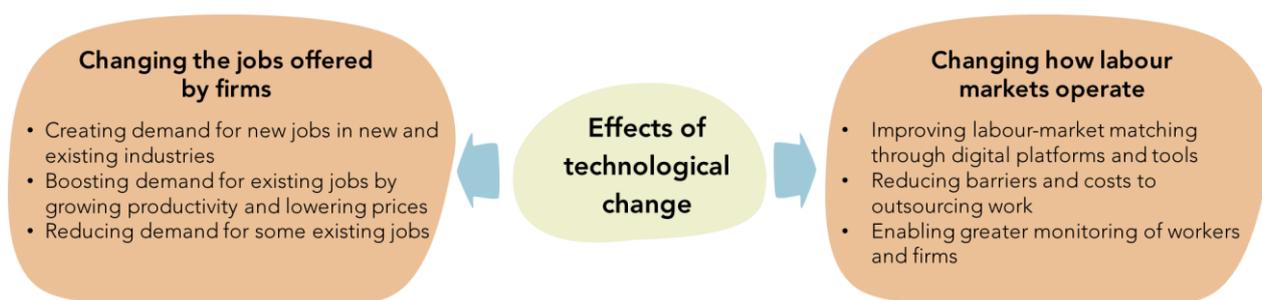
processes, goods and services by firms. There are things New Zealand can do now to support smoother transitions and to seize these opportunities.

This second draft report considers the recent performance of New Zealand’s labour market and opportunities for improvement that might both encourage technology adoption and better support people who face significant adjustment costs from labour-market change.

1.1 The labour-market impacts of technology

Labour markets are the interactions between people seeking work and firms seeking workers. Technology has many distinct effects on labour markets, as described in this inquiry’s first draft report. Technology can change the jobs offered by firms and the way that labour markets operate (Figure 1.1).

Figure 1.1 How technology affects labour markets



Technology can change the jobs that firms offer ...

Technology can change the demand for jobs and skills. By creating new goods and services, technology creates demand for new jobs in existing and new firms. Technology can also boost the demand for workers in existing jobs as technology can “augment” workers, making them more productive. For example, spreadsheet software made accountants much more productive, boosting the demand for the financial calculations they could now perform more efficiently (Kestenbaum & Goldstein, 2017).

On the other hand, adoption of labour-replacing technology by firms can reduce demand for some jobs and skills. Moreover, jobs can be lost when new technology-enabled business models reduce the profitability of firms using traditional models. For example, video-streaming services practically wiped out video rental stores.

Technology also has indirect effects on job demand. For example, technologies that reduce input costs for firms can enable them to lower prices (eg, televisions have become much cheaper). This means that consumers can spend their disposable income on other goods and services, increasing the demand for jobs elsewhere in the economy.

... and technology can change the way work is organised

Technology can also affect how labour markets operate. Digital platforms and tools have improved the process of matching workers to jobs. Examples include Seek, LinkedIn and AI-based services that vet job applications for employers. Better matching of workers to jobs increases the returns for employers and employees, and thus strengthens the demand for permanent jobs.

Technology has also reduced the transaction costs of finding suitable labour, monitoring the performance of workers, and outsourcing work to contractors. Digital platforms, for example, allow firms and individuals to specify tasks they want carried out and then purchase services from other firms or freelancing individuals. Improvements in technology have also allowed workers to work remotely from home or elsewhere, increasing work options and reducing travel costs.

Some people are concerned that technology might change the way work is organised, with negative effects on job quality, including security of income and employment. But job quality means different things to different people and does not necessarily depend on how the work is arranged or by which platform (digital or otherwise) it is mediated (Box 1.1).

Box 1.1 Is there such a thing as a “good” job?

By definition, a “good” job must be better than a “bad” one. Some commentators believe that government policy can encourage firms to create the former and to reduce – or even eliminate – the latter. But to do so, such policy needs to be able to accurately distinguish between the two categories.

This is tricky because individuals place high and low values on different aspects of job quality. For example, income stability and job security are high priorities for many, particularly during their child-rearing years. Others, especially younger and older workers, may place greater priority on flexible hours, training and progression opportunities, personal alignment with the employer’s mission, a congenial workplace, or other aspects of a job.

It is useful to distinguish between *job security* – a high likelihood of being able to stay in one’s current job – and *income security* – the ability to maintain current levels of income, even in the event of job loss. Job security is an important way to achieve income security, but not the only way.

There is no one definition of a “quality” job. People will make different choices and trade-offs depending on their circumstances and preferences. Good jobs do not have to look like “standard” full-time employment in a permanent, on-location, 9-to-5 job. However, security is a high priority for many workers and an important contributor to wellbeing (Cazes, Hijzen, & Saint-Martin, 2015; Morrison in Pacheco et al., 2016). If technological change were to drive an increase in the prevalence of “precarious” work, with a concomitant decrease in the availability of “secure” work for those who value it, then that would be a legitimate cause for policy concern.

Policies that are overly rigid in defining work arrangements, or in specifying who can do what and where, may have negative effects on the very people that the policy makers intended to help. Such policies may:

- reduce opportunities for work, especially for those requiring flexible or non-standard working hours or conditions; and
- discriminate against people with non-standard skills, work histories, preferences or circumstances.

The net result of such policies is both higher unemployment and under-employment. It is more important to promote a dynamic labour market that offers jobs of all sorts, while providing protection against exploitation, especially of the lower-skilled, the more vulnerable and the less geographically mobile.

Similarly, it is clear from the wellbeing literature that drops in subjective wellbeing occur with negative economic growth (ie, recessions) (De Neve et al., 2018). Even supposedly secure jobs can disappear during recessions. Government policy that minimises the likelihood or severity of recessions may be more important overall than policies that protect jobs judged good by whatever criteria.

The Commission defines a *good job* as one attractive to both employee and employer. More importantly, a *good job market* is one that provides ample opportunities for good jobs for all kinds. Policy is better directed to creating and maintaining the conditions for good job markets.

This suggests maximising opportunities for employment, rather than minimising the likelihood of existing workers losing their current job. High levels of employment and well-functioning labour markets improve wellbeing by reducing income insecurity.

Disentangling technology from other sources of labour-market change is hard

Technology is but one source of labour-market change. Other sources include global and domestic economic conditions, policy changes, changing consumer preferences and globalisation. It is difficult to separate the effects of technology from those of other sources because:

- change with different underlying causes (eg, globalisation and automation) can have similar impacts on labour markets; and
- specific labour-market events (eg, firm closure) are often the result of several underlying causal factors.

Treating technology differently is unhelpful for policy making

Distinguishing between sources of labour-market change is not necessarily helpful for policy making. Policies concerned with negative outcomes in labour markets should address those outcomes directly, rather than differentiating by source. The personal consequences of job loss, for example, are similar whether caused by globalisation or automation.

The US Trade Adjustment Assistance Program is an example of a system that provides support for displaced workers, conditional on the cause of their displacement being competition from firms in a country that has a free-trade agreement with the United States (US Department of Labor, 2019). It is advantageous to workers to be able to attribute their displacement to trade, and there is some evidence that firms “game” the system and favour such workers by misstating the underlying cause of lay-offs.

Policy needs to deal with both lumpy and gradual labour-market change

The effects of technology can be subtle and incremental in nature. In some cases, the adoption of new technologies by firms can lead to large-scale lay-offs that can attract public attention. But more often than not, labour-market changes happen on a smaller scale and go unnoticed by many, yet cumulatively they can substantially alter the who, where and what of work.

The 1980s offer one example. The state-owned New Zealand Railways Corporation reduced staff numbers by 54% between 1982 and 1989. This reduction was controversial at the time and it remains part of the New Zealand political narrative. Yet the demise of typist and stenographer jobs in the 1980s appears lost from social memory. The latter affected more workers, and there is no reason to believe their lives were any less upset than those of railways workers. On fairness grounds, policy should treat those affected by diffuse and incremental change no differently from those affected by an event that attracts significant public attention.

As a general principle, policy should not treat those adversely affected by technology any differently from those similarly affected by other causes.

F1.1

Distinguishing the effects of technology from other sources of labour-market change is hard and not necessarily helpful for policy making. Policies to support workers adversely affected by labour-market change should treat those affected by technology no differently from those similarly affected by other causes.

A “lumpy” event in a thin local labour market (such as a regional town) might, however, require a specific, tailored policy response. This is because the affected workers may face fewer options and higher adjustment costs than otherwise similar workers would face in a thicker labour market (such as in the main centres).⁵

1.2 Two decades of New Zealand data tells a labour-market story

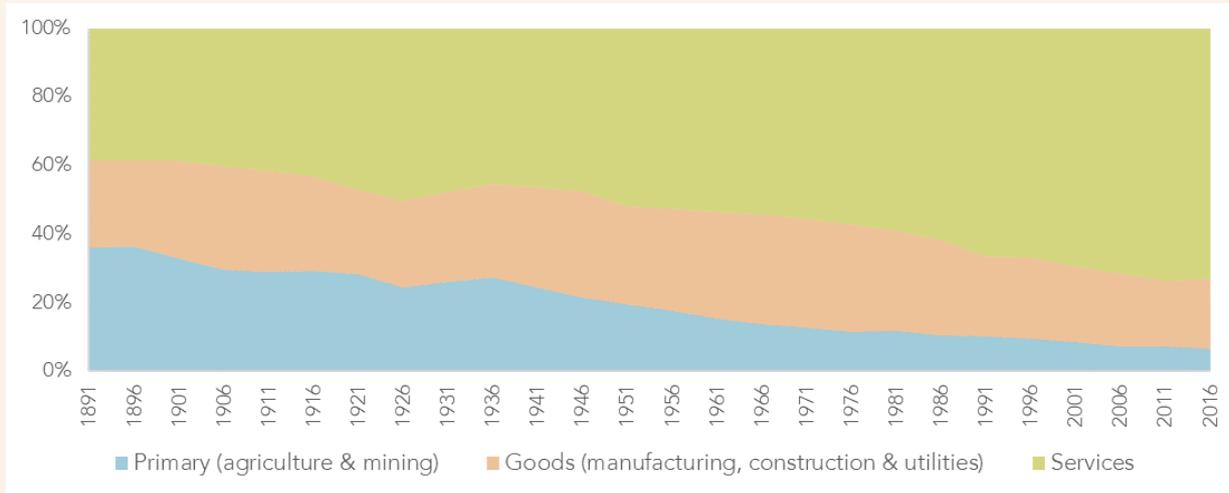
New Zealand has seen a substantial shift of jobs over time from both agriculture and manufacturing to services industries. This is a long-term trend (Box 1.2). Technology has driven much of this change.

⁵ Such lumpy events occur from time to time. This report does not specifically address lumpy events, as this inquiry is about policy settings that might support ongoing labour-market adjustments in response to technological change.

Box 1.2 The long-run story about primary and manufacturing sector employment

The share of employment in New Zealand's primary industries has been falling since the 1930s and the share of employment in manufacturing has been falling since the 1970s (Figure 1.2).

Figure 1.2 Employment by industry sector, New Zealand, 1891–2016



Source: New Zealand Institute for Economic Research (n.d.).

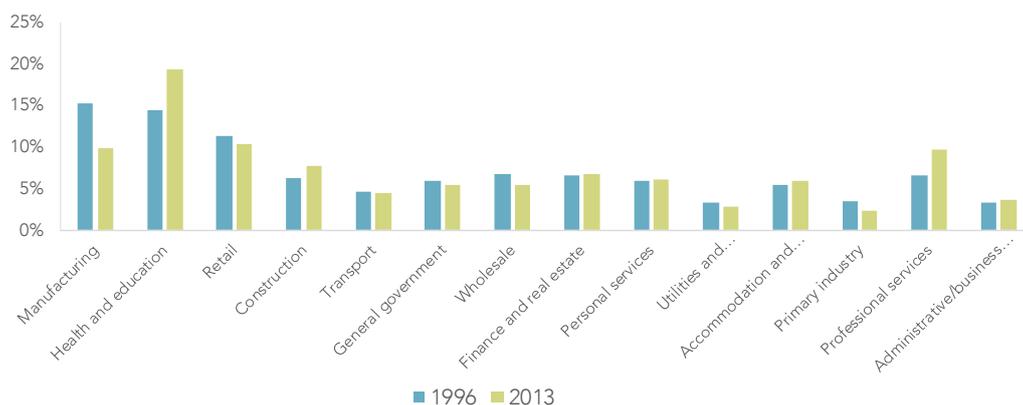
Notes:

1. Some data interpolated.

Firms and jobs have shifted to service industries

Figure 1.3 shows the shifts in New Zealand employment between industries in 2013 compared to 1996.⁶ The largest changes were falls in manufacturing, and rises in health and education, and professional services. The employment share of primary industry also fell.

Figure 1.3 Employment share by industry, New Zealand, 1996 and 2013



Source: Coleman and Zheng (2019).

New service industry jobs have tended to be in larger cities: Auckland, Wellington and, to a lesser extent, Christchurch.

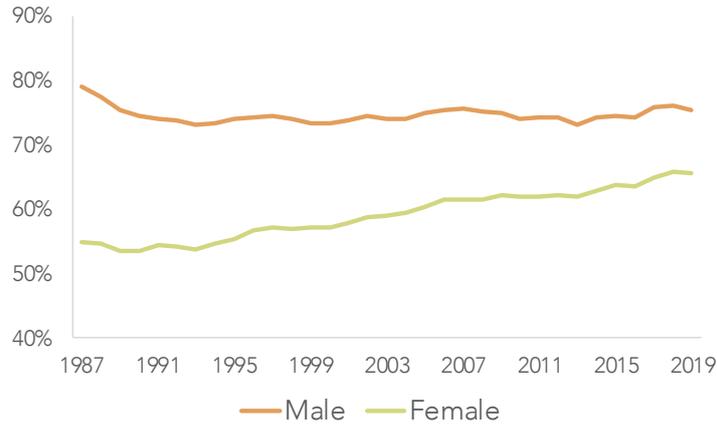
⁶ Statistical agencies construct employment shares by assigning workers to the industry defined by the main activity of their employer. The employer's main activity, in turn, is defined by its largest output. Should an employer's main activity change (eg, because it is now doing more wholesaling and less manufacturing), its whole workforce "moves" to a different industry, even though its actual workers may experience no change in their employer, occupation or work activities. So, a fall in employment share by industry does not equate to an equivalent number of job losses in that industry. Bloom et al. (2019) described how employment share data, incorrectly interpreted, led to overstated estimates of "manufacturing job" losses in the United States in the 2000s.

Social and demographic change

New Zealand has absorbed large numbers of people into the labour force through demographic and social change. The number of people employed increased by around one million (about 60% in percentage terms) between 1987 and 2019.

Social change and household economic necessity saw the proportion of women participating in the labour force increase from 55% to 66% between 1987 and 2019 (Figure 1.4). The large increase in the proportion of women aged 25–34 participating in the labour force is notable (Maddock & Genet, 2019).

Figure 1.4 Labour-force participation rate by gender, aged 15 and above, New Zealand, 1987–2019



Source: Stats NZ Household labour force survey.

Demographic change means that older people make up a much higher proportion of the population than they did in the past. Also, social and regulatory changes have made it more likely that older people remain in, or re-enter, the workforce. Since the late 1980s, the labour-market participation rate for people aged 60 to 64 has increased by close to 50 percentage points, concomitant with rising life expectancy and changes to the age of eligibility for superannuation in the 1990s. Fourteen percent of the workforce were aged 60 or more in 2017, up from just 4% in 1987.

Migration

New Zealand's population has grown over the past two decades. Population growth is the net outcome of births, deaths, arrivals and departures of New Zealand and Australian citizens and residents, and migration from other countries. Inwards migration (excepting by Australians and returning New Zealanders) is the only component of New Zealand's population growth that is able to be directly influenced by immigration policy.

Box 1.3 describes how migration has affected New Zealand's population and labour market.

The past four years are somewhat unusual. Small net outflows to Australia have combined with a spike in net migration from other countries to push total net migration to its highest levels of the past 40 years.

Box 1.3 The long story about migration and the New Zealand labour market

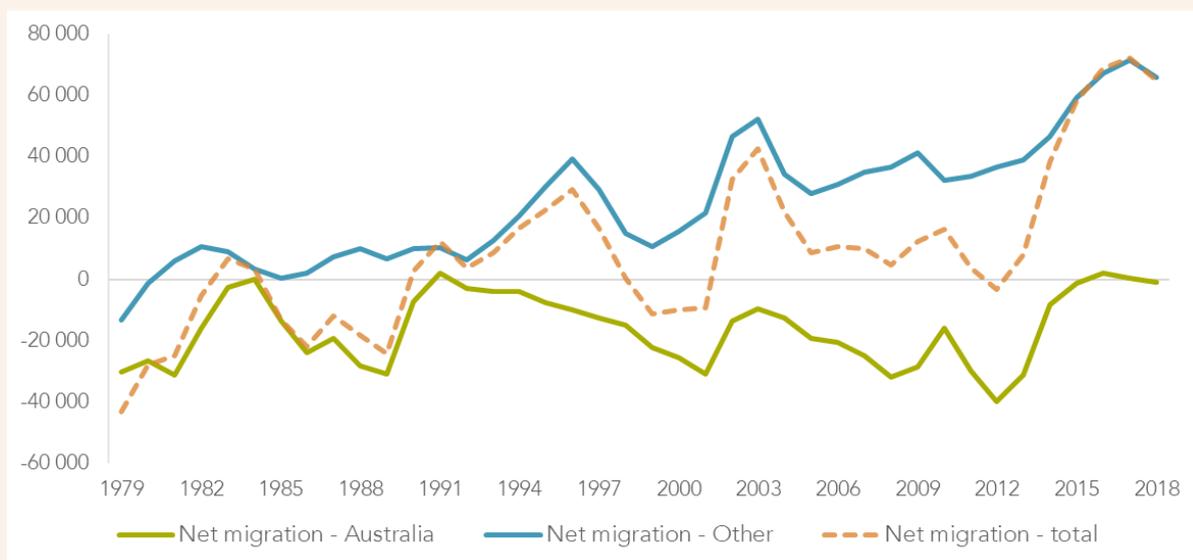
Since the 1840s there has been a high degree of fluidity between the New Zealand and Australian labour markets. The 1973 Trans-Tasman Travel Agreement formalised easy movement between the two countries (APC & NZPC, 2012).

In periods when job prospects are better in Australia, New Zealand experiences a steady outflow of Kiwis. This flow reduces, or occasionally reverses, when conditions favour job prospects in New Zealand. These flows tend to smooth out New Zealand's employment and unemployment statistics over time. An additional smoothing factor is that New Zealanders tend to return home from all over the globe when relative economic (and political) conditions favour New Zealand.

Despite the Kiwi diaspora, the New Zealand-resident labour force has grown due to inward migration from other countries, especially from China, India, the United Kingdom, South Africa and the Philippines. Forty-three percent of immigrants in 2018 arrived using a work visa.

Figure 1.5 shows the overall effect of these factors. More people emigrated from New Zealand than immigrated in most years in the 1980s. Immigrants have outnumbered emigrants in most years since then. The substantial net outflow to Australia significantly dampened net migration in the 1980s, 1990s and 2000s.

Figure 1.5 Net migration – total, with Australia and with other countries, 1979–2018



Source: Stats NZ International travel and migration.

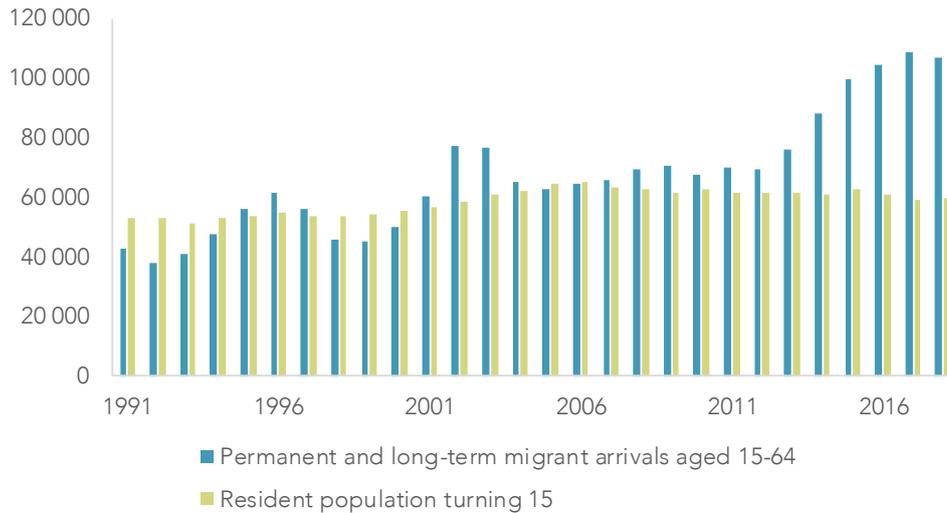
The past few years have been unusual. New Zealand's net outflows to Australia were close to zero in 2018 – this has not happened since about 1990. And it only happened one other time before that in the last 40 years. At the same time, there has been an unprecedented spike in net migration from other countries. This has pushed total net migration to its highest levels over the past 40 years.

Migrant arrivals outnumber young New Zealanders by nearly two to one

More people from countries other than Australia are choosing to move to New Zealand (Figure 1.5).

The number of new permanent and long-term migrant arrivals (aged 15–64) has, in recent years, been approximately double the number of New Zealand residents turning 15 (and who could potentially enter the labour force) each year (Figure 1.6).

Figure 1.6 Additions to the working age population – migrants and existing residents, New Zealand, 1991–2018



Source: Stats NZ International travel and migration; Stats NZ Population estimates.

International students also contribute to the New Zealand workforce. Many international students can work part-time while studying in New Zealand and, after graduation, may apply for work visas for up to three years. Most international students do not become permanent additions to the workforce. Policy changes that expanded international students' work rights (eg, in 2013) and growth in international student numbers (eg, in 2014–15) created a net addition to the workforce. Policy changes that reduced work rights (eg, in 2017) and declining student numbers (eg, in 2017–18) had the opposite effect.

Inwards and outwards migration is responsible for numerically larger effects on the size and composition of New Zealand's labour force than the output of our school system. The recent spike in net migration (Figure 1.5) does not just affect population, it also affects the size and the skill composition of the workforce.

The education system is often characterised as a "skills pipeline" by policy makers, employers, unions and others seeking more certainty over workforce supply. This characterisation gives a misleading impression of the extent to which the future demand for skills can be predicted, and shortages or surpluses avoided, by controlling the number of people in the training pipeline for particular occupations.

Efforts to predict demand and manage supply are fraught. Even in sectors such as education and health, where the state employs, regulates and trains most of the workforce, government has failed to match demand with supply. Government can influence but cannot dictate students' study choices and graduates' career choices. Multi-year lags are inevitable as students move through the system. Even where policy achieves marginal changes in graduate numbers for targeted occupations, these are invariably overwhelmed by migration flows, and by changes in the labour-supply choices of the much larger numbers of qualified people already in the labour force. Policies to manage the skills pipeline through the education system can make only a small and imperfect contribution. Broader labour-market dynamics derail even the best intended "workforce strategies".

F1.2

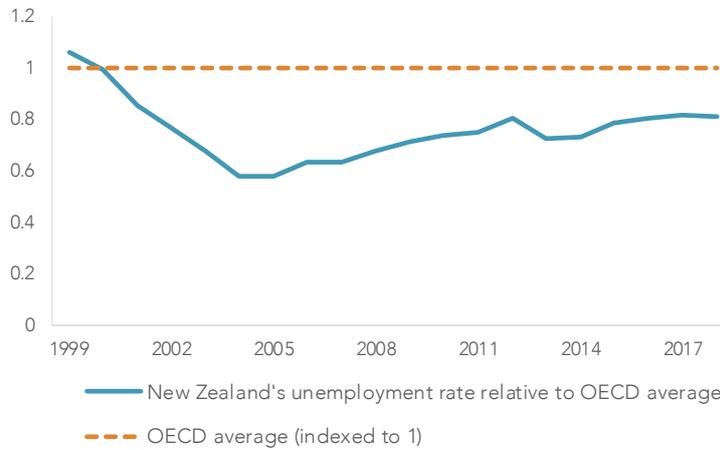
Inwards and outwards migration are responsible for numerically larger effects on the size and composition of New Zealand's labour force than is the output of its school system.

Policy makers, employers, unions and others often characterise the broader education system as a "skills pipeline". Inwards and outwards migration, and changes in the labour-supply choices of the existing workforce, invariably overwhelm attempts to forecast demand and fine tune the supply of skills in the workforce.

High participation and low unemployment

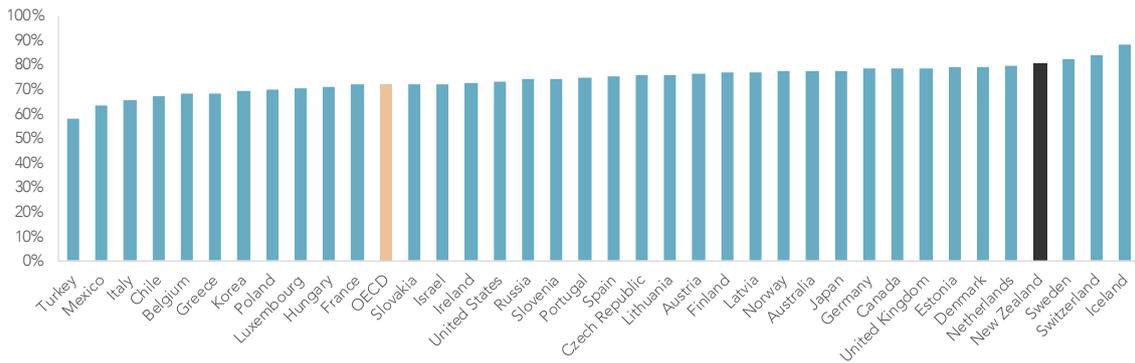
Over the past 20 years, New Zealand has had relatively low levels of unemployment and high rates of participation relative to other OECD countries (Figure 1.7; Figure 1.8).

Figure 1.7 New Zealand's unemployment rate relative to the OECD average, 1999–2018



Source: OECD Unemployment rate.

Figure 1.8 Labour-force participation rate across OECD countries, people aged 15–64, 2017



Source: OECD Labour-force participation rate.

New Zealand’s current unemployment rate is close to its lowest rate in three decades (Figure 1.9). Previous low rates of unemployment occurred with lower participation rates, making the current combination unprecedented.

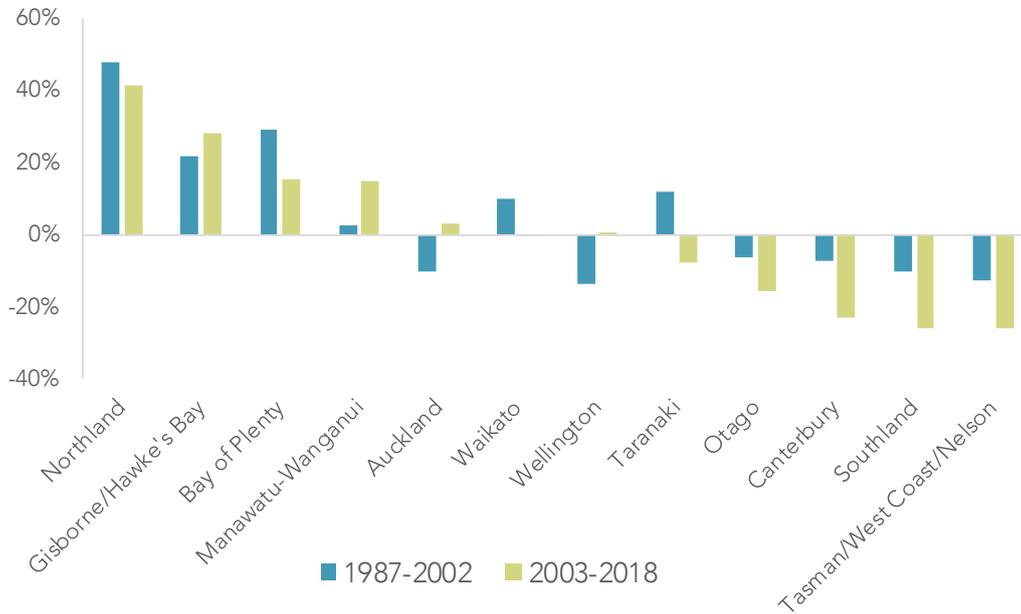
Figure 1.9 Unemployment rate and labour-force participation rate, New Zealand, 1987–2019



Source: Stats NZ Household labour force survey.

While in aggregate the unemployment rate is low, regional unemployment rates differ considerably from the national average. Regions such as Gisborne and Northland have persistently higher rates of unemployment (Figure 1.10). There are also large disparities between ethnic groups – Māori and Pacific peoples experience much higher levels of unemployment. Young workers and less-educated workers also face higher unemployment (Figure 1.11).⁷

Figure 1.10 Regional unemployment rates relative to the national unemployment rate, New Zealand



Source: Stats NZ Household labour force survey.

Figure 1.11 Unemployment rates by ethnicity, age group and qualification, New Zealand, 2019



Source: Stats NZ Household labour force survey.

Notes:

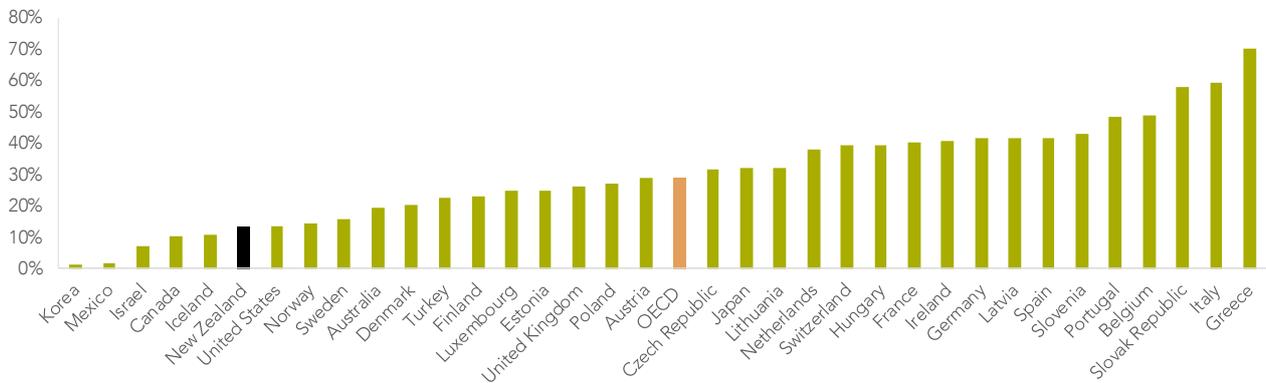
1. The unemployment rates by ethnicity and highest qualification covers people aged 15 and above.
2. Some of these categories have relatively few respondents, thus the data has large confidence intervals. Category measures should be interpreted with caution.

⁷ These factors are not independent of each other. For example, Māori and Pacific peoples are younger on average than other groups.

Low levels of under-employment and long-term unemployment

New Zealand has very low rates of long-term unemployment (ie, longer than a year) compared to other OECD countries (Figure 1.12).

Figure 1.12 Share of unemployed, unemployed for longer than one year, OECD countries, 2018



Source: OECD Long-term unemployment rate.

Using the Household labour force survey, Erwin, Dasgupta and Pacheco (2019) found that 28% of unemployed respondents were in employment and fully utilised in the labour force within three months, and just over 70% were in employment and fully utilised after a year.

The same study estimated an under-employment rate of 4.1% for June 2016 to June 2018. These are workers who reported being in employment but willing and available to work more hours. Sixty percent of the under-employed said that the main reason was not enough work available. However, the study found that under-employment was largely short term. Fifty percent of those who reported being under-employed had become fully employed in the labour force after three months, and nearly 85% were fully employed after a year.

F1.3

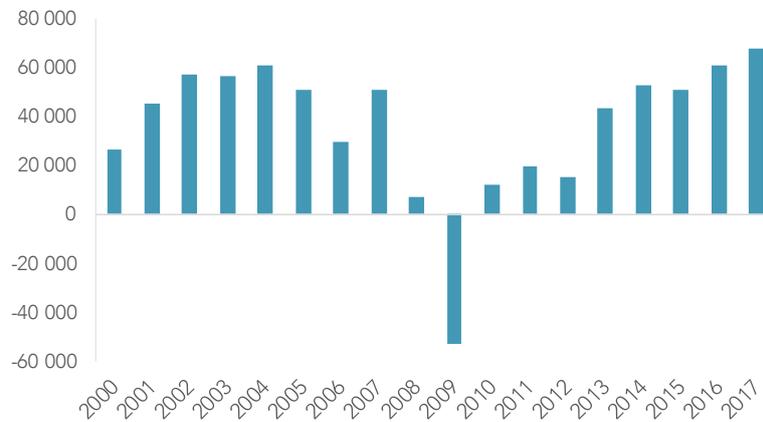
Demographic and social changes have seen an increase in the proportions of women and older people participating in the labour market, alongside high levels of net migration. New Zealand has had low rates of unemployment while having its highest-ever rates of labour-force participation. Under-employment is also low and largely short term. All these factors are strengths of New Zealand's current labour market.

Labour-market dynamism

Job creation

The New Zealand economy has created a total of about 650 000 jobs over the past 18 years (Figure 1.13). The number of jobs increased in each year excepting 2009, reflecting the effects of the global financial crisis (GFC).

Figure 1.13 Net job creation, New Zealand, 2000–17

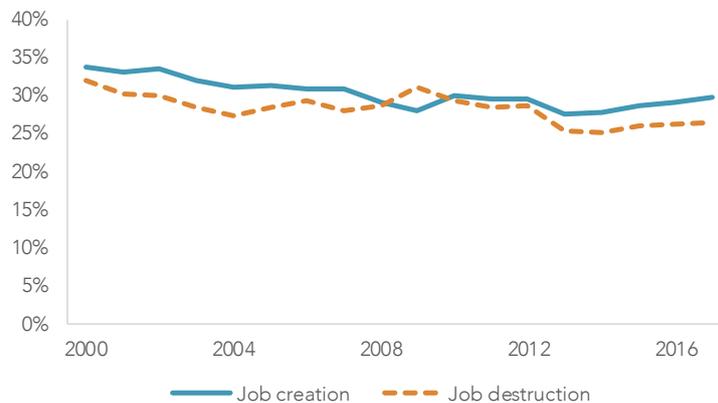


Source: Stats NZ Linked employer-employee database.

Job churn

In a dynamic economy, new firms are born, old ones exit, and existing firms grow or contract. The demand by firms for labour changes accordingly. Job churn figures assist in understanding this dynamism. Job churn is a measure of changes in the net number of filled jobs each year. Job creation and destruction have tracked closely between 2000 and 2017 (Figure 1.14). Job creation exceeded job destruction over the period, except briefly during the GFC. Job churn has declined slightly since 2000.

Figure 1.14 Job churn, New Zealand, 2000–17



Source: Stats NZ Linked employer-employee database.

Notes:

1. The rate of job creation for each year is calculated by dividing the sum of the new jobs created each quarter in that year by the average of the total filled jobs across the four quarters of that year. Job destruction rates are calculated using the same approach.
2. A natural interpretation of “job creation” is “new positions created”. Similarly, “job destruction” might naturally be interpreted as “workers displaced”. However, these interpretations are misleading. These metrics are measures of changes in the number of filled jobs over time. They are useful measures of labour-market dynamism, but less useful for other purposes.

Job-to-job switching

The frequency with which people switch from one job to another is called the *job-to-job transition rate*. This measure reflects an important aspect of the dynamism of the labour market – the opportunities for workers to pursue jobs that better match their skills and grow their incomes. That is why job-to-job transitions are sometimes referred to as the “job ladder” (Box 1.4).

Box 1.4 Job-to-job transitions and labour-market change

A voluntary move from one job to another is an important way for workers to grow their wages, since they have stronger bargaining power if already employed. These job switches can also benefit workers who stay in their jobs.

[A more fluid labour market] may improve the bargaining position of workers. If a worker has more credible outside options in more fluid labour markets, then they will be better placed to negotiate higher wages with their employer, and therefore to earn a higher share of the rent from the match. (Andrews, Deutscher, Hambur, & Hansell, 2019, p. 2)

Andrews, Deutscher, Hambur and Hansell (2019) from the Australian Treasury posited that lower rates of job switching helps to explain the recent drop in wage growth in Australia. Switching jobs and greater job mobility can be particularly beneficial for younger workers, given that the quality of early job matches can have a large bearing on a worker's career and future income. The ease of changing jobs also affects how well people can adjust to labour-market changes.

Job-to-job flows are affected by many factors:

- The pace of technology adoption. The adoption of new technologies can lead to more jobs being created and destroyed, which, in turn, results in more job switches as workers adjust to changes in the demand for work.
- Economic conditions and worker confidence. In a more buoyant economy, workers will be more willing to take risks and move jobs to find better paying and more suitable work, while firms will be more willing to take on new staff. US evidence indicates that transition rates decline significantly during recessions.
- Flexibility of employment protections. The costs of hiring and firing workers influence firms' decisions about taking on new staff.
- Income security and redundancy payments. Employees may be less willing to leave a job if their redundancy payments are linked to their length of tenure (and they lose their entitlement by switching job), or if they are at risk of unemployment and expect a sharp drop in income should that risk eventuate.

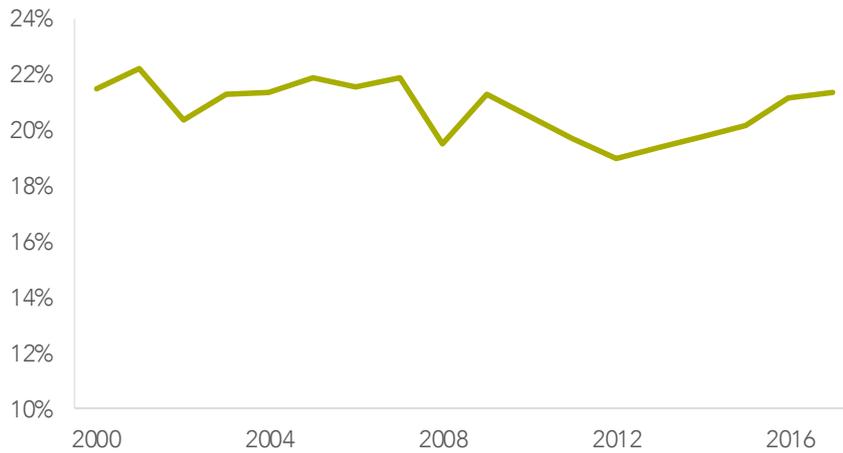
Labour productivity increases when workers move from less productive to more productive firms or move to jobs that better match their skills. The corollary is that in a less fluid labour market with fewer job transitions, it is more difficult for high productivity firms (particularly smaller firms that may be perceived to offer poor job security) to find suitable workers.

Coleman and Zheng (2019) examined job-to-job transitions across firms, industries and regions in New Zealand. Just over 20% of employees (aged 18–64) – about 420 000 people – had a different job in March 2018 than they had a year earlier.⁸ About 40% of these changes were to a new location, just under 60% involved switching industry, while only 20% stayed in the same industry and location. People who moved to a new location were more likely than not to change industries. Rates of job-to-job transitions were broadly similar across different-sized towns and cities.

Overall, the frequency of transitions has not changed much over the past two decades. The rate was stable between 2000 and 2007, fell slightly between 2008 and 2012 (following the GFC), and has recovered to pre-recession rates (Figure 1.15; Figure 1.16).

⁸ These estimates of job-to-job transitions exclude those who changed jobs but stayed employed in the same firm.

Figure 1.15 Share of employees who made job-to-job transitions, New Zealand, 2000–17

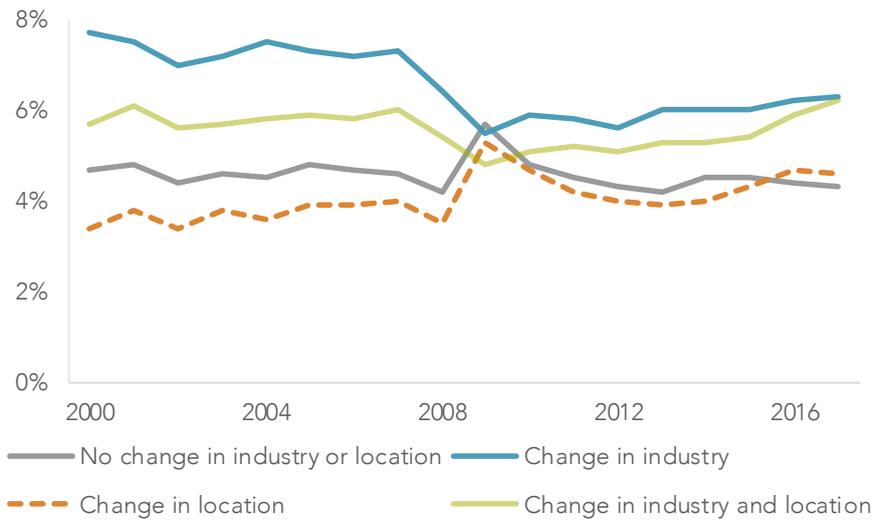


Source: Coleman and Zheng (2019).

Notes:

1. Coleman and Zheng measured job-to-job transitions by taking a snapshot of the workforce in March of each year between 2000 and 2017. Those people who were in a job in March of year t and another job in March of year $t+1$ count as making a job-to-job transition.
2. These figures will include some people who did not move directly from one job to another (ie, those who lost employment involuntarily or voluntarily terminated their employment but subsequently re-gained employment).

Figure 1.16 Job-to-job transition rates by type, New Zealand, 2000–17



Source: Coleman and Zheng (2019).

Notes:

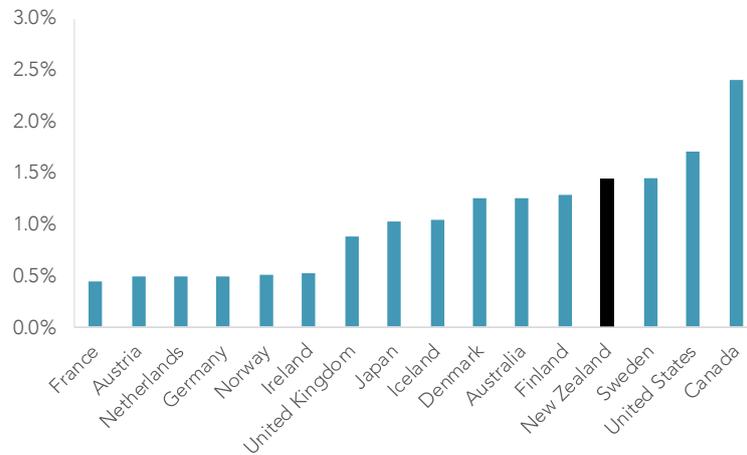
1. See notes for Figure 1.15.

In periods of faster technological change, job-to-job transitions would be expected to become more frequent (NZPC, 2019). Such an increase is not evident in the New Zealand data for the past two decades.

Among OECD countries, the New Zealand labour market looks dynamic

New Zealand's labour market looks dynamic, in international comparison. For example, compared to other OECD countries, flows into and out of unemployment are comparatively high in New Zealand, and the duration of unemployment is low (Figure 1.17; Figure 1.18).

Figure 1.17 Unemployment inflow rate, selected OECD countries, 1996–2016

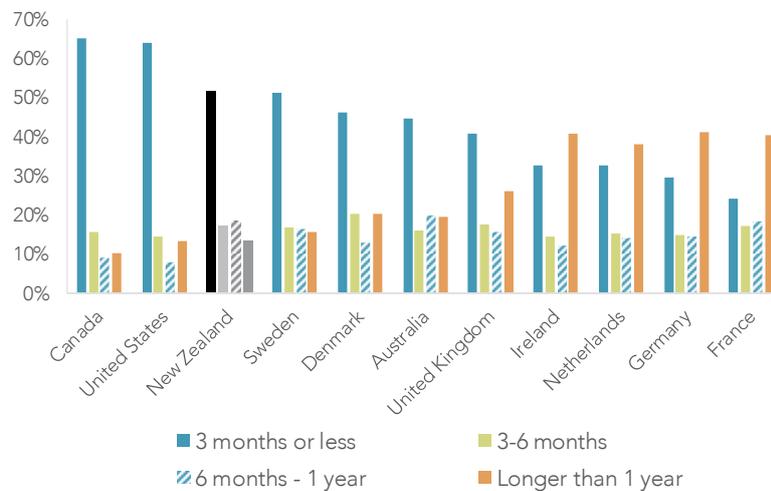


Source: OECD (2017).

Notes:

1. The unemployment inflow rate is the average number of unemployed who have been unemployed for less than one month as a percentage of the total labour force one month earlier.

Figure 1.18 Duration of unemployment, selected OECD countries, 2018

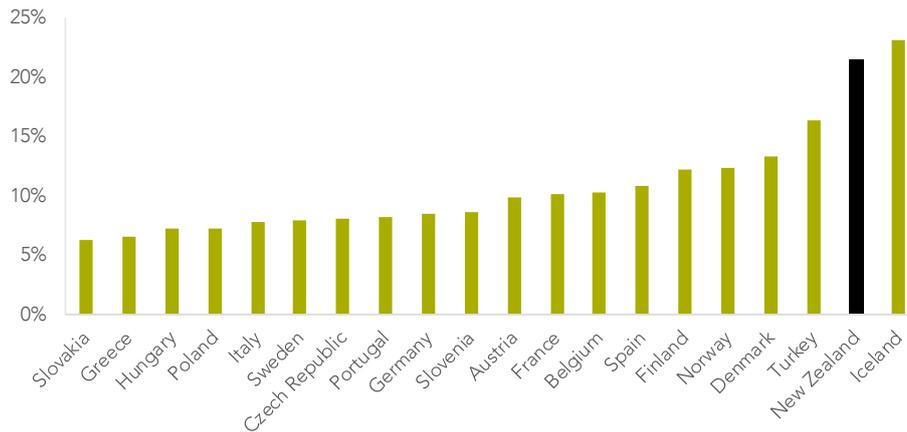


Source: OECD (2019f).

The rate of job-to-job transitions is another measure of labour-market dynamism. However, comparing estimates across countries has limitations, as methodologies and available data differ.

Coleman and Zheng (2019) estimated an annual rate of 19–22% of New Zealand workers switching jobs between 2000 and 2017. Bassanini and Garner (2012) estimated job switching for a selection of other OECD countries between 2000 and 2007 using a similar methodology to Coleman and Zheng. New Zealand's rates of job switching are high by comparison (Figure 1.19). Golan, Lane and McEntarfer (2007) estimated rates of job switching for the United States that were similar to Coleman and Zheng's estimates for New Zealand.⁹

⁹ Golan, Lane and McEntarfer's estimates are for the years 1991–2001, which has minimal overlap with the 2000–17 period studied by Coleman and Zheng.

Figure 1.19 Job-to-job transition rates, selected OECD countries, 2000–07

Source: Coleman and Zheng (2019) for New Zealand; Bassanini and Garnero (2012).

Notes:

1. Both Coleman and Zheng, and Bassanini and Garnero, defined a job-to-job transition as when a person was in a job at a specified point in year t and another job at the same point in year $t+1$.
2. Coleman and Zheng estimated the job-to-job transition rate as the share of people in a job in year t who made a job-to-job transition between year t and year $t+1$. Bassanini and Garnero estimated the rate as the share of people in a job in year $t+1$ who made a job-to-job transition between year t and year $t+1$.

F1.4

New Zealand's labour market appears dynamic on multiple measures, which is a further strength of the labour market. However, data on the rate at which people switch from one job to another does not point to increasing labour-market dynamism over the past two decades.

Labour productivity growth is persistently weak

Labour productivity growth is a measure of GDP growth per hour worked. Despite the strengths of the New Zealand labour market, labour productivity growth is persistently weak – averaging 1.4% since 1996.¹⁰ In common with other advanced economies, growth has slowed since the GFC.¹¹

Nolan, Pomeroy and Zheng (2019) benchmarked New Zealand's labour productivity against the countries in top half of the OECD, that is, the 18 countries with the highest GDP per capita. They found that New Zealand's GDP per capita is 30% below the average of this group. Aside from a small improvement following the GFC, it has remained around this level since 1996.¹²

Box 1.5 explains why a country should be concerned about low labour productivity levels.

¹⁰ This growth rate refers to the "measured sector", that is, industries mostly consisting of enterprises that are market producers. The measured sector omits local and central government administration, defence and public safety, education and training, health and social assistance, and owner-occupied property operation.

¹¹ New Zealand's average annual labour productivity growth was just 1.0% between 2008 and 2018.

¹² 1996 is the earliest year for which there is comparable data.

Box 1.5 Why labour productivity matters for wellbeing

Gross Domestic Product (GDP) is a measure of national income. Labour productivity, measured as GDP per hour worked, puts a ceiling on average hourly wages over the long term. Without labour productivity growth, sustained growth in hourly wages is not possible.

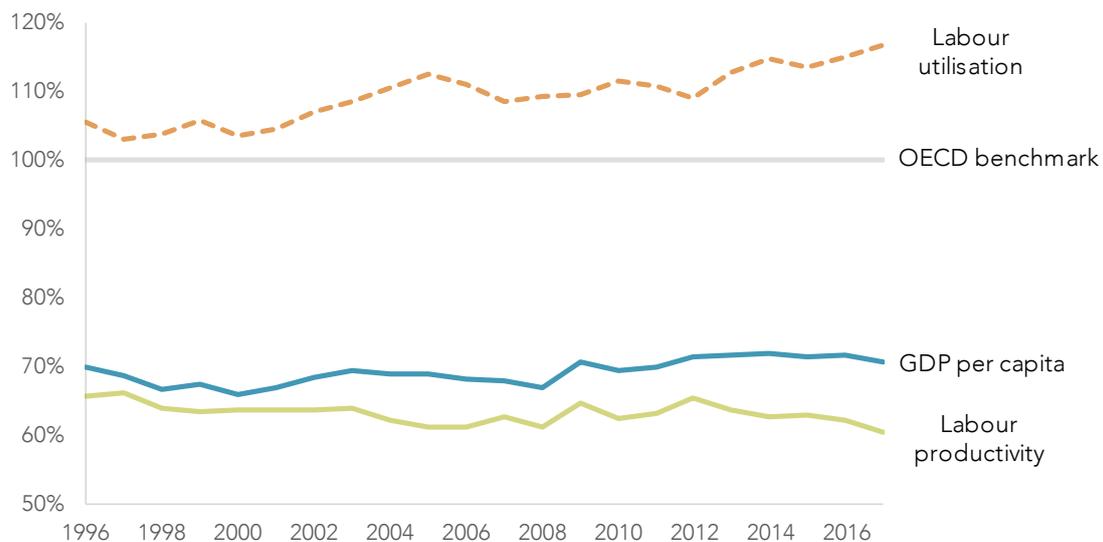
Economic growth – as measured by increasing GDP – creates room for wages to rise. It expands options for people to buy the things they value and contribute to their current and future wellbeing. Higher incomes allow better public services, improved social and environmental outcomes, and more spending on things that improve collective wellbeing.

Looking across countries, GDP (especially per-capita GDP) tends to correlate with many of the non-economic factors typically highlighted in wellbeing or living standards frameworks, such as life expectancy, subjective wellbeing, infant mortality and environmental quality (Dasgupta, 2001; Grossman & Krueger, 1991; Sacks, Stevenson, & Wolfers, 2010, 2012).

Economic growth is best achieved through increasing productivity – using labour and other resources more efficiently and effectively. Technology adoption is an important source of increased productivity.

Figure 1.20 shows the contributions of labour utilisation (ie, hours worked per capita) and labour productivity (ie, GDP per hour worked) to shaping New Zealand's relative GDP per capita.¹³ The graph shows that the New Zealand economy is growing not due to labour productivity, but due to its labour utilisation.

Figure 1.20 New Zealand's sources of GDP per capita as a % of the OECD benchmark, 1996–2017



Source: Productivity Commission; Nolan, Pomeroy and Zheng (2019).

Notes:

1. The OECD benchmark is the average of the top half of OECD countries with the highest GDP per capita.
2. GDP per capita (blue line) is the result of GDP per hour worked (green line) and hours worked per capita (dashed orange line).

New Zealand's labour utilisation is above the average of the top half of the OECD, and it has increased over time. Labour utilisation was, on average, 17% higher in New Zealand in 2017 than the average of the top half of the OECD. Since 1996 there has been no sign of New Zealand's labour productivity improving relative to the OECD benchmark.

¹³ Labour utilisation has three components: (1) hours worked per worker; (2) the proportion of the population in the workforce; and (3) the proportion of the workforce currently in employment (Nolan, Pomeroy, & Zheng, 2019).

F1.5

New Zealand has persistently weak labour productivity growth. Growth since 1996 has averaged 1.4%. It has further slowed since the Global Financial Crisis, in common with other advanced economies.

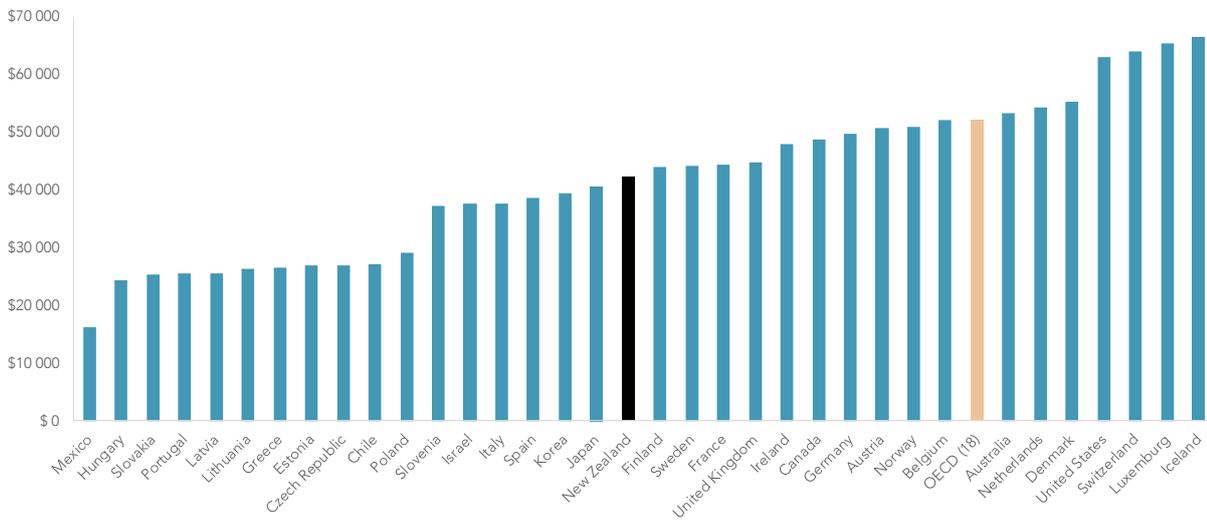
F1.6

New Zealand’s economic growth since 1996 has been achieved mostly through more people participating in the workforce rather than by improving productivity as measured by the value of output per hour worked. This type of growth does not support increased wages.

New Zealand wages are low compared with other advanced economies

Average New Zealand wages have been around three-quarters of those in Australia over the past decade. They were below those in many advanced economies in 2018 (Figure 1.21).

Figure 1.21 Average wages, purchasing-power-parity adjusted, OECD countries, 2018



Source: OECD (2019a).

Notes:

1. Inter-country wage comparisons are inherently difficult. This figure presents the OECD’s estimates.
2. Wages are measured in USD constant prices using a 2016 base year and purchasing-power-parities (PPPs) for private consumption of the same year. Wages are gross – that is, before taxes and transfers.
3. PPP-adjustment allows the international comparison of the ability of an average wage-earner in a country to purchase goods and services in that country. PPP-adjusted wages do not reflect the ability of a wage earner in one country to purchase goods and services in another. Such a comparison would adjust wages using market exchange rates, not PPPs.
4. OECD (18) is the average of the 18 OECD countries with the highest average wages in 2018 (excluding New Zealand). This is a similar (but not identical) group of countries to those used as a benchmark in the previous section.

F1.7

Average New Zealand wages are around three-quarters of those in Australia, and below those in many advanced economies.

New Zealand's labour market – the good and the bad

The good:

- Labour-market participation is at historic highs.
- The labour market has successfully employed a strongly growing labour force.
- Unemployment is relatively low, and long-term unemployment is very low.
- The labour market has adapted to recent technological changes without widespread disruption for workers.

The bad:

- The main source of economic growth has been more people working.
- Labour productivity growth is persistently weak.
- Consequently, wage growth has been subdued. New Zealand's average wages are around three-quarters of those in Australia, and below those in many advanced economies.

New Zealand's economy – more people pushing a broken-down car?

High-income economies are characterised by highly skilled workers with high capital-intensity jobs and the rapid uptake of emerging technologies. These features drive a high output per hour worked – that is, high labour productivity – and support high incomes and living standards.

New Zealand's economy does not meet this description. More New Zealanders are in work than ever before. But labour productivity remains around 40% less than the average of the top half of OECD countries.

More workers can and do grow the economy, at least in absolute terms. However, this approach is a bit like recruiting more people to push a broken-down car rather than fixing its engine. More people might move the car faster, but it is not a great way to get to one's destination.

For the New Zealand economy, "fixing the engine" is analogous to improving productivity growth. Technology adoption is an important way to achieve that goal. Adoption, in turn, requires increased investment in capital equipment, complementary assets and human capital.

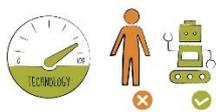
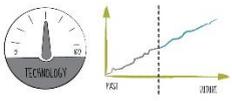
1.3 Embracing technology is vital to lift incomes and wellbeing

Increased technology adoption is desirable under all scenarios

The inquiry's first draft report (NZPC, 2019) presented four scenarios for 2035 as a tool for understanding possible outcomes from different rates of technology adoption and its labour-market effects. These scenarios are not equally likely; indeed, the ones with the most adverse consequences are the least likely.

Draft report 1 discussed the global nature of technology as the primary driver of the scenarios. It also noted that New Zealand has a poor track record of technology adoption. Table 1.1 presents the rationale for why accelerated technology adoption in New Zealand would be desirable under each of the four scenarios.

Table 1.1 Labour-market scenarios and rationale for more, not less, technology adoption

Scenario	Rationale for more, not less, technology adoption
More tech, more jobs 	Technology adoption accelerates, creating at least as many jobs as it destroys <ul style="list-style-type: none"> An opportunity for New Zealand to lift productivity growth, incomes and wellbeing Adopting technology at a rate faster than the global average would make New Zealand more competitive, raising New Zealand incomes above those of slower-adopting countries
More tech, fewer jobs 	Technology adoption accelerates, with the overall effect of replacing labour <ul style="list-style-type: none"> Slow adoption will put New Zealand at a competitive disadvantage, potentially leading to extra job losses as production moves to faster-adopting countries
Stagnation 	Technology adoption slows, with less job churn and less change in the nature of work <ul style="list-style-type: none"> New Zealand productivity and incomes are already stuck in low gear, under this scenario they could be further depressed Adopting technology faster than the global average rate could improve New Zealand incomes
Steady as 	Technology adoption continues at a pace similar to the past 15 years <ul style="list-style-type: none"> New Zealand productivity and incomes are stuck in low gear Adopting technology faster than the global average rate could improve New Zealand incomes

It is difficult to pursue worker and firm protection *and* technology adoption

To lift living standards and wellbeing will require policy settings that encourage greater technology adoption. But the benefits and costs of greater technology adoption will fall unevenly on firms, workers and households. Governments come under pressure to implement policies that might avoid or mitigate such costs to firms, workers and households.

But policies intended to protect current firms and workers can inhibit technological change. Such policies can also limit opportunities for people at the margins of the labour market, and discourage new firms from entering existing markets.

F1.8

The benefits and costs of greater technology adoption will likely fall unevenly on workers and households, creating significant costs for some. However, to lift overall incomes and wellbeing, policy settings must encourage greater technology adoption. Government should resist policies that protect existing firms and workers as these tend to discourage technology adoption.

Governments need to find ways that promote technological change while providing security and support to people adversely affected by such change. Subsequent chapters in this report explore options for providing security and support in ways that do not discourage technology adoption.

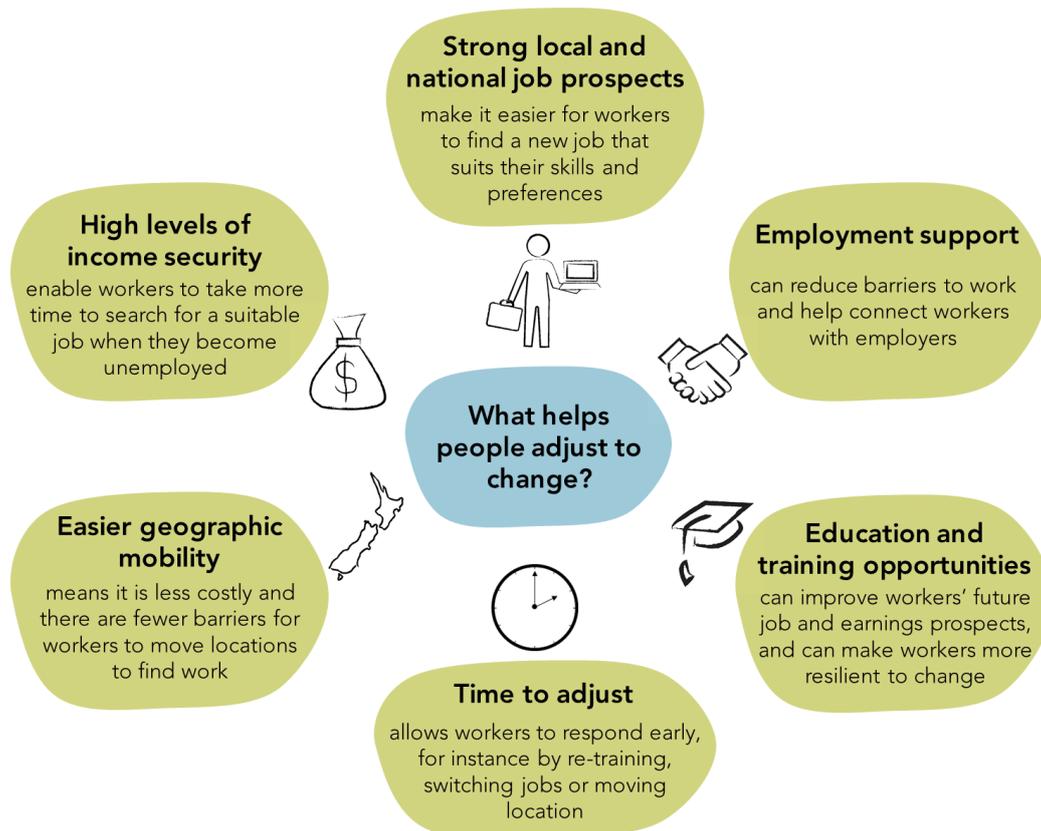
1.4 Encouraging technology adoption

The importance of a dynamic, flexible labour market

In the short run, more rapid technology adoption could lead to increased rates of job displacement. But, having a dynamic, flexible labour market will minimise the consequences, by offering opportunities for people to quickly find new jobs suited to their skills and preferences.

This points to policies that promote a dynamic labour market and expanded work opportunities. And, with the right support policies in place, workers can adjust without undue financial stress (Figure 1.22).

Figure 1.22 Supporting smooth and successful labour-market adjustments for workers



Chapter 2 discusses employment relationships, and gig work in particular. Chapter 3 addresses income security, and Chapter 4 covers employment support. Draft reports 3 and 5 will address training and education opportunities respectively. Coleman and Zheng (forthcoming) and draft report 4 will examine geographic mobility.

2 Digital platforms, gig work and employment relationships

Key points

- Digital platforms offer significant potential productivity gains, as well as benefits for workers, employers and consumers. They make it easier to search for work, expand income-earning opportunities and support more flexible work arrangements. They are especially valuable to workers who face thin labour markets or barriers to employment in “traditional” labour markets.
- Digital platforms are varied and hard to classify, with diverse business models that evolve rapidly. They create and exchange value in diverse ways. Platform rules, set by private governance systems, sometimes come into tension with public systems of law and regulation.
- In regulating digital platforms, the Government should: follow a principles-based, flexible and technology-neutral approach; support choice and mobility between platforms; and encourage performance transparency. Platforms with poor practices should face reputational consequences.
- The measurement of gig work, and other related descriptions of non-standard employment, is incomplete. Stats NZ should work with the Ministry of Business, Innovation and Employment and Inland Revenue to improve measures.
- Work-mediating platforms offer both high- and low-wage work. The proportion of people depending on low-wage platform-mediated work for sustained periods is very small and does not appear to be increasing. Most workers undertaking low-wage platform-mediated work do so for short periods, and for supplementary income, rather than as a main job. Most low-wage, casual, fixed-term and contract work is not platform-mediated.
- Work-mediating platforms allow work to be divided into discrete tasks and contracted out, but it is not inevitable that the technology will be widely used in this way. Both employers and workers can benefit from direct and enduring employment relationships. Compared to other countries, employees and contractors are treated fairly equally by New Zealand’s healthcare, income support, tax and Accident Compensation Corporation systems. This reduces employer incentives to mis-classify workers as contractors or to outsource work to avoid employment-related costs.
- Employment law issues over platform-mediated work are generally new instances of old issues about workers’ status under New Zealand law, which classifies workers as either employees or contractors. Platforms offer opportunities to organise work in ways that can be hard to align with traditional legal tests, regulations and policies. These issues are best addressed by clarifying legal tests. Adding intermediate worker categories would add further complexity and may create new problems.
- The legal tests for employee status should focus more directly on the fundamental nature of the work relationship: the extent of employer or platform control; worker autonomy and choice; and the extent of lock-in. Aspects of the “integration” test developed by case law include considerations that are difficult to justify or apply to platform-mediated work. These considerations discourage firms from offering better conditions and benefits to contractors.
- The Government should consider options to create a form of “safe harbour” that would allow firms to offer a wider range of benefits and support to contractors without the risk that doing so will result in their contractor workforce being re-categorised as employees.

This chapter explores platforms and gig work – two new manifestations of older institutions – and the extent to which they are reshaping labour markets.

Digital platforms are the 21st century manifestation of the millennia-old concept of a *marketplace*, traditionally a physical location where people came to exchange information, goods and services, and to socialise. Marketplaces are one of the great inventions of humankind, and have arisen spontaneously throughout history unless ruthlessly suppressed (McMillan, 2002).

"Gig" once meant a live performance by a musician or group. It now refers to work that is temporary or that has an uncertain future. Such work is nothing new, as evidenced by the plethora of terms that describe those working in these roles, including freelancers, independent contractors, project workers, seasonal workers and locums. Gig work, while not for everyone, constitutes good work for some (Box 1.1).

The prominence of digital platforms and the apparent ease with which they allow gigs – short-term arrangements between those wanting to purchase labour and those wanting to sell it – has ignited concerns of a future in which gig work is more prevalent or even substantially replaces more traditional employment.

2.1 Digital platforms

Digital platforms operate as virtual marketplaces for people to find each other, establish trust and transact. Platforms create economic value by matching parties in a two- or many-sided market.¹⁴

This chapter is primarily concerned with *work-mediating platforms* – those that support the exchange of labour and skills for reward through employment and contracting. However, it first considers digital platforms more generally and their broader effects on work.

Digital platforms are reshaping industries, firms and the organisation of work

The rise and spread of digital platforms has affected many industries and jobs over the past two decades. Platforms have enabled many new products and services, especially in digital media and information technology. Online marketplaces, disruptions to established supply chains, and changes to how organisations structure themselves and their workforces, have created, changed and eliminated jobs in many industries.

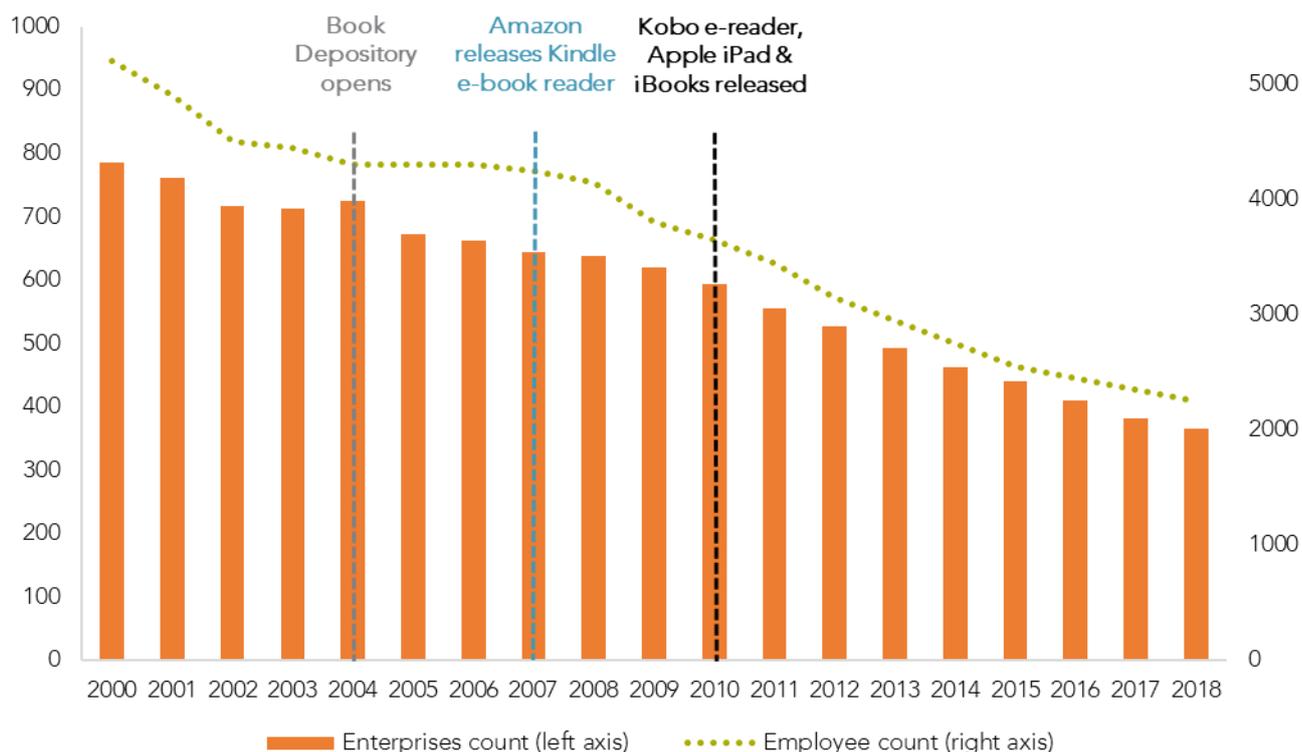
The speed of growth and scale of some platform-based companies highlights their ability to create and capture value, and to disrupt established business models. Digital platform companies (broadly defined) comprised seven of the eight largest public companies in the world by market capitalisation as at March 2019 (PricewaterhouseCoopers, 2019).¹⁵

The impact of digital platforms on business models, employment and work arrangements has been dispersed and incremental across the wider New Zealand economy. However, it has been fast-paced and disruptive for specific industries such as music and book retailing.

- The number of specialty music stores in New Zealand reportedly fell from roughly 300 to 30 in the two decades to 2013 (PricewaterhouseCoopers, 2018a). From 2013 to 2017, retail sales of physical music products halved to \$20m while download and streaming sales doubled to \$101m (PricewaterhouseCoopers, 2018b).
- The numbers of book stores and their employees has also fallen over the past two decades, reflecting rising competition from digital (eg, Kindle, Kobo) and internet-enabled (eg, Book Depository, Amazon) book sellers (Figure 2.1). The fall in bricks-and-mortar book sales may be more dramatic than the graph suggests, as remaining stores have diversified into other products to sustain revenues.

¹⁴ Some platform operators also participate on one or both sides of the market they operate in. Amazon, for example, sells its AmazonBasics line of products on the amazon.com shopping platform.

¹⁵ Ranked by market capitalisation: Microsoft, Apple, Amazon.com, Alphabet (Google's parent company), Facebook, Alibaba and Tencent. Financial sector firm Berkshire Hathaway ranked fifth.

Figure 2.1 Book retailers and employees, New Zealand, 2000–18

Source: Productivity Commission; Stats NZ business demography data.

Notes:

1. New Zealand business demography data is available from 2000. This graph does not show earlier effects from online book sales. Amazon, for example, started selling books online in 1994.
2. "Book retailers" refers to enterprises classified as newspaper and book retailers.

These declines occurred alongside rising retail sales and employment for the economy overall, and low unemployment. This suggests that New Zealand's institutional and policy settings are reasonably well equipped to handle the types of economic change brought about by digital platforms.

Platforms will continue to evolve and are likely to further shape the nature of work.

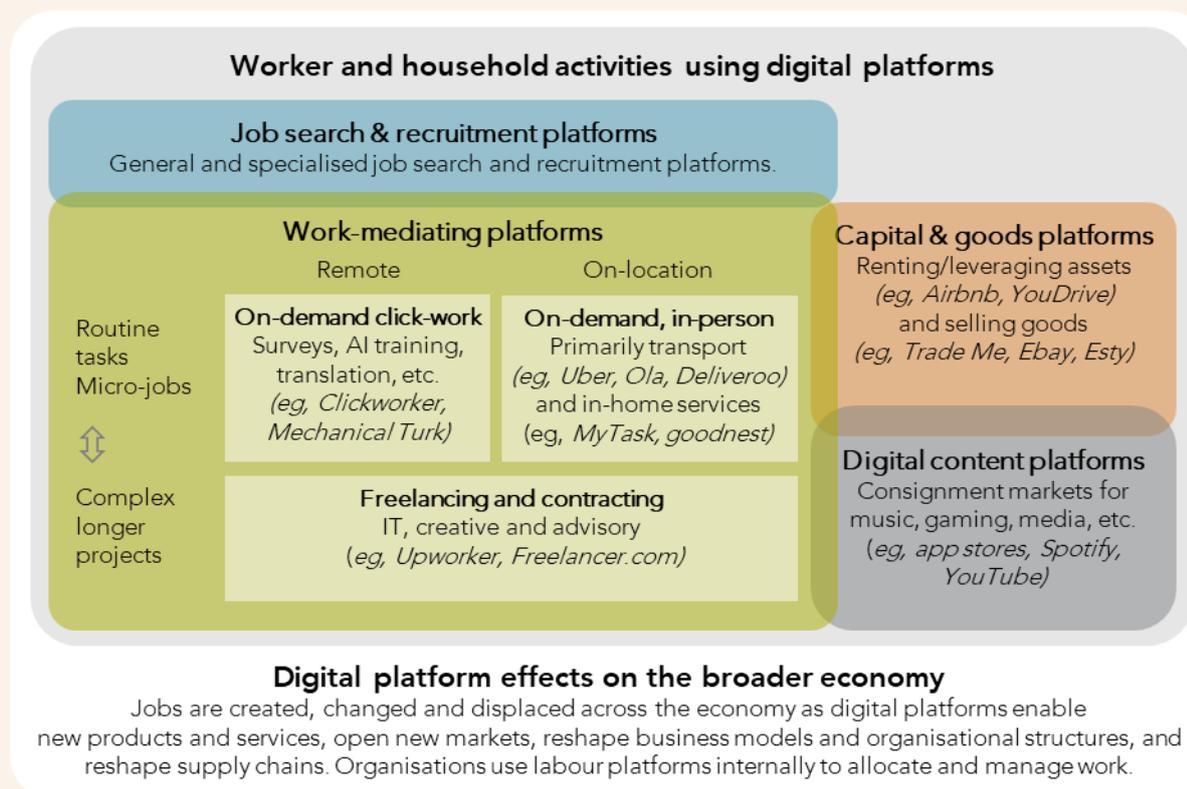
Many types of platforms, with different clients, purposes and effects

Digital platforms have diverse business models and can evolve quickly in ways that challenge efforts to classify and regulate them. There are a wide variety of platforms that workers and households engage with to find and undertake work (Box 2.1). This chapter uses the term "labour platforms" to refer to both work-mediating platforms and job search and recruitment platforms, as defined in Box 2.1.

The economic effects of labour platforms are not without precedent. Business practices and intermediaries developed in the past serve similar purposes. Manufacturing piece-work dates to pre-industrial times. Work-mediating platforms have much in common with the talent agencies or labour hire firms that pre-date them.

De Stefano (2016, p. 6) noted:

... it would be wrong to assume that the gig-economy is a sort of watertight dimension of the economy and the labour market. Nor would it be correct to take for granted that existing labour market institutions are entirely outdated in its respect or unsuitable to govern it and that therefore we would necessarily have to abandon existing institutions and regulation and to introduce new, and possibly "lighter", ones to keep pace with the challenges presented by the gig-economy.

Box 2.1 **Digital platforms create work and value in many forms**

Job search and recruitment platforms operate as matchmakers, helping job seekers and employers find each other, and reducing the costs of job search and hiring.

Work-mediating platforms match those willing to pay for tasks to those willing to do them for reward. Tasks range from relatively routine micro-tasks requiring low skills, to longer and more complex projects requiring specialised skills.

Work-mediating platforms provide mechanisms to specify tasks, determine wages/prices and other contract terms, match clients and tasks to workers, monitor and assess performance, and facilitate payment. These mechanisms tend to become more standardised and prescriptive for more routine and repetitive tasks, as a key point of the platform is to reduce transaction costs.

Some tasks on work-mediating platforms require workers to supply vehicles, equipment or a home office. For such tasks, income from the platform has both capital and labour components.

Work-mediating platforms – especially those offering lower-skilled and lower-paid on-demand work – are central to policy concerns about low-quality jobs, precarious work and the employment status of digital platform workers

Capital and goods platforms allow people to rent out their homes, cars or other assets. There is often a labour component to such rentals. For example, Airbnb hosts' income is a mix of property rent income and pay for work (eg, marketing, hosting guests and cleaning). Similarly, the income people earn from products they make for sale on goods platforms includes a labour component.

Digital content platforms support work creating digital content (eg, music, photography, games). Most are "consignment" markets: content is provided free to the platform and the creator's earnings are based on user volume (eg, a share of advertising, subscription or download sales). Some content creators leverage platform exposure to cross-sell endorsements, live performances or merchandise.

Source: Productivity Commission; Kenney and Zysman (2018); De Groen et al. (2018).

While the spread of digital platforms may highlight policy concerns about the future of work, such concerns are generally broader in nature and reflect longstanding issues not restricted to labour platforms, such as insecure work, poor job quality, low wages and equity of opportunities. Most non-standard (eg, casual, seasonal and fixed term) work is arranged and undertaken without using labour platforms. Policies should target these issues rather than the platforms or their underlying technology.

F2.1

Issues of insecure work, poor job quality, low wages and equity of opportunities are not specific to digital labour platforms. Policies should target these issues rather than the platforms or their underlying technology.

The benefits of labour platforms

Labour platforms have the potential to lift productivity, improve job quality and increase wellbeing. Platforms can lower transaction costs and provide new ways to organise and monitor work, with wide-ranging benefits.

- **Creating new opportunities for economic activity.** Lower transaction costs make new mutually beneficial opportunities for exchange possible by opening access to new markets and by reducing the cost of finding matches and arranging transactions. For example, ride-hailing service platforms have significantly expanded demand for point-to-point transport, increasing the number of drivers and hours worked.¹⁶ Digital content platforms offer a global audience for producers of creative work with less reliance on intermediary agents and distributors.
- **Better matching workers and skills to jobs.** Job search and recruitment platforms can speed job search for the unemployed (Kuhn & Mansour, 2014), and the process of filling jobs for employers. These platforms improve matching of people to the jobs that best use and reward their skills. Work-mediating platforms enable better matching of work to available workers and skills. They offer similar benefits used in-house to improve the deployment of a firm's employed workforce.
- **Using resources more efficiently.** Capital and goods platforms offer income-smoothing opportunities for displaced workers and enable people to earn income from their assets (McKinsey Global Institute, 2016).
- **Offering flexibility of hours, location and other conditions of work.** By offering flexibility to organise work in new ways, labour platforms create new or improved work options for workers and efficiency gains for their employers or clients. Both employees and contractors can benefit from greater flexibility in work hours, greater mobility and more efficient collaboration with peers. Flexibility can be of particular benefit to working parents, people with disabilities, new immigrants and other often-disadvantaged groups of workers (APC, 2016).¹⁷ Flexibility of work hours can also improve access to, and affordability of, tertiary education and training by reducing the opportunity costs of study (Bouzol-Broitman, Thevenon, Adema, & Clarke, 2016).

In turn, these benefits contribute to:

- **increased productivity and incomes** as resources (including human resources) are allocated and used more effectively, increasing output per hour worked and incomes;
- **improved wellbeing and income security** by expanding employment opportunities and reducing the risks and costs of job loss; and
- **lower prices and broader choice**, where competition and scale economies from platforms lead to lower prices that increase workers' purchasing power.

¹⁶ A 2017 study of Uber's impact on rider demand and labour supply in three US cities found Uber's arrival was followed by a 10% increase in hours worked by wage-employed taxi drivers and a 50% increase in hours worked by self-employed drivers (Berger, Chen, & Frey, 2018).

A 2018 New York City study found that from 2015 to 2018, following Uber and Lyft's arrival, monthly taxi rides fell by 4.4 million while Uber/Lyft rides increased by 15 million (Parrott & Reich, 2018).

¹⁷ Tirole (2017) commented that "it is interesting to note that in France, Uber created jobs for young people from immigrant backgrounds in a country where labor market institutions have not worked well for this group" (p. 416).

Figure 2.2 summarises these benefits and the relationships between them.

Figure 2.2 Benefits of labour platforms



Issues with labour platforms and regulatory challenges

The rise and evolution of labour platforms raises some issues and concerns for the public, policy makers and workers' advocates. Some relate to digital platforms generally: potential market power, and the quality of the rules they operate by. Other issues and concerns relate specifically to labour platforms, especially the ways that work-mediating platforms change how work is organised and affect the nature and quality of jobs.

Issues with platforms in general

Market power

Some, but by no means all, digital platforms operate in markets with strong scale economies. Network effects, best understood as demand-side economies of scale, are an example (Shapiro & Varian, 1999). An on-demand worker will naturally prefer to participate in a market ("network") with the greatest number and variety of potential buyers of their services. Similarly, buyers prefer a market with the greatest number and variety of potential workers. Such network effects encourage "winner takes all" markets in which a single platform may dominate.

Network effects are muted or absent when a platform's participants can multi-home (ie, participate at low cost on multiple competing platforms). Multi-homing can create strong inter-platform competition, such as that between Uber, Ola, Zoomy and other ride-hailing platforms.

Dominant platforms can, in some instances, exploit market power, for example, by underpaying for inputs, overcharging customers or acting to exclude potential competitors.

Determining the existence and exploitation of market power by digital platforms is complex and can be controversial. Complexities include operation in multiple markets, zero prices for some customers, and service bundling. Rather than competition on price or quality, platforms typically compete by finding the most profitable business model, or through successful R&D efforts.

For competition authorities examining platform markets, a platform having significant market share would not necessarily demonstrate that the platform is capable of exerting market power.

Platform rules versus public law and regulation

Platforms operate under private governance structures. They have sets of rules to regulate the exchanges and activity undertaken on the platform. This is not necessarily a problem; indeed, it is all but essential when a platform operates across international borders. Nor is it specific to digital platforms – stock exchanges, for example, have relied on rules that constrain participants since their inception in the 17th century.

These private governance structures can come into tension with established institutions and regulatory systems, including law and regulations covering employment, consumer protection, privacy and competition (Kenney & Zysman, 2018).

Issues specific to labour platforms

There are legitimate concerns that some types of platform-mediated work may undermine job quality for low-skilled workers, with weaker employment protections, lower wage rates and income security, and poorer working conditions. Insecure work, isolation (lack of a human manager and peer community), lack of opportunity for progression and privacy have been raised as policy concerns (De Groen et al., 2018).

In some cases, platform operators may seek a competitive advantage based on an arbitrage between the rules and practices applied to transactions on their platform and the rules that apply to companies operating in public, regulated markets (Kenney & Zysman, 2016). In the case of work-mediating platforms, this may involve seeking competitive advantage by driving down labour costs through practices prohibited by employment law for work organised off-platform.

People make trade-offs when deciding to participate on labour platforms

Like any other market, for labour platforms to function effectively, people need to share information, give up some privacy, and accept some constraints on their freedom of action. People make such trade-offs so they can connect with others and realise the benefits of platform participation.

- To reduce transaction costs and increase the number of potential exchanges, people give up some freedom to negotiate case-by-case and accept standardised pricing and contracts.
- To build the trust and reputation that encourages strangers to deal with each other, people share personal information and participate in review and performance-rating systems.

People have different preferences and will make different decisions over such trade-offs. Box 2.2 provides some information on the characteristics and motivations of gig workers.

Labour platforms vary in their control and constraint of the choices and behaviour of participants. In some cases, the hiring party and worker directly negotiate prices and other contract terms. In other cases, prices and terms are standardised and determined by the platform. Work-mediating platforms tend to be more prescriptive and standardised for more routine, on-demand micro-task work, such as click-work or in-person services (eg, ride hailing). Where the platform determines prices and terms and allocates buyer-seller matches, the parties give up some flexibility and autonomy, but can benefit from lower transaction costs and greater pricing certainty, which in turn may generate more work.

Box 2.2 Gig worker characteristics and motivations

Research on gig work has found a wide variety of worker characteristics, motivations and impacts.

- Hall and Krueger's (2018) analysis of Uber's US operations found that most drivers valued the flexibility that gig work offered. A significant proportion used Uber driving as a way of supplementing their income while they looked for other work. Eighty-five percent of respondents said that a key motivation was "to have more flexibility in my schedule and balance my work with life and family", and 32% reported that earning money "while looking for a steady, full-time job" was a major reason for driving with Uber.
- A similar study of Uber drivers in Australia found that 78% joined for the flexibility to balance work, study and family commitments. Nearly half of drivers were parents of children under 18. Slightly more than a quarter of drivers had a full-time job and were supplementing their income, 17% were looking for work, 16% had a part-time job, 15% were driving while they set up their own business, 10% were students, 6% were retirees and 5% were driving while caring for a family member or loved one. Almost half of the study's participants drove for less than 10 hours a week (AlphaBeta, 2019).
- A UK study of gig workers found that just under a third were participating to boost their overall incomes, a quarter were doing so to pursue a short-term goal (eg, buying a car, going on holiday), and 21% were using it as a "back-up" to avoid worrying about income security. Fourteen percent were working in the gig economy because they could not find a traditional job. More workers were satisfied than dissatisfied with gig work (46% vs 17%). Fifty percent agreed with the statement that gig workers "make a decision to sacrifice job security and workers' benefits for greater flexibility and independence", but 63% believed that government should regulate gig work to give all workers "a basic level of rights and benefits (eg, Living Wage/holiday pay)" (CIPD, 2017).
- Pallais's (2014) study of the freelancing platform oDesk (since rebranded as Upwork) found that work-mediating platforms could help boost earnings and employment opportunities for inexperienced workers. Specifically, positive customer reviews increased the likelihood of future employment for such people by 20% and improved earnings.
- A survey conducted for the Royal Society for the Encouragement of Arts, Manufactures and Commerce found that 59% of UK gig workers were providing professional, creative or administrative services, 33% skilled manual or personal services, and 16% driving and delivery services (Balaram, Warden, & Wallace-Stephens, 2017).

It is not obvious that the trade-offs that participants make on labour platforms are a policy problem. Trade-offs are a feature of participation in most, if not all, social and economic processes.

F2.2

That people make trade-offs to participate on labour platforms is not in itself a policy problem. Trade-offs are a feature of participation in most, if not all, social and economic processes.

Regulation versus choice and competition?

Like other marketplaces, if participants on either side of a platform (ie, buyers or sellers, hirers or workers) consider the platform is abusing its power, making unfair or unreliable rules, or unduly restricting their ability to transact, then its participants may desert it. Building trust is a key strategy for success, and platforms that fail to do so tend to pay the price.

Yoffie, Gawer and Cusumano (2019) cite eBay's loss of market dominance in China as an example of how the failure to build trust with customers can derail even large platforms.

eBay was the first mover, with a dominant share in China in the early 2000s. But Alibaba took over the market. The biggest source of the failure, confided the CEO of eBay China in an interview, was that "eBay's single biggest problem ... was trust." eBay relied on PayPal, which was designed as a payment system, much like a bank. For Chinese consumers unfamiliar with ecommerce, that was not enough. Alibaba's Alipay used an escrow model (which did not release payment until the consumer was satisfied). This neutralized eBay's early mover advantage, and Alibaba quickly captured the bulk of the market.

Choice and competition *between* platforms can therefore help provide a check on poor behaviour and market power. Policy makers should look to promote conditions that increase choice and mobility between platforms.

Both passengers and drivers using ride-hailing platforms can switch between platforms, whether to find better service or more work, or because they prefer one platform's rules and processes over another.¹⁸ Platforms have incentives to find ways to "lock-in" both drivers and passengers to reduce platform switching. Regulatory approaches that limit the extent of such lock-in and increase choice are likely to constrain the prices platforms charge and improve the accountability of platforms to their participants.

Platforms operate internationally, and rules governing them developed in one country or region can have effects in others (eg, the "click to accept cookies" messages required by EU regulators impose costs on New Zealand web users and website publishers). New Zealand regulators and policy makers therefore need to be well joined-up and internationally connected to influence platform regulation.

Platforms can evolve quickly, changing functions, business models and even industries in ways that are unpredictable and difficult to classify, monitor or regulate. Regulatory regimes face difficulties in keeping up with fast-moving digital industries, so principles-based, flexible and technology-neutral regulatory approaches are generally the best way to regulate platforms (APC & NZPC, 2019).

F2.3

Digital labour-platform operators seek to recruit and retain participants to achieve market liquidity, scale economies and network effects. Operators are sensitive to reputation and platform switching. So that poor performance and bad practices have reputational consequences, the Government should encourage choice and mobility between platforms and transparency of their labour-market practices. This approach is preferable to the prescriptive regulation of platform business models and rules.

Labour platforms neither cause nor fix enduring labour-market problems

Labour markets deliver both good and bad outcomes for participants. The potential for bad outcomes motivates labour-market regulation, which generally seeks to reduce the exploitation of vulnerable parties by addressing uneven power relationships, a lack of choice or voice, or low reputational consequences from poor behaviour.

The Commission found nothing about labour platforms that makes the exploitation of vulnerable parties more likely, relative to similar forms of work organised without labour platforms. Accordingly, the Commission makes no recommendations that would impose additional constraints on labour platforms.

¹⁸ Drivers and riders can also switch to "platforms" with different business models (eg, taxi companies). Public and private transport are imperfect substitutes. These compete with ride-hailing services on the rider side of the market.

Policies aimed at protecting people in insecure jobs and vulnerable to exploitation should focus on:

- the nature of the work and the employment relationship, and not the technology;
- lower-skilled and lower-paid work; and
- people for whom such work is their primary source of income.

2.2 Gig work does not appear to be increasing

Labour platforms and gig work have prompted fears of a “ruthless race to the bottom, as self-employed ‘freelancers’ compete in a larger, more competitive labour market to support themselves” (Stewart & Stanford, 2017, p. 421). The actual picture is much more limited and nuanced.

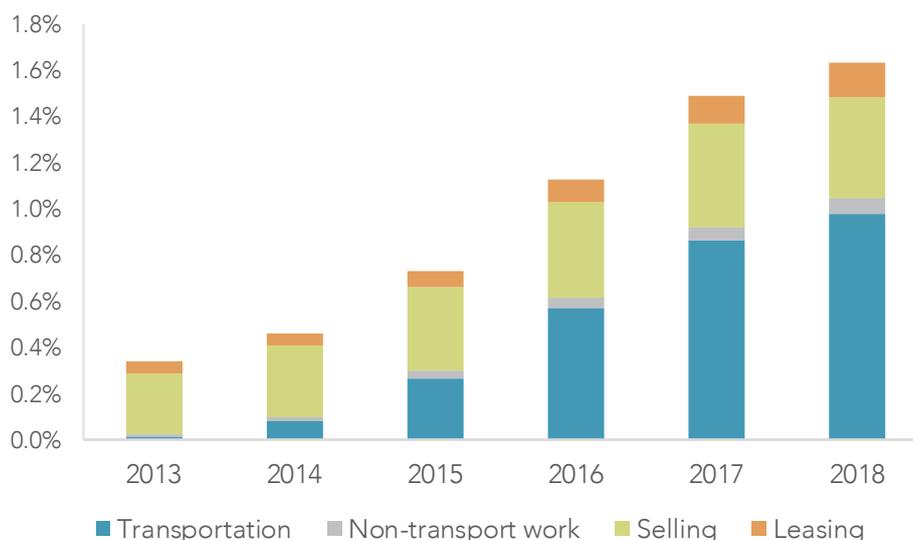
Despite the high-profile emergence of some platform-mediated gig work, the proportion of people doing this type of work is very small. Available statistics use different definitions and offer imperfect measures, making comparisons difficult. However, they are still reliable when looking at trends over time. Overall, they show scant evidence of an increasing trend to more platform-mediated work, casual work, self-employment and contracting, or multiple job holding in the New Zealand labour market. Most workers undertake platform-mediated work for short periods, and for supplementary income, rather than as a main job.

It is not clear that work-mediating platforms have increased the amount of gig work and self-employment, or that platform-mediated work is expanding at the expense of traditional employment arrangements.

In 2015, 11.5% of people employed in New Zealand were “own account” or solo self-employed workers. This is slightly above the 2016 average of 10.0% for 35 other countries (OECD, 2018). There was no consistent trend in the proportion of own-account employment between 1995 and 2016 across the 30 countries for which data is available. Rates fell in some countries and rose in others. Policy changes (tax and regulatory incentives) rather than technology have driven increases in own-account employment.¹⁹

Platform-mediated work such as ride-share driving for Uber, or click-work for Amazon Mechanical Turk, remains a small proportion of the overall labour force. US estimates suggest approximately 1% of households earned income through such work in 2018 (Figure 2.3). Most of these are doing so for short periods, and not as a primary source of income (Figure 2.4).

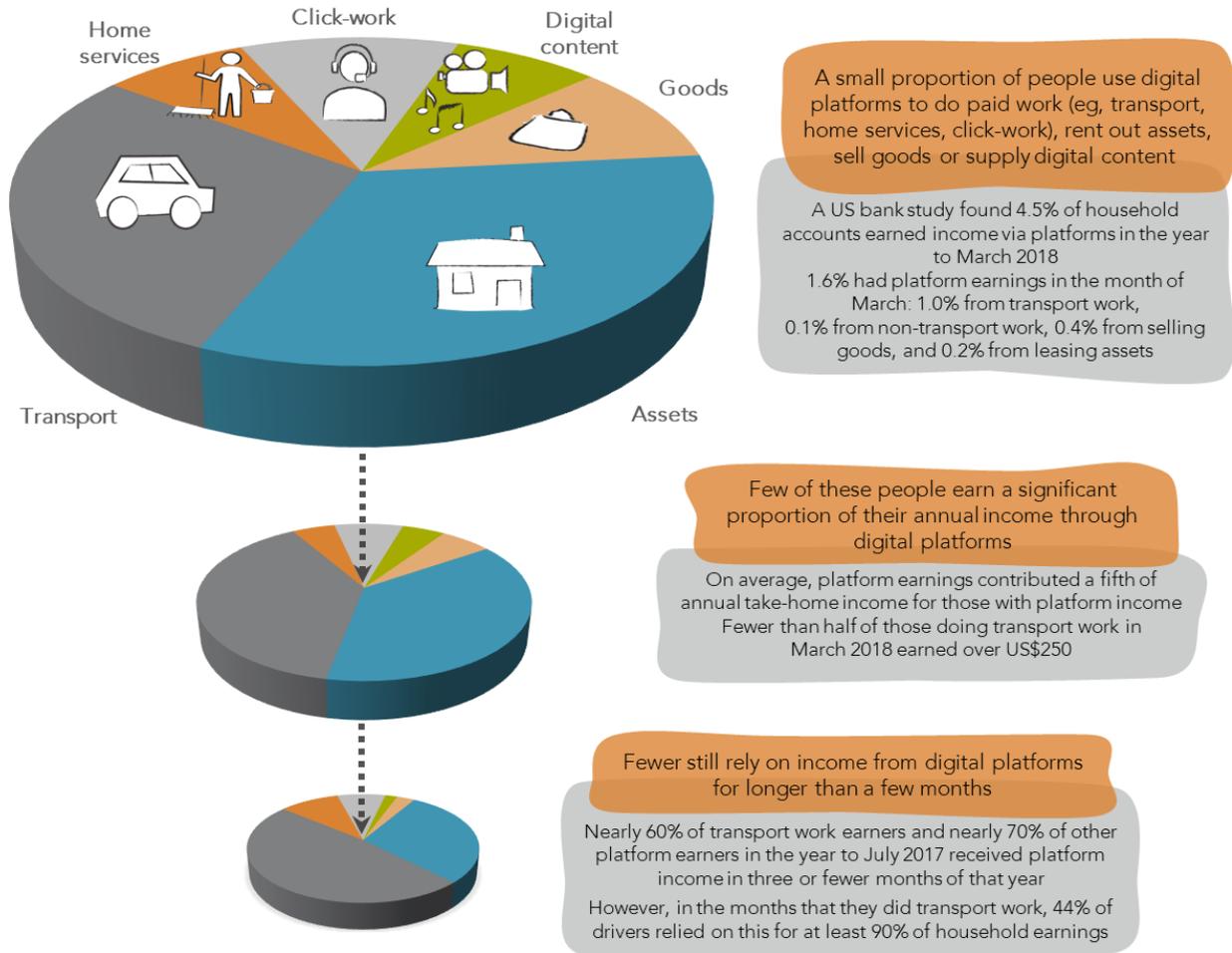
Figure 2.3 Share of sampled US families earning income from platforms each month, by platform sector



Source: Productivity Commission; Farrell, Greig and Hamoudi (2018).

¹⁹ Japan, Denmark, Norway, Germany, Sweden, Luxembourg, Hungary, Estonia and Switzerland have the lowest rates of own-account employment (all between 4.2% and 5.6%). Many of these countries have legal constraints, and strong tax and social insurance incentives, to favour employee status. The OECD is concerned that policy unduly deters own-account employment in some of these countries (OECD, 2018).

Figure 2.4 Characteristics of US platform workers



Source: Productivity Commission; Farrell, Greig and Hamoudi (2018).

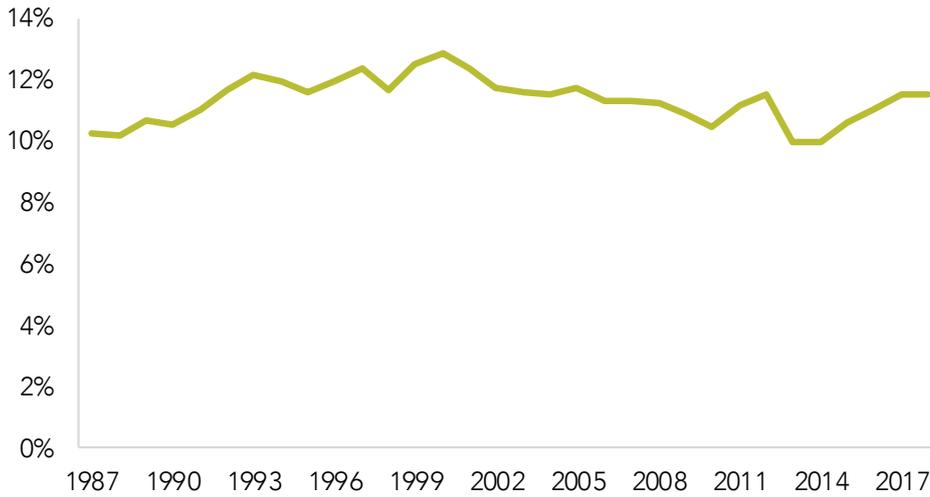
Notes:

1. Pie and slice sizes are illustrative of shares of income from platform work.

Media coverage has influenced public perceptions about the scale and growth rate of the so-called “gig economy” (see eg, Millenkovic (2019)). Some have claimed that as much as 35–40% of the workforce are engaged in gig or contingent employment (CXC Global, 2019). Such claims are based on expansive definitions that also count others, including self-employed people, freelancers, independent contractors, seasonal and casual workers, and those with fixed-term employment. While some such people may be in precarious employment with poor income and job security, this does not apply to all such work, or to all the people working in these types of jobs. Other estimates of digital platform workers are inflated by including people buying and selling goods online, Airbnb hosts, BeMyEyes volunteers and people completing surveys to earn vouchers.

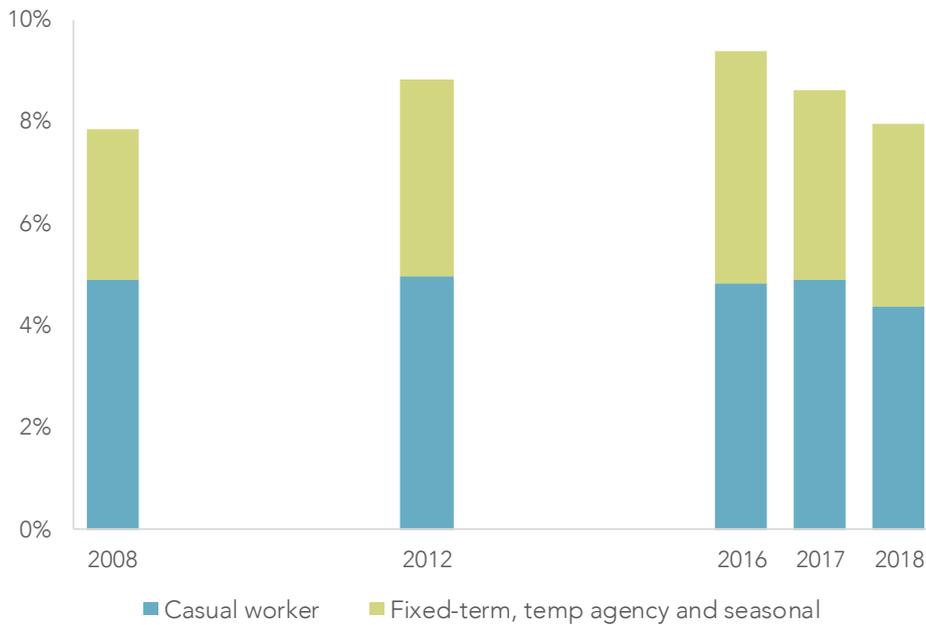
Recent New Zealand data does not support claims of large shifts towards gig work. Self-employment (Figure 2.5), casual and other non-standard working rates (Figure 2.6) are either stable or falling.

Figure 2.5 Percentage of the workforce self-employed, New Zealand, 1987–2018



Source: Stats NZ Linked employer-employee database.

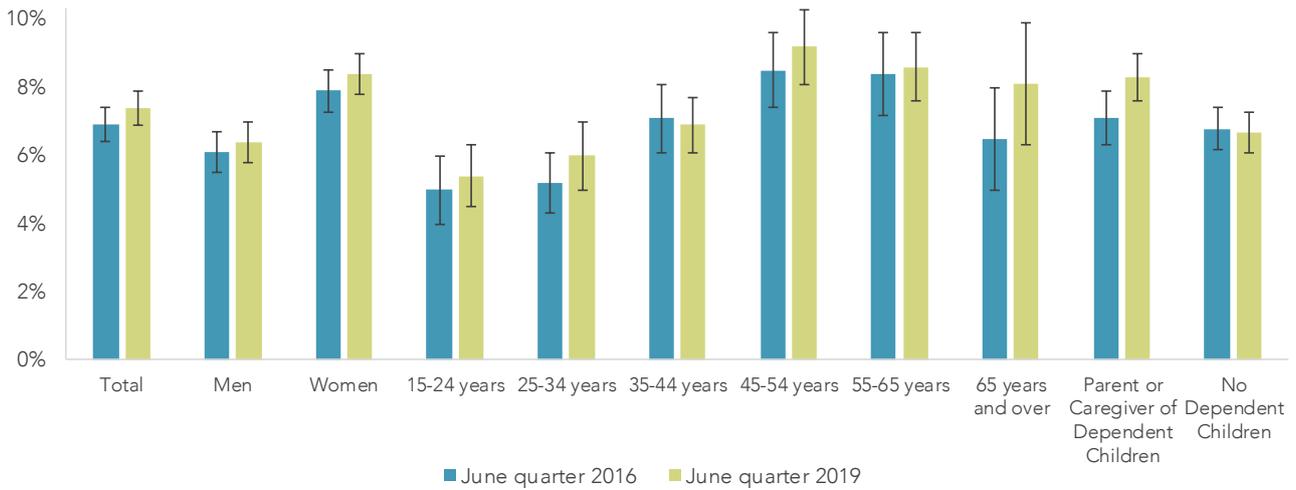
Figure 2.6 Percentage of the workforce on a casual, fixed-term, temporary or seasonal work arrangement, New Zealand, 2008–18



Source: Productivity Commission; Stats NZ Linked employer-employee database.

Any overall trend to more gig work or non-standard employment would likely be observed as an increase in the numbers of people working multiple jobs. There was no statistically significant change (at a 95% confidence level) over the three years from June 2016 to June 2019 in the proportion of workers that reported having more than one job. This result holds across the workforce as a whole, by gender, for any age group, for workers with or without dependent children (Figure 2.7), or in any industry (Figure 2.8).

Figure 2.7 Percentage of employed people working more than one job by population group, New Zealand, 2016 and 2019

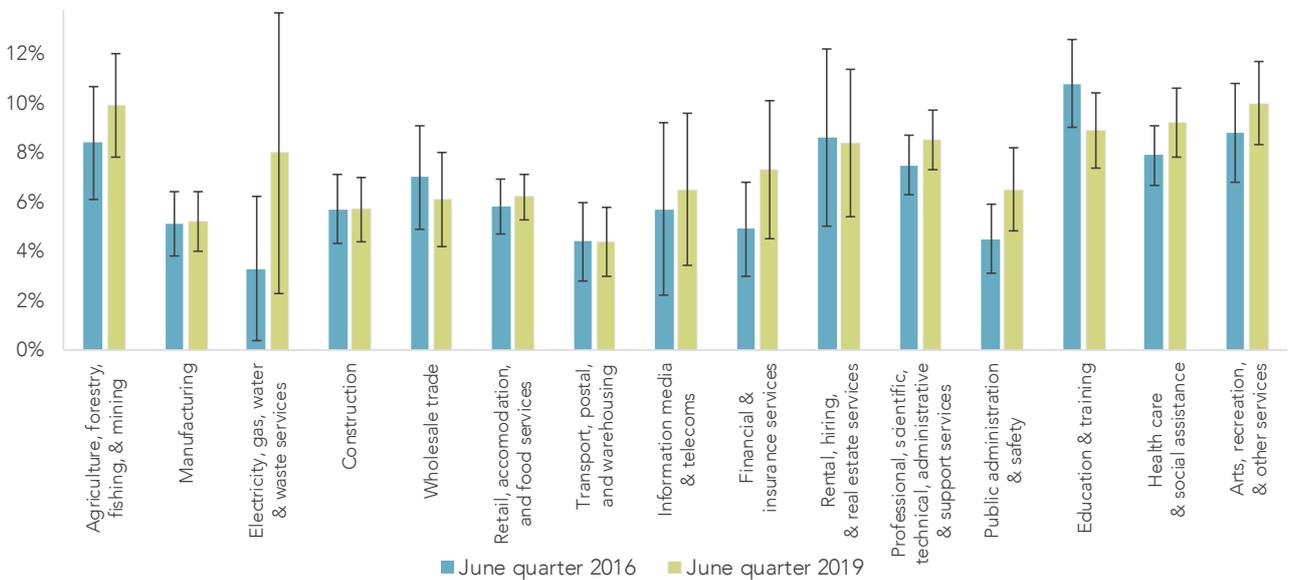


Source: Productivity Commission; Stats NZ Household labour force survey.

Notes:

- Figure shows absolute sampling errors at a 95% confidence level. Where sampling error ranges overlap, changes between periods are not statistically significant.

Figure 2.8 Percentage of employed people working multiple jobs by industry, New Zealand, 2016 and 2019



Source: Productivity Commission; Stats NZ Household labour force survey.

Notes:

- Figure shows industry of main or second job. Some industry categories grouped to correspond with NZ standard industrial output categories (NZSIOC). Respondents who specified no industry are not included in these figures.
- Figure shows absolute sampling errors at a 95% confidence level. Where sampling error ranges overlap, changes between periods are not statistically significant.

F2.4

The proportion of people doing platform-mediated “gig work” is very small in New Zealand, and there is little evidence of an increasing trend. Most workers undertake platform-mediated work for short periods, and for supplementary income, rather than as a main job.

Many parties face incentives to exaggerate the scale and growth of gig work and the gig economy. For example, work-mediating platforms seeking growth have every reason to talk up their scale and influence, while human resources and management consulting firms market themselves on their ability to predict the next big trend and to offer their (paid) consultancy services to help governments and firms cope with it.

The Commission’s conclusions sharply contrast with popular beliefs that gig work is expanding at the expense of more traditional work arrangements, which are presumed to be more secure and therefore more desirable.

The Public Service Association (sub. 33), for example, submitted that while Uber, Walmart and Amazon have benefitted from technological change, the profit and productivity gains for shareholders were made to the disadvantage of workers and especially their income and security. Uber’s dramatic increase has meant “an increase in insecure work and pay, which clearly affects certain groups of workers (e.g. with a specific ethnic background) and their communities” (p. 4).

Data on gig work could be improved

The measurement of gig work, and other related descriptions of non-standard employment, is incomplete. In conjunction with this inquiry, the Commission contracted Motu Economic and Public Policy Research to survey the approaches used internationally to measure gig work and the “gig economy”, and to recommend ways to improve measurement in New Zealand. Box 2.3 summarises Motu’s findings and recommendations.

Better measures are potentially relevant to the Ministry of Business, Innovation and Employment (MBIE, as labour law regulators) and Inland Revenue (given risks to the tax base). Stats NZ should work with these and other interested agencies to improve measurement of non-standard work and work mediated by digital labour platforms.

R2.1

Stats NZ should work with the Ministry of Business, Innovation and Employment and Inland Revenue to improve measurement of non-standard work and of work mediated by digital labour platforms.

Box 2.3 Measuring the gig economy: challenges and options

The definition of gig work is unclear. It is even less clear what constitutes a gig economy. There is no consistent definition of gig work internationally and across different studies. These terms need further clarification.

It is important to develop better measures. Gig workers and the value of their work is not well captured by current measures. Better measures will help to detect and respond to potential changes in the labour market.

Growth in platform-mediated work and non-standard employment models could also affect the accuracy of overall measures of GDP, productivity and wellbeing. It may have implications for the tax system (including GST and income tax revenue management) and for ensuring that government policies and services are effectively reaching their intended target groups.

Much policy concern is about platform-mediated, low-skilled on-demand work yet gig work also includes highly skilled freelance work with substantial longer-term contracts. Further, gig work need not be arranged and undertaken via digital labour platforms. Aggregate measures (eg, self- or casual employment rates) may hide growing participation in platform-mediated work where this is substituting for other forms of non-standard work.

Data to study the gig economy can come from: household surveys such as Stats NZ's Household labour force survey and its supplement the Survey of Working Life; government administrative data (such as tax and Accident Compensation Corporation data); and private firm data (eg, data from labour platforms, banks or business accounting platforms).

Each type of data has its limitations. Surveys focussed on current employment may not probe sufficiently to uncover all household members' activity and income that meets a definition of gig work. Administrative data usually suffers from the under-reporting of non-employee work arrangements. People reported as self-employed in administrative data are often not identified as self-employed in surveys, and vice-versa. Private data sources are generally limited in coverage and may not be generalisable to the overall population.

Implementing new or changed surveys takes time. In the short run existing surveys and existing administrative data can be mined for proxies and indicators of the scale and value of gig work.

Longer-term development should start with a taxonomy of gig work and measures, taking into account New Zealand's specific labour-market features. Existing surveys and administrative data can then be analysed to identify gaps, refinements and new measures for development. Measures should be multi-faceted and readily (dis)aggregated. They should capture who is participating in gig work, but also the extent (hours, frequency) and value of gig work over multiple timeframes.

Source: Riggs, Sin and Hyslop (2019).

Increases in platform-mediated work may not be to the detriment of traditional jobs

A future expansion of platform-mediated on-demand work could occur from three sources:

- Shifting existing on-demand jobs onto work-mediating platforms.
- Bringing new activity or demand into the monetised economy and creating new paid work opportunities.
- Restructuring work currently part of traditional jobs into tasks specified and organised via a work-mediating platform.

The first source reduces transaction costs and increases flexibility for clients and workers. Its impacts on job quality for workers and the quality of service are unclear.

Ride-hailing platforms are an example of the second source. They can offer quality improvements compared to traditional taxi services, as well as lower prices for riders. The convenience, trust and cost savings these platforms offer has increased demand for rides. Tirole (2017, p. 415) commented that in:

... cities such as Paris and London, taxi rides are expensive and relatively few people use them – the well-off and those with expense accounts. Many people who hardly ever used this form of transportation have begun to do so since lower-cost services like Uber or Lyft appeared.

The first two sources should not concern policy makers. The third – restructuring work currently part of traditional jobs into tasks specified and organised via a work-mediating platform – would be of concern if there was evidence of this happening or evidence of an accelerating trend. However, the Commission finds little if any evidence that traditional jobs are being restructured into platform-mediated tasks and no evidence of acceleration.

There are limits to the work that can shift to work-mediating platforms

There are benefits to both employers and workers from enduring employment relationships. Although work-mediating platforms might reduce the costs of contracting out some tasks, they are not in themselves a cause of jobs being broken down into discrete tasks suitable for contracting out. Only some jobs can be separated into discrete, independent, and easily specified and monitored tasks. Such separation is likely to have already occurred. The discrete tasks created are candidates not just for work-mediating platforms, but also for insourcing to lower-wage employees and for more traditional forms of outsourcing (Baldwin, 2019).

It is not inevitable that labour platforms will lead to a significant shift away from traditional work. Whether current and future platforms lead to such a shift at the margins depends on the relative effectiveness of outsourcing models for firms, on the regulatory context established by government, and on the choices made by workers.

Where job- and firm-specific skills and knowledge matter, continuity of relationships is valuable, or firms value self-directed workers, then traditional employment models will be likely to predominate.²⁰ Such employment relationships are more likely to be enhanced than replaced by technology.

Workers and employers with an ongoing relationship have an incentive to cut out the “middleman”, bypassing platforms to transact directly and with more flexibility. These factors will constrain the expansion of work-mediating platforms.

F2.5

Increases in platform-mediated work may not be to the detriment of traditional jobs. There are limits to the potential for jobs to be subdivided into discrete tasks and shifted to work-mediating platforms. Traditional employment models will likely predominate where job- and firm-specific skills and knowledge matter, continuity of relationships is valuable, or firms value self-directed workers.

Work entitlements are more transferable in New Zealand than in many other countries

Many of the concerns raised in other jurisdictions about the adequacy of protections for gig workers have limited relevance in a New Zealand context. New Zealand’s healthcare, income support, tax and Accident Compensation Corporation (ACC) systems treat employees and contractors on a largely equivalent basis. This reduces incentives for firms to classify workers as contractors to avoid costs such as health insurance,

²⁰ Self-directed workers, in this context, are those with wider visibility of a firm’s challenges and priorities, and the ability and autonomy to direct their efforts to the overall benefit of the firm. By contrast, a contracted worker can only pursue pre-specified tasks.

payroll taxes or accident insurance. It also reduces the extent to which contractors and the self-employed are disadvantaged compared to employees.²¹

F2.6

In contrast to many other countries, New Zealand's healthcare, income support, tax and worker's compensation (ACC) systems treat employees and contractors on a largely equivalent basis. This reduces incentives for firms to classify workers as contractors to avoid costs, and the extent to which contractors and the self-employed are disadvantaged compared to employees.

2.3 Employment status

Good jobs for all in a changing world of work: The OECD jobs strategy noted that it:

... is important to stress that platform work is not in and of itself a form of employment, but rather refers to the means through which the work is obtained and (sometimes) carried out. In theory, platform workers could be engaged in any kind of employment relationship. (OECD, 2018, p. 263)

People working on work-mediating platforms are a small proportion of the total number of self-employed, contractors or casual workers. Where work-mediating platforms raise issues about job quality and employment protections for workers, these tend to reflect broader issues with labour-market conditions and employment regulation. These broader issues are not unique to New Zealand. Many jurisdictions are grappling with the question of how best to pursue the goals of providing labour-market flexibility and work opportunities for a diverse range of people, while protecting those in work from exploitation (Box 2.4).

Policy concerns and policy solutions in other jurisdictions may not necessarily translate well to New Zealand, as each has its own unique social, economic, policy and legal context. In the United States, concerns about platform workers often centre on access to healthcare, unemployment insurance and other services and protections that are not tied to employment status in New Zealand. Reviews of platform workers' status in the United Kingdom have overlapped with reviews of "zero hour" employment contracts, an issue that has been dealt with separately in New Zealand.

The Taylor Review (Taylor, 2017, p. 26) – commissioned by the UK Government to provide advice on "modern working practices" and "good work" – summarised the tension:

... flexibility does work for many people, and it is clear that an agile labour market is good for protecting employment. The key question in relation to atypical work is therefore whether vulnerable workers, or those with limited choice, are adequately protected in this type of employment.

²¹ Notwithstanding that in many instances contractors and the self-employed receive higher contractual payments than employees receive as salaries, which fully or partially offset such "disadvantages".

Box 2.4 International developments: regulating labour platforms and employment status

France

In July 2018, the French National Assembly adopted a legislative amendment that would allow labour platform firms to establish a charter “determining the conditions and procedures for exercising its social responsibility, defining its rights and obligations as well as those of the workers with whom it is in contact” (Amendment 2072 to National Assembly Bill 1019). Such charters would specify benefits and conditions offered to contractors. Required features included a “non-exclusive” work relationship, assurance of “a decent income”, and guarantees in the event of termination. Approved charters could be used as evidence that workers were independent contractors rather than employees. The Amendment was subsequently overturned by the French Constitutional Court.

California

In September 2019, California’s Governor approved a law change codifying a new legal test of workers’ status (California Labor Code section 2750.3 added by Assembly Bill 5 chapter 296). It sets a default assumption that workers are employees. To classify a worker as an “independent contractor”, employers must prove that each part of an “ABC test” applies:

- A. The person is free from the control and direction of the hiring entity in connection with the performance of the work, both under the contract for the performance of the work and in fact.
- B. The person performs work that is outside the usual course of the hiring entity’s business.
- C. The person is customarily engaged in an independently established trade, occupation, or business of the same nature as that involved in the work performed.

The new law aims to give more workers Labor Code protections such as minimum wage coverage and process protections for discipline or dismissal, and to provide better access to social programmes.

Many occupations and work arrangements are excluded: for example, registered professions (lawyers, accountants, engineers, private detectives, etc.), fishermen, financial advisers, real estate agents, and hairstylists who rent booths at salons. These exemptions were reportedly granted after lobbying from occupational licensing bodies and business organisations (Campbell, 2019).

The law change is opposed by parties who believe it will increase prices and reduce choice and work opportunities for platform workers. On 29 October 2019, Uber, Lyft and Doordash launched a campaign to add a ballot initiative to the November 2020 elections, to replace the law with other measures assuring health subsidies and various work protections to platform workers (Myers, 2019).

United Kingdom

The employment status of gig workers has been the subject of considerable debate and legal activity in the United Kingdom, in particular as to whether such people are independent contractors or “workers” – an intermediate classification in UK law that sits between “employee” and “contractor”.

- In *Uber BC v Aslam [2018] EWCA Civ 2748*, the Court of Appeal of England and Wales upheld earlier judgements that Uber drivers should be classified as “workers” and therefore eligible for the minimum wage and holiday pay. Uber has been granted permission to lodge an appeal against this judgment with the UK Supreme Court.
- The Central Arbitration Committee found in November 2017 that Deliveroo couriers were not “workers” but were independent contractors. A later case brought by 50 couriers to the UK Employment Tribunal was settled out of court, reportedly for a “six-figure payout” (Butler, 2018).
- Other cases against courier companies have tended to come down in favour of “worker” status.

In December 2018, the UK Government announced it would make law changes giving gig workers the right to request a temporary or fixed-hours contract after 12 months of service (Crerar, 2018).

A binary model of employment law

New Zealand employment law applies a binary model that distinguishes between employees and contractors (or, in legal terminology, “contracts of service” and “contracts for service”). Table 2.1 lays out the substantive differences between the categories.

Table 2.1 Employee versus contractor in New Zealand employment law

Employee	Contractor
<p>An employee is a person employed to do any work for hire or reward under an employment agreement. The hire or reward is almost always a wage or salary.</p> <p>Employees have minimum employment rights under employment laws (eg, the Employment Relations Act 2000, Minimum Wage Act 1983 and the Holidays Act 2003), including:</p> <ul style="list-style-type: none"> • at least the minimum wage; • holiday and leave entitlements; and • a written employment agreement. <p>Employees also have extra rights, including the right to take a personal grievance.</p> <p>The employer must keep employee records such as their employees’ employment agreement, and wage, time and holidays and leave records.</p>	<p>Self-employed people are sometimes referred to as contractors, or independent contractors. These terms mean the same thing. A contractor is engaged by a principal (the other party) to perform services under a contract for services (commonly called an independent contractor agreement).</p> <p>Contractors are self-employed and earn income by invoicing the principal for their services. A contractor pays their own tax and ACC levies.</p> <p>Contractors are not covered by most employment-related laws. They do not get things like annual leave or sick leave, they cannot bring personal grievances, they pay their own tax, and general civil law determines most of their rights and responsibilities.</p> <p>Firms are not legally obliged to hold contractor records.</p>

Source: Employment New Zealand (2019).

In cases where the nature of the working relationship is disputed, the courts apply a series of legal tests to determine which category the worker falls into (Box 2.5).

Box 2.5 New Zealand legal tests for employee vs contractor status

Case law has developed four main tests to assess whether a working relationship is an employment or contracting arrangement.

- **The intention test.** This assesses what the parties to the relationship intended, usually from the wording of the parties’ written agreement. While the stated intention is relevant, it is not decisive. The courts may also examine how the relationship operates in practice and whether it varies from the written intentions.
- **The control test.** This assesses how much control is exerted over the worker’s work content, time, location, availability and methods. The greater the control, the more likely it is that the person is an employee.
- **The integration test.** This examines whether the work performed by the person is “fundamental to the employer’s business (and whether they are ‘part and parcel’ of the organisation)” (Employment New Zealand, 2019). Work carried out by contractors is generally only a “supplementary” part of the business. Factors considered include whether the person works with their own equipment, is part of a team, is paid by results, wears a company uniform, or is reimbursed for work-related expenses (eg, travel).
- **The fundamental/economic reality test.** This looks at the totality of the work relationship to determine “whether the contracted person has been effectively working on his/her own account” (*Kamlesh Prasad v LSG Sky Chefs New Zealand Ltd* [2017] NZEmpC 150, at [37]).

Although the emergence of labour platforms has recently raised questions about the adequacy of the current model, these concerns are not new. The Employment Court commented in *Kamlesh Prasad v LSD Sky Chefs New Zealand Limited* (at [91]) that “traditional binary notion of employment, and unitary concept of employer, is increasingly being challenged by innovative ways of working and structuring relationships.”

Make the law clearer and more rational

New Zealand’s law and regulatory practice about the classification of workers as employees or contractors could be made clearer and more rational. This could improve conditions for workers, reduce risk for firms, and help ensure firms compete on quality, price and productivity. Some aspects of the “integration” test developed over time in case law and as currently applied by Employment New Zealand and the courts have strayed and include tests that are difficult to justify or apply to platform-mediated work.

The test of whether work is “fundamental” rather than “supplementary” to a firm’s business makes little sense in many contexts, and for platform-mediated work in particular. Many integral “core business” tasks can be specified, commissioned, monitored, assessed and rewarded at a distance. However, the same characteristics that make a task suitable for contracting out can make it suitable for offshoring. Limiting the ability of independent contractors to undertake such tasks in New Zealand risks sending such work offshore.

The legal tests to determine whether a worker is an employee or contractor should be modified to downplay or remove the integration test and focus on the fundamental nature of the work relationship – the extent of employer control, the degree of worker autonomy and choice, and the extent of lock-in to a specific firm.

R2.2

The Government should explore options to modify the legal tests for employee status. The tests should focus on the fundamental nature of the work relationship – the extent of employer control, worker autonomy and choice, and the extent of lock-in to a specific firm. Whether work is “fundamental” or “supplementary” to a firm’s business should not be part of the legal test.

A “safe harbour” for firms offering contractors better conditions

Legal risks discourage firms from offering better conditions and benefits to contractors.

In applying the integration test, the courts can infer an employment relationship if workers are offered certain benefits and supports that in the past may have been offered primarily to employees. Hiring firms risk liability and disruption of their business if they offer contractors benefits such as: support for education and training; access to career advice and pastoral care support; access to group insurance/investment schemes; vaccinations and healthcare; invitations to company events; or uniforms and merchandise. Uber (sub. 27, p. 5) cited this risk:

Uber recently announced a new Partner Support and Protection package in partnership with Chubb Insurance and Converge International in Australia, providing personal accident cover, as well as access to counselling services should something go wrong while on a trip. Elsewhere in the world, we have been able to go further. In Europe our partnership with AXA provides a range of insurance coverage including sickness, injury and maternity & paternity payments for drivers and couriers when they are on and off the Uber app.

While we would like to offer a better experience and more support and benefits through our app for driver and delivery partners across New Zealand, this approach is not contemplated in the existing binary construct of employment law and could risk undermining the very flexibility that we know New Zealanders who choose to partner with Uber value.

This application of the integration test serves no clear policy purpose and may discourage firms from offering contractors better working conditions.

To give firms and workers more certainty, while strengthening incentives on firms to compete on quality and conditions of work, some form of “safe harbour” could be made available for firms wishing to offer people working with them as contractors a wider range of benefits and support.

One way to achieve this would be to build on the French model (Box 2.4). Firms could apply to MBIE – the agency responsible for enforcing employment and labour laws – to seek certification that workers in defined roles are contractors, provided the firm’s business model met specified criteria.²² These criteria could include:

- **non-exclusivity** (ie, contractors must be free to enter and exit the platform, and free to work with other platforms, without penalty);
- **fair and transparent termination processes** (possibly with appeals processes);
- **clear communication of changes in conditions** (eg, no sudden, unexpected changes in conditions or prices);
- **dialogue** (ie, evidence of mechanisms for contractors to provide feedback on policies and processes, and evidence that the feedback is treated seriously and influences decisions);
- **robust health and safety provisions**; and
- **development opportunities and protections** (eg, support for training, provision of parental leave or payments, contributions towards retirement savings, insurance policies).

Certification would provide a firm with protection against legal challenges about the employment status of its contractors. However, this would depend on continued compliance with the criteria.

This proposal would raise issues such as how the role of a certifying agency relates to the role of judicial bodies under the Employment Relations Act 2000. Other ways may also be available to achieve the objective of this proposal.

F2.7

Legal risks discourage firms from offering better conditions and benefits to contractors. Clarifying the law on the employment status of workers and contractors could incentivise firms to compete on quality and conditions of work.

One way to do this would be to provide some form of “safe harbour” to firms wishing to offer benefits such as access to group discounts, training or health support to their contractors.

R2.3

To give greater legal certainty to firms that wish to offer independent contractors a wider range of benefits and support, the Government should explore options to provide some form of “safe harbour” that reduces the risk of legal challenge to the employment status of their contractors.

²² The French social charter model discussed in Box 2.4 was used as a model for this proposal.

Is there a need for an intermediate category of worker?

Another option would be to follow UK precedent and introduce an additional legal employment status. In contrast with New Zealand, UK employment law creates three main classes – employee, worker and self-employed/contractor.²³ “Worker” sits in between the two other classes, providing an intermediate category that offers greater protections and rights than does self-employed/contractor, but less than those for employees (Table 2.2).

Table 2.2 Characteristics of the United Kingdom’s three employment classes

	Employee	Worker	Self-employed/ contractor
Features	Someone who works under an employment contract	<ul style="list-style-type: none"> Has contract/arrangement to do work or services personally for reward Reward is for money or benefit in kind Limited right to subcontract Have to turn up for work Employer must provide work so long as contract lasts Is not doing work as part of their own company 	Someone who runs their business for themselves and takes responsibility for it
Employment rights	All of the rights workers have, plus: <ul style="list-style-type: none"> • statutory sick pay • statutory maternity, paternity, adoption and shared parental leave • minimum notice periods • protection against unfair dismissal • right to request flexible working • time off for emergencies • statutory redundancy payments 	<ul style="list-style-type: none"> National minimum wage Protection against unlawful wage deductions Statutory minimum level of paid holiday Statutory minimum rest break lengths Right to not work more than 48 hours per week on average Protection against unlawful discrimination Protection for whistleblowing Right not to be treated less favourably if they work part-time May qualify for statutory sick, maternity, paternity, adoption and parental pay (but not leave) 	Employment law does not cover self-employed in most cases. However, they still have: <ul style="list-style-type: none"> • protection for health and safety, and (in some cases) against discrimination • rights and responsibilities set out in contracts with their client

Source: UK Government (n.d.).

A new employment status could provide greater protections for some workers. However, it would also increase the complexity of employment law, as firms will need to negotiate new boundaries and the courts will have to develop new case law to distinguish one status from another. In addition, such changes would not necessarily address the issues raised by platform work. Indeed, it may make some platform business models uneconomic, reducing opportunities for work and value creation.

²³ UK law also makes provision for “directors” and “office holders” as further types of employment status. These cover a very small proportion of the workforce.

Valerio De Stefano (2016) analysed gig employment conditions for the International Labour Office, and concluded that creating an intermediate category of workers between employees and independent contractors would not solve problems in the gig economy.

Whilst this proposal is interesting, as it challenges some of the existing boundaries to the application of labour protection, there are many potential negative implications that should not be underestimated ... proposing a new legal bucket for grey-zone cases may complicate matters, rather than simplifying the issues surrounding classification. ... Legal definitions ... are always slippery when they are applied in practice: the real risk is shifting the grey-zone somewhere else without removing the risk of arbitrage and significant litigation in this respect, especially if the rights afforded to workers in that category afford any meaningful protection (p. 19).

F2.8

There is no strong case for the introduction of a new category of employment status between employee and contractor.

2.4 Gig work is not replacing traditional work – it is helping those at the margin

Platform-mediated work makes up a very small share of the workforce, few people rely on it for most of their income, and most participate in such work intermittently or for short periods of time. It can also provide work opportunities for those not well served by traditional employment models. Many participate by choice; because they prefer the flexibility and other attributes of such work.

While some types of platform-mediated work raise genuine questions about job quality and employment protections for workers, these tend to reflect broader issues with labour-market conditions and employment regulation. The diversity of platforms, users, motivations and business models makes regulation challenging and governments should approach it cautiously. Before intervening, governments should be clear about the outcomes they seek, and how any proposed intervention will advance those outcomes.

Platform-mediated work is helping those in traditional employment manage periods of financial pressure, and those between jobs to maintain income levels while they look for new employment. Chapter 3 explores other mechanisms that can smooth the incomes of workers between jobs.

3 Income smoothing for workers

Key points

- Labour-market changes can be financially and personally challenging for people, both in and out of the workforce, especially when change results in a threat to employment, a loss of employment, or reduced chances of gaining employment.
- Most countries have mechanisms in place to provide a degree of income security for displaced workers until they regain work. These mechanisms are part of the overall welfare, tax and labour-market regulatory systems, supplemented in some countries by private and public insurance schemes.
- Support for displaced workers in New Zealand is primarily provided through the welfare system, rather than through the unemployment insurance schemes common in many other countries. New Zealanders receive low rates of income replacement in their first 6–24 months of unemployment compared to the rates typical in most OECD countries.
- Some New Zealanders experience sharp losses of income after job loss. This provides strong incentives for unemployed people to seek work, but it may pressure displaced workers to take up a new job even when it is not well suited to their skills. Displaced workers finding a new job after a period of unemployment can experience lower wages or reduced hours.
- There is a case to improve income security for displaced workers with income smoothing measures that cushion the financial shock of job loss. Doing so could:
 - make workers less fearful about switching jobs and more accepting of labour-market settings that promote dynamism in the economy but reduce job security;
 - achieve better labour-market matching – by enabling those who lose their jobs to take more time to search for a better, high-paying job that is a good match for their skills; and
 - improve attitudes towards technology – as effective support systems can reduce fears about job loss and so make workers more welcoming of policies that embrace technology.
- Policy options for improved income smoothing include:
 - mandatory redundancy payments;
 - portable individual redundancy accounts;
 - unemployment insurance;
 - universal basic income; and
 - changes to benefits and tax credits.
- The *portable individual redundancy accounts*, *unemployment insurance* and *changes to benefits and tax credits* options show promise in a New Zealand context. All three of these options involve significant changes to policy, processes and institutions. Comprehensive analysis and policy work is needed to fully understand their relative costs and benefits.

3.1 Security is not about staying on, it is being able to move on

Labour-market changes can be financially and personally challenging for people, both in and out of the workforce, especially when change results in a threat to employment, a loss of employment, or reduced chances of gaining employment.

Technology is one factor that can contribute to labour-market change. By changing the demand for workers or specific skillsets in different industries and occupations, technology can result in the disappearance of some jobs. An example is when firms adopt labour-replacing technology or become less economic (and lay off staff) due to competitors adopting new technologies. The consequence for individual workers can be job loss and unexpected losses of income. Technological change may also make it hard for some people (eg, stay-at-home parents, displaced workers, those completing study) to enter the workforce, by reducing the demand for certain types of skills and making some skills obsolete.

Changes in the demand for workers and skillsets are a constant and longstanding feature of the New Zealand labour market (Coleman & Zheng, 2019). These will continue to occur regardless of the *pace* of future technology adoption. In any future scenario of technological change, having effective systems in place that support affected workers will be important. An increase in the pace of technological change (eg, the *More tech, more jobs* and *More tech, fewer jobs* scenarios outlined in draft report 1) would make these support systems even more important.

This chapter covers three related but distinct concepts: income smoothing, income support and income security, in the context of involuntary unemployment (Box 3.1).

Box 3.1 **Income smoothing, income support and income security**

Income smoothing is having the resources available to fund ongoing consumption during periods of unemployment. Income smoothing can be organised personally, commercially or collectively.

Income support is supplementary income for unemployed people, from whatever source.

Income security is being confident that one's income will not drop to levels that would cause undue hardship in the event of unemployment.

The chapter also discusses the concept of *job security*. This is being confident that one's employer will not or cannot terminate one's employment.

Income security can substitute for job security

A challenge in labour-market policy is to encourage labour-market dynamism and the flexibility of the economy to create new jobs, while also providing security for workers when jobs are lost. Some countries try to achieve this latter goal by pursuing *job security*—that is, policies that make it more likely workers will stay in their current job and not be at risk of displacement. Such policies include regulation of dismissals and penalties for firms that shed workers without authorisation or approved cause.

Contrasting France ...

Yet, policies that seek to increase job security can limit wider job creation. The experience of France – with some of the most stringent regulation of dismissals in the OECD – is illustrative. Nobel laureate Jean Tirole (2017, p. 234) presented the “key facts” of France’s performance in matters of employment and wellbeing at work:

1. Unemployment is much higher in France than in Northern European countries (Germany, the Netherlands, the Scandinavian countries) or the developed English-speaking countries (US, UK, Canada, Australia);
2. [Unemployment] affects mainly people between fifteen and twenty-four and between fifty-five and sixty-four years old;
3. Unemployment penalizes those with little education or training and those who live in low-income urban areas;
4. Long-term unemployment, which is by far the most harmful, is high and has been steadily increasing since 2007;
5. The French experience a serious malaise at work resulting from a lack of job mobility, conflictual relationships in the workplace, and a feeling that their jobs are not secure;
6. As a result, French taxpayers have to spend heavily on employment policy.²⁴

An alternative to seeking to increase job security is to improve income security. That is, policies or conditions that reduce the negative impacts of loss of employment (eg, redundancy or restructuring) or prolonged periods of unemployment. Denmark has embraced this alternative, under the banner “flexicurity” (Box 3.2).

... with Denmark

Denmark enjoys low levels of unemployment (5% in 2018, compared to 9.1% in France), relatively low proportions of long-term unemployed (22% in 2017 vs 44% in France), and high labour-force participation. In addition, flexicurity appears to have contributed to more positive attitudes among the Danish population and workforce towards technology (Figure 5.2) and labour-market change. Worker mindsets and priorities have changed, according to an outgoing head of the Danish national labour confederation:

When I was young, security meant having a good, solid job. This was not very exciting – but in a way, it was very safe. This security disappeared as globalization emerged. Security is no longer to hold on desperately to the same job throughout your life. Security is to stay cool when you hear rumours of outsourcing from the boardroom. Because deep down you know that you have solid skills and that you will quickly be able to find a new job if the old one is relocated. Security is not to be able to stay on. Security is to be able to move. It is precisely this new security through training and education that we have now embarked on creating for every worker. (Bredgaard & Daemmrich, 2012, p. 10)

France has pursued policies that increase job security for existing workers, whereas Denmark has eschewed such policies in favour of those that increase income security. Job security protections are lower in New Zealand than in France, but higher than in Denmark. New Zealand provides lower levels of income security for displaced workers than either France or Denmark.

²⁴ Tirole (2017) estimated that in 2012 France was spending 3.5–4% of GDP on passive and active employment policies and fiscal incentives.

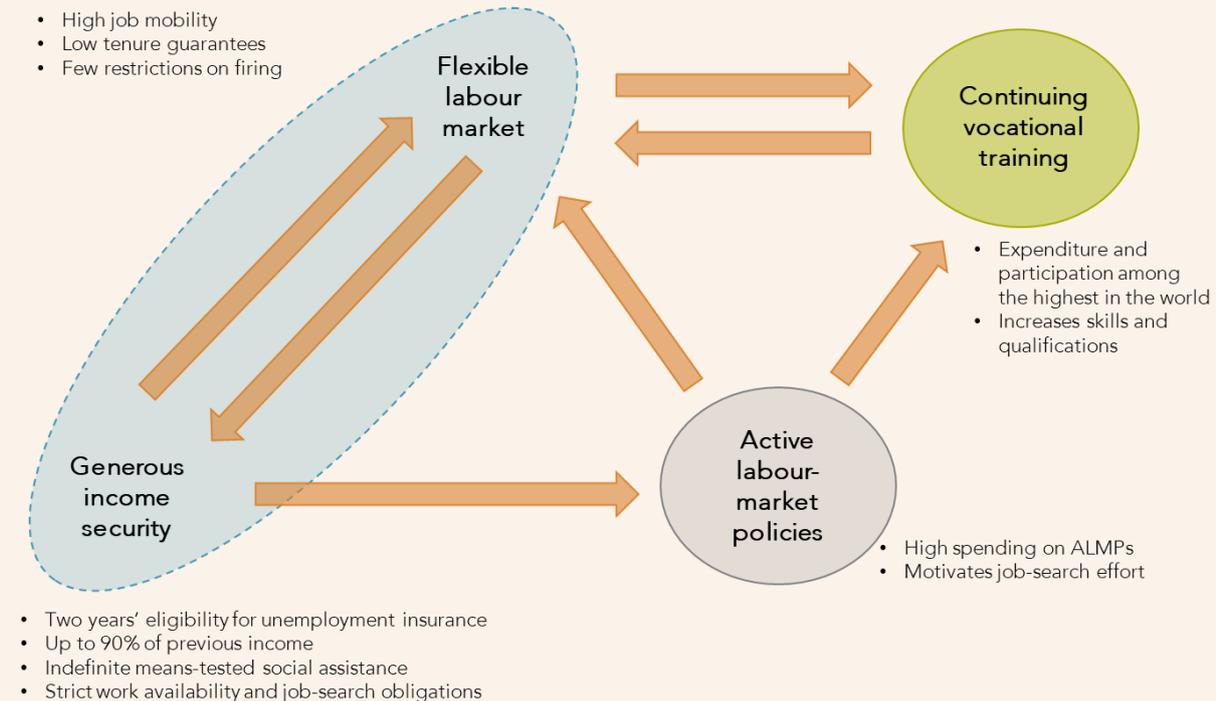
Box 3.2 Flexicurity

Flexicurity refers to a package of policies developed in Denmark to provide income security and high employment, and to promote economic adaptability. It has four components.

- *A flexible labour market:* Firms in Denmark “can fire and hire with few restrictions, and entrepreneurs can start new companies with a minimal amount of bureaucratic delay” (Bredgaard & Daemrich, 2012, p. 6).
- *Generous income security,* including unemployment insurance (UI) and social assistance benefits. Denmark has one of the longest payment periods for UI and the highest income-replacement rates for low-wage earners in the OECD. Income support is tied to strict work availability and search obligations. This approach assumes “the availability of generous income replacements increases the risk-taking propensities of the labor force, thereby facilitating job mobility” (p. 6).
- *Active labour-market policies (ALMPs):* Denmark has some of the highest levels of expenditure on ALMPs in the OECD (section 4.1), which seek to “motivate the unemployed to find work without assistance, and second, to qualify those who cannot find unemployment on their own” (p. 7).
- *Continuing vocational training:* By international standards, Denmark has high levels of spending on, and participation in, education and training.

Employee and employer contributions fund UI. The general tax base funds other flexicurity policies.

Figure 3.1 Components of Danish flexicurity



Source: Adapted from Bredgaard and Daemrich (2012, Fig. 1).

Flexicurity emerged through an evolutionary process, rather than coming from a deliberate and comprehensive policy process: “[a] balance between labour market flexibility and income security has characterized the Danish labour market for a century” (Bredgaard & Daemrich, 2012, p. 5). In the 1990s, access to vocational training was expanded in response to concerns about inadequate supplies of skilled labour. ALMPs and tighter work requirements were added in response to rising unemployment and inflation. More recently, government ministers have cited flexicurity as a strategy for assisting Danish firms and workers to adapt successfully to globalisation.

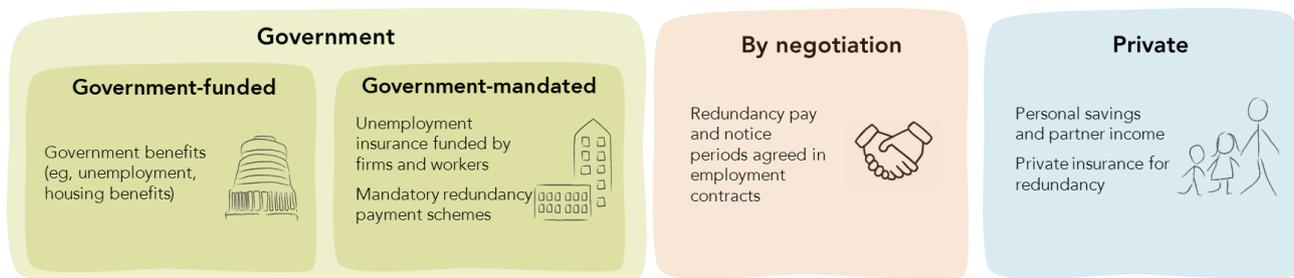
Governments, employers and individuals can improve income security

Households vary in their ability to cope financially with labour-market changes. Many households can at least partly insure themselves using precautionary savings or partner income as a buffer. Whānau, church and community can be sources of support for other households. Those with low savings and large existing financial commitments are likely to be less financially secure when facing losses of income.

Some workers negotiate with their employer for a redundancy package – perhaps trading this off against some other job conditions. Others, mainly those on higher incomes, purchase private income insurance. However, income insurance is likely to be expensive (or unavailable) for those with a high risk of job loss.

Various policies, institutions and arrangements contribute to income security (Figure 3.2). Government-funded payments or government-regulated insurance schemes can provide replacement incomes for unemployed workers while they search for work. Governments can also require firms to compensate workers in the event of redundancy. Early notice of lay-offs also contributes to income security, as it gives people more time to search for a new job before their existing job ends.

Figure 3.2 Contributions to income security



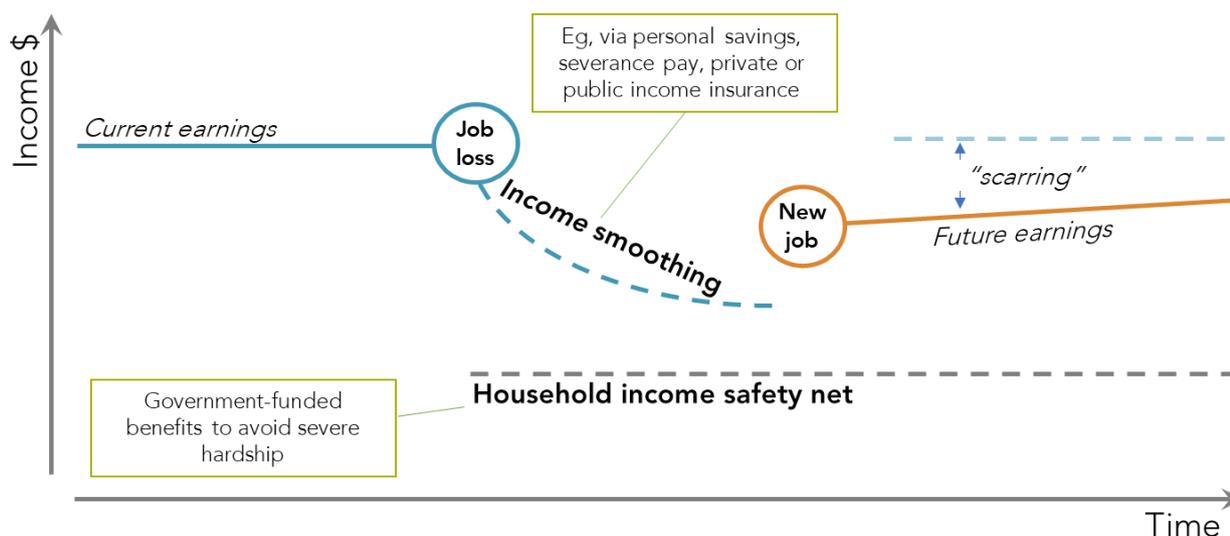
Income support systems can assist by:

- **Preventing severe financial hardship for households** – such support is usually delivered through the welfare system and often referred to as a “safety net”.
- **Smoothing income** – helping workers who become unemployed to meet their existing financial commitments and avoid large fluctuations in their income and consumption levels (East & Kuka, 2015; Gruber, 1994).

Effective income support systems also contribute to productivity growth and greater wellbeing. They contribute by:

- **Facilitating dynamism** – making workers less fearful about switching jobs, and more accepting of flexible labour-market regulations that promote dynamism in the economy but reduce job security.
- **Achieving better labour-market matching** – allowing displaced workers more time to search for a better, higher-paying job that is a good match for their skills (Acemoglu & Shimer, 2000).
- **Improving attitudes towards technology** – can reduce fears about job loss and its impacts, and therefore make workers more welcoming of policies that embrace technology.
- **Building human capital** – encouraging displaced workers to undertake training and upskilling that make them more valuable in the labour market.

Figure 3.3 illustrates the policy instruments (along with using personal assets) that provide income security for unemployed people following job loss. Government-funded benefits provide a minimum *income floor* for households. Such policies are designed to prevent severe hardship. Other policies, such as UI schemes and redundancy payments, can achieve *income smoothing* – that is, flattening the reduction in income after job loss.

Figure 3.3 Income for the unemployed subsequent to job loss*Notes:*

1. This figure is stylised. Some displaced workers receive higher earnings in their new job than their previous one, through working more hours or receiving a higher hourly rate. And for some individuals, particularly those working limited hours and/or at low hourly rates, the income floor provided by government benefits can be at, near or even above their pre-job-loss earnings.
2. Some workers experience what is known as income scarring – they start a new job on a lower hourly wage or fewer hours, and they can take some time to reach their previous earnings or earnings trajectory. Some never fully recover (section 3.4). Income scarring is the combination of two effects: one is reduced hours and the other is a reduced hourly wage rate.

3.2 Support for displaced workers in New Zealand

New Zealanders rely on three main sources of income in the event of unemployment:

- redundancy payments negotiated in employment contracts;
- private arrangements (eg, savings, partner income and private insurance); and
- government-funded benefits targeted mostly at low-income households.

Private and negotiated forms of income security are important for some

A significant minority of New Zealand workers have redundancy provisions in their employment contracts. These provisions are mostly a matter of negotiation between employers and employees. There is no statutory requirement in New Zealand for employers to offer redundancy, outside of a narrowly defined set of employees (Box 3.3).²⁵

People can access their private savings (or liquidate assets) to help smooth their consumption during periods of unemployment, although this option is not available to all. Rashbrooke, Rashbrooke and Molano (2017) used data from the 2008 wave of the Survey of Family, Income and Employment to estimate the value of assets held by New Zealanders. They found that people in the bottom four income deciles had “negligible” cash in the bank (p. 20).

²⁵ 2 Part 6A of the Employment Relations Act 2000 provides additional protections for employees who provide cleaning services, food catering services, and caretaking or laundry services in the education, health and residential care sectors. According to the Act, these workers were selected because restructuring of businesses occurs frequently in their sectors, employee terms and conditions “tend to be undermined” by restructuring, and they have “little bargaining power” (section 69A).

Box 3.3 Redundancy payments in New Zealand

The data on redundancy provisions and payments in New Zealand is limited. Redundancy provisions are most common in collective agreements.

- The vast majority of the approximately 20% of employees covered by collective agreements are entitled to redundancy payments (OECD, 2017).
- Only 20% of staff employed in small to medium-sized enterprises on individual employment agreements were entitled to redundancy payments, according to 2008 research (Public Advisory Group on Restructuring and Redundancy, 2008).
- About 55% of the 636 displaced workers who participated in the Survey of Family, Income and Employment between 2000 and 2009 received redundancy payments. The median payment was around \$15 000 (before tax and in March 2012 dollars) and the mean was just over \$28 000 (Dixon & Maré, 2013).
- Lower-skilled workers, younger workers and those with shorter tenure periods are less likely to receive redundancy payments, and the median amount paid tends to increase with tenure and seniority (Dixon & Maré, 2013).

People who are in “significant financial hardship” (eg, unable to meet minimum living expenses or mortgage repayments) can apply to withdraw funds from their KiwiSaver account. In 2017/18, approximately 17 000 New Zealanders withdrew funds because of financial hardship. Withdrawals averaged about \$6 200, with the total withdrawn equalling about \$100 million. The number of withdrawals has been steadily rising each year over the past decade (KiwiSaver, 2019).

Private insurance is not a significant source of income security in New Zealand. Some insurers offer redundancy cover, usually as part of an income or mortgage protection policy (Spencer, 2019). However, payments are often subject to a waiting period of 30–90 days, and self-employed workers are generally not covered. Support is typically for a limited period at 60–80% of a person’s previous earnings.

Government-funded support is highly targeted to prevent severe hardship

Government benefits in New Zealand are targeted to those in households with very low incomes. A higher proportion of benefit payments go to those in the bottom income quintile than any other OECD country – around 45% in 2014 (Causa & Hermansen, 2018).²⁶

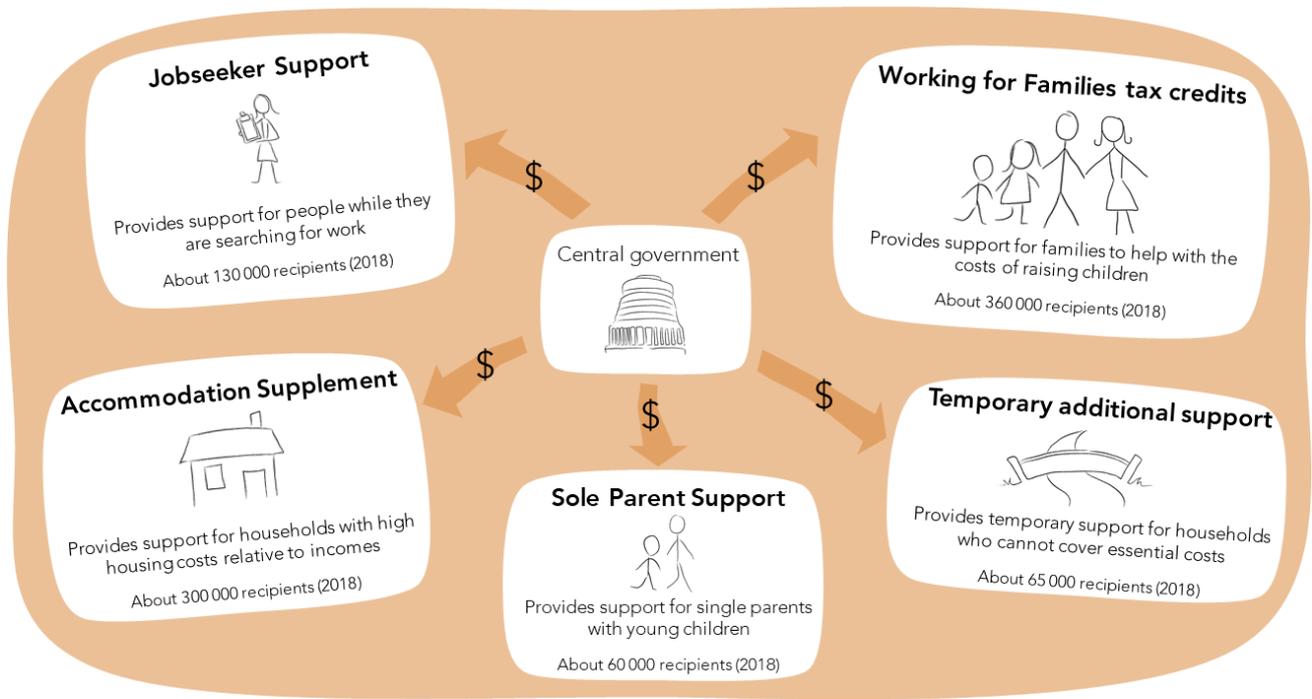
Different types of benefits are available to workers and households in different circumstances (Figure 3.4). The benefit specifically targeted at unemployed workers is Jobseeker Support. This provides a weekly payment to those not in employment and looking for work, or those in part-time employment who are searching for more work.²⁷ Those receiving Jobseeker Support are often eligible for other benefits, for example, the Accommodation Supplement and Working for Families tax credits.

Not all unemployed workers are eligible for government benefits. Eligibility is means tested, based on total family income (ie, individual plus partner income). Some benefits are also asset tested (eg, the Accommodation Supplement). Most benefit recipients are single and without children, or sole parents (Figure 3.5).

²⁶ Pensions for older persons and for veterans are not included.

²⁷ Those who cannot work temporarily because of a health condition or disability are also eligible for Jobseeker Support.

Figure 3.4 Types of government-funded support, New Zealand



Source: Productivity Commission; WEAG (2019d).

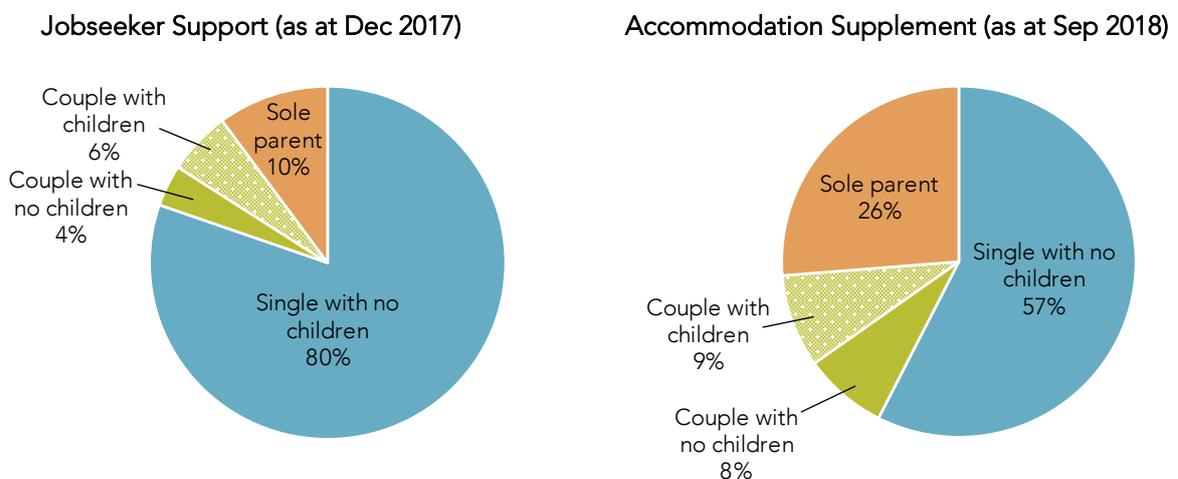
Notes:

1. Jobseeker Support includes those who cannot work temporarily because of a health condition or disability. These recipients account for about 45% of the 130 000 recipients in 2018 (MSD, 2019).

About two-thirds of people who reported losing a job did not receive Jobseeker Support in 2015.²⁸ Ineligibility due to too high partner income explains more than half of these instances. Some people may not have accessed support because they were enrolled in education, were avoiding stigma attached to receiving a benefit, or lacked information on eligibility (OECD, 2017).

The income test for the Accommodation Supplement is less stringent so more couples are eligible compared to Jobseeker Support. However, a large number of eligible households may not be taking up the Accommodation Supplement, according to Treasury modelling (WEAG, 2018).

Figure 3.5 Recipients of Jobseeker Support and Accommodation Supplement, by household type, New Zealand



Source: WEAG (2019c); McAllister, St John and Johnson (2019).

²⁸ Based on the Stats NZ Household labour force survey. Those “losing a job” are those who reported being laid off, dismissed or made redundant from a previous job within the past five years.

Jobseeker Support and other benefit payments are made at a flat rate that abates as family income increases. Box 3.4 shows the amount of support available for three representative households during unemployment. Support varies significantly depending on a household's specific circumstances. Benefit recipients who still have "insufficient income and assets, and who have immediate and specific needs" can also apply to receive hardship grants – one-off payments to help people meet short-term needs. The total number of hardship grants given increased by just under 150% between 2014 and 2019 (MSD, 2019).²⁹

Box 3.4 Financial support during unemployment – representative households

Rawiri, a single 50-year old

Rawiri lives in Timaru in his own house. He has just been made redundant from his job at a local manufacturing plant, where he was earning \$45 000 a year. He has \$10 000 of savings and has recently paid off his mortgage.

After a one-week stand-down period, Rawiri receives \$220 a week of Jobseeker Support – as long as he starts to search for a new job. Because it's June, he can apply for the Winter Energy Payment. That will give him \$20 a week extra. Before Rawiri lost his job, he had a weekly after-tax income of \$702. His weekly income (including Winter Energy Payment) is now \$240 a week.

Mia, a 35-year old living with her partner and two children

Mia lives in Auckland with her partner and their two kids, aged six and nine. She was working in a fixed-term job, earning \$40 000 a year. That job has finished, and she has not found a new one. Her partner works full time, earning the minimum wage (about \$37 000 a year). Mia and her partner have \$5 000 in savings, and their weekly rent is \$500.

Mia is not eligible for Jobseeker Support because of her partner's income. They are, however, eligible for \$240 a week through the Accommodation Supplement. Their Working for Families tax credits increase from \$111 to \$277 a week because of the drop in Mia's income. Before Mia was unemployed, Mia and her partner had a weekly after-tax income of \$1 315. Now it is just under \$1 090.

Luka, a 28-year old living with his partner

Luka lives in Palmerston North with his partner. After a restructuring at his firm, Luka was laid off from a job paying \$60 000 a year. His partner works full time and earns \$45 000 a year. They have \$15 000 in savings and weekly mortgage payments of \$450.

Luka is not eligible for Jobseeker Support because of his partner's income, although they are eligible for \$16 a week through the Accommodation Supplement. Before Luka was unemployed, Luka and his partner had a weekly after-tax income of \$1 590. Their weekly income is now \$710.

Source: Productivity Commission; Work and Income (2019); Inland Revenue (2019).

Notes:

1. Annual salaries are before tax.
2. These estimates of after-tax income assume that people make KiwiSaver contributions at the minimum rate of 3%. They also exclude support for out of school childcare.
3. People in these situations may also be eligible for hardship grants.

²⁹ There were 216 146 hardship grants given for the September quarter in 2014. In the September quarter in 2019, there were 573 588. The average hardship grant was just under \$300 for the 2019 quarter.

3.3 How does income support in New Zealand compare internationally?

New Zealand is an outlier among OECD countries in that benefits targeted at low-income households are the only form of government-funded or mandated support specifically available to unemployed workers. This is characterised as a “social assistance” approach, where payments are available to any person but means tested and funded from general taxation. By contrast, most OECD countries have adopted a “social insurance” approach, where eligibility for support (and the rate of support) is broadly tied to a person’s prior income and individual contributions, which are collectively used to fund payments.

The New Zealand Social Security Act 1938 introduced means-tested unemployment benefits at a time when several European countries had chosen to adopt a social insurance approach (Spencer, 2019). Today, New Zealand’s social assistance approach extends beyond welfare benefits, including other social policy areas such as health care and pensions. The ACC system is an exception – New Zealand has adopted a social insurance approach to workplace and other accidents (Box 3.10).

Governments fund or mandate unemployment insurance in most OECD countries

Except for New Zealand and Australia, all OECD countries have a public (or government mandated) UI system of some form. Unlike New Zealand’s government-funded benefits, UI payments are usually linked to previous earnings and are not means tested. Table 3.1 sets out the common differences between UI and New Zealand’s system of government-funded benefits. There is a lot of variation in the design of UI systems across countries. Box 3.5 presents three examples.

Table 3.1 Comparing income support for displaced workers in New Zealand with UI systems

	Income support for displaced workers in New Zealand ¹	Unemployment insurance (most OECD countries)
Coverage	Adults potentially in the workforce	All participants in the UI system. In most countries, participation is compulsory. In some countries, casual, part-time, and self-employed workers are not covered or required to join.
Eligibility test	Beneficiaries must have joint household income below a specified threshold. For some benefits, they must be available for and seeking work.	Employees must have worked for a specified period or made sufficient financial contributions. In some countries, payments are only available for involuntarily job loss. In others, additional causes are allowed. Recipients must be available for and seeking work.
Payment rate	Payments are at a flat rate, which abates with earnings	Payments are usually linked to previous earnings (Ireland and the United Kingdom are exceptions), although they are capped at a specified limit
Duration of payments	No time limit	Payments are time-limited (most limited to between 6 and 24 months)
Funding	Funded through taxes, on a pay as you go basis	Funded by employee and/or employer contributions

Source: Fletcher (2015); Welfare Working Group (2010).

Notes:

1. The Australian system is very similar to the New Zealand system on these criteria.

Most countries with UI systems also provide a second tier of income support – similar to New Zealand’s welfare system – after UI payments run out (Fletcher, 2015). As an example, Denmark provides social assistance (with work requirements in most cases) to those who cannot support themselves, along with a housing supplement and family benefit. A single person over the age of 30 without children receives about \$NZD660 a week (European Commission, 2019).

Box 3.5 Unemployment insurance systems in Denmark, France and Canada

Denmark

Denmark has a voluntary UI system, with a choice of 24 private UI insurers operating under government regulation. Policies differ but in general, people can qualify for UI payments once they have been a contributing member of a UI scheme for at least one year. Members can register for either full-time or part-time insurance and can buy extra cover to increase the income-replacement rate. Self-employed workers are eligible for payments if their total income over the previous three years exceeds DKK233 376 (\$NZD54 000).

UI contributions are around 8% of payroll, the highest rate in the OECD. The standard maximum payment for the full-time insured is DKK18 866 (\$NZD4 390) per month, and no more than 90% of prior earnings. Payments are higher for recipients with dependent children, and lower for under-25 year olds and recent graduates. Payments are available for up to 24 months within a three-year period (European Commission, 2019).

For a single UI recipient with no children and who previously earned the average wage, UI payments in 2018 were equal to 58% of their prior income. This replacement rate increases for lower incomes, rising to 83% for a single childless worker previously earning two-thirds of the average wage (OECD, 2019d).

France

France's earnings-related UI system covers people who have lost their job (other than for misconduct), resigned for valid reasons, or ended fixed-term employment. The system is overseen by Unédic, an independent agency governed by employer and worker representatives. It is funded by mandatory employer levies of 4.05% of payroll.

Payments depend on the recipient's age, previous income, and any earnings while claiming UI. The average income-replacement rate in the year to June 2018 was 72% (Unédic, 2019a).

Following reforms implemented from 1 November 2019:

- claimants must have worked at least six months (up from four) in the two years prior to making a claim;
- people who have worked continuously for five years can resign and claim UI during an approved career change project that may involve training, or creating or taking over a business;
- payments to high earners are capped after six months, reducing payments by up to 30% for people receiving over €2 565 (\$NZD4 455) per month; and
- cover has been extended to self-employed people whose businesses fail (Unédic, 2019b).

Canada

Canada's Employment Insurance (EI) Scheme covers laid-off seasonal and permanent employees. To be eligible, people must have worked 700 hours in the past year (less in regions with high unemployment). In 2017, 84.3% of laid-off workers and 42.1% of all unemployed people received EI. Special benefits, also covering the self-employed, pay for time off work due to sickness, pregnancy, care for a newborn or newly adopted child, and care for gravely ill relatives.

Employees' premiums are 1.62% of earnings. Employers pay \$1.40 for each \$1 employees pay. Most workers receive 55% of their prior earnings, up to an insurable income cap of \$CAN53 100 (\$NZD63 635) at which payments are \$CAN562 (\$NZD675) per week. Payments will be made for a maximum period of 45 weeks, or less in regions with low unemployment or if recipients have not worked sufficient hours in the previous year (Employment & Social Development Canada, 2019).

Some countries mandate that firms provide redundancy payments

Redundancy payments (also called severance payments) provide eligible workers with a lump sum payment to buffer the financial shock of job loss.

Emerging economies tend to rely more on redundancy payments than developed economies (Holzmann & Vodopivec, 2012). Mandatory redundancy payment obligations tend to be less common (or cover fewer workers) in countries with well-developed UI systems. Denmark has no mandatory redundancy payment requirements, but several other countries with UI schemes, including Canada, Ireland and the United Kingdom, require firms to make lump-sum redundancy payments to long-tenured workers (OECD, 2019b).

Australia, which along with New Zealand, does not have a UI scheme, mandates redundancy payments for firms with more than 14 employees. Those firms must provide at least 4–16 weeks' pay when laying off employees, depending on tenure (Australian Fair Work Ombudsman, n.d.). The Australian Government guarantees payments in the event of employer insolvency.

Income-replacement rates are low in New Zealand

One way to compare the level of income security across countries is to look at *income-replacement rates* – a person's household income when unemployed as a proportion of their household income when employed. This measures the fall in a person's income when they go from being employed to unemployed.

Replacement rates, as typically calculated, do not consider personal savings and redundancy payments, but they do include partner incomes for couples.

Since government support systems are invariably complex and eligibility requirements vary, cross-country comparisons of replacement rates must make simplifying assumptions.³⁰ They typically compare using one or more representative cases. The OECD, for example, compares replacement rates across countries for a 40-year old male with an uninterrupted employment record since the age of 19 (Figure 3.6). In reality, income replacement rates can vary quite substantially for households in different circumstances (Box 3.4).

New Zealand has one of the lowest income-replacement rates within the first year of becoming unemployed, according to the OECD comparisons in Figure 3.6. Government financial support for New Zealanders who lose their job is not linked to their previous earnings or duration of unemployment, and payments are tightly means tested.

However, having a UI scheme does not always mean high income-replacement rates. For example, the United States has a federal UI programme that provides similar levels of support to New Zealand's Jobseeker Support. Some US states supplement the federal programme.

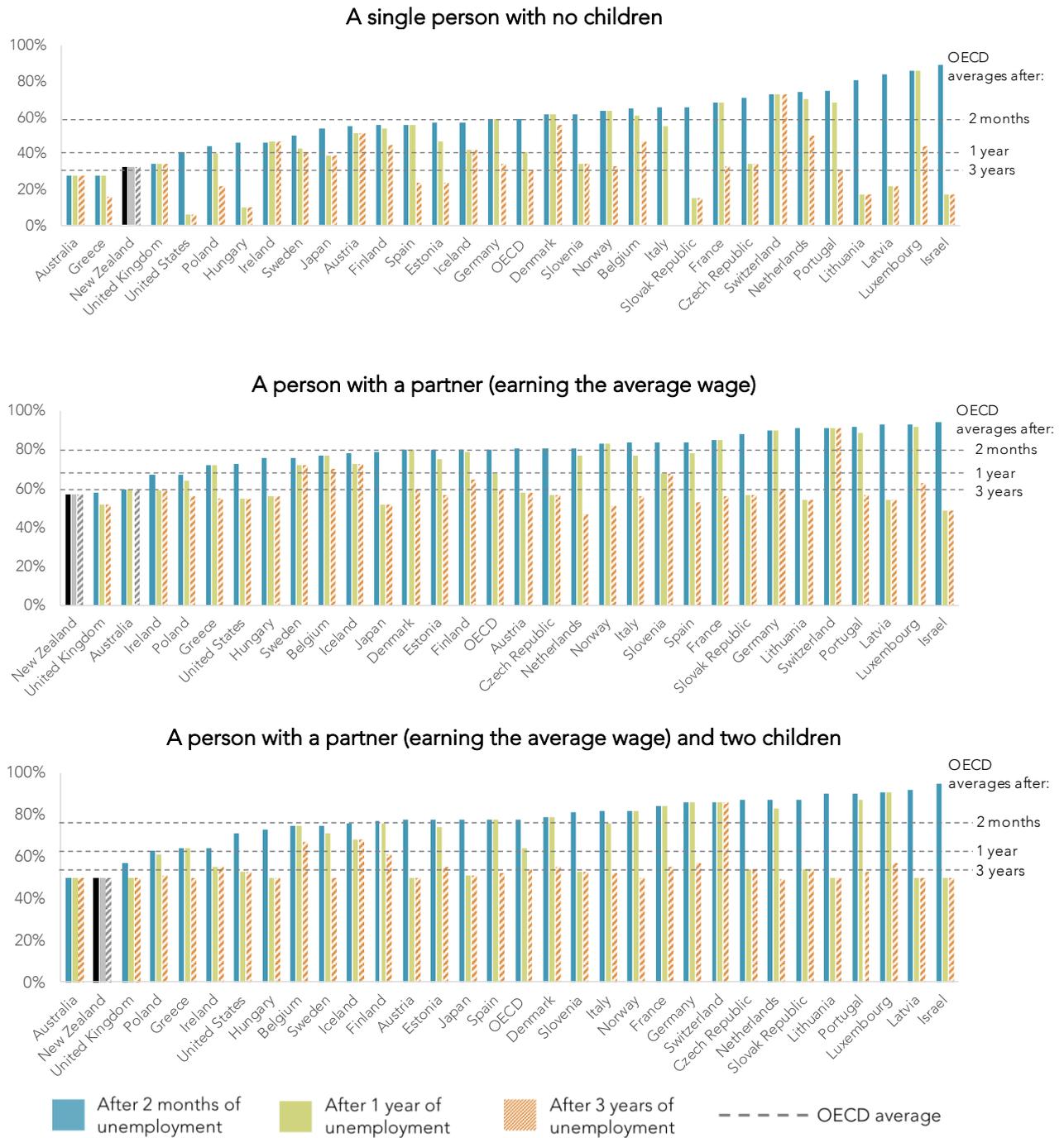
New Zealand's replacement rates are especially low by OECD standards for those with a working partner, because of the joint income testing of benefits. Fletcher (2015) noted that:

... countries with unemployment insurance (including the flat-rate insurance in the UK and Ireland) are effectively more generous than New Zealand towards couples because unemployment insurance is not subject to a spousal income test. Unlike in New Zealand, couples will continue to receive the insurance element of assistance even if the recipient's spouse is in employment. In a world where it is common for couples, including couples with children, to both work, this is likely to make a significant difference to the overall cost to the couple of a spell of unemployment experienced by one partner. (p. 21)

After one year of unemployment, New Zealand's income-replacement rate sits around the OECD average. This is because UI payments end (or reduce) in many other countries. Some countries see a substantial decline in the income-replacement rate after UI payments end (eg, the United States, Israel and Italy). In other countries, a person's income can remain relatively high some years into unemployment (eg, Denmark, Norway and Switzerland).

³⁰ For example, in countries with UI programmes, not all workers receive UI payments when they lose their job since some programmes are voluntary and most require that workers must have worked or financially contributed a minimum amount.

Figure 3.6 Income-replacement rate for a person previously earning the average wage, OECD countries, 2018



Source: OECD (2019f).

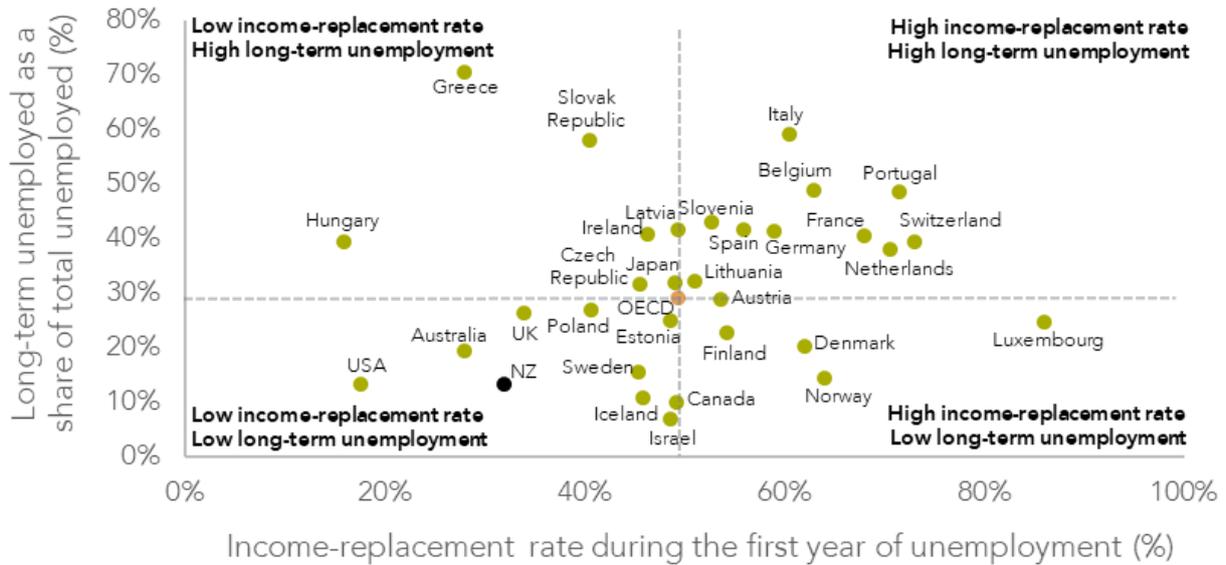
Notes:

1. The replacement rate is a person’s household income (including partner income) when unemployed as a proportion of their household income when employed. Figure 3.6 assumes that the person is a 40-year old male worker with an uninterrupted employment record since the age of 19 who is earning the average wage. The average wage used for New Zealand is \$59 970.
2. Disposable income for an unemployed person includes UI payments (where relevant) and guaranteed minimum sources of income, such as unemployment and social assistance benefits, housing benefits (eg, the Accommodation Supplement) and family benefits (eg, Working for Families tax credits).
3. Housing benefits are calculated assuming a household renting privately, paying rent equal to 20% of the average wage. The assumptions on rental expenditure are arguably low relative to actual rent cost in New Zealand. As a result, the estimates of support from the Accommodation Supplement (and therefore overall replacement) for New Zealand are artificially low (Fletcher, 2015).
4. The duration and rate of unemployment benefits in some countries, such as the United States and Canada, vary across states. In these cases, the OECD uses the replacement rate from a representative state (eg, Michigan for the United States).
5. Calculations based on the OECD tax-benefit model. See OECD (2019b) for more detail.

Are high income-replacement rates linked to longer periods of unemployment?

A higher income-replacement rate, all else being constant, would be expected to result in longer periods of unemployment, because unemployed workers have weaker incentives to search for work. Cross-country OECD data show a loosely positive link between income-replacement rates and long-term unemployment. For example, New Zealand has a relatively low income-replacement rate and a very low long-term unemployment rate compared to other OECD countries (Figure 3.7).

Figure 3.7 Income-replacement rates and long-term unemployment rates, OECD countries, 2018



Source: OECD (2019).

Notes:

1. The income-replacement rate during the first year of unemployment is calculated by taking the average of income-replacement rates at the point of 2, 4, 6, 8, 10 and 12 months after the point of becoming unemployed.

However, the income-replacement rate is just one of many factors that could affect the duration of unemployment. Others include economic conditions, employment regulation, and the availability of programmes to assist people back into work. For example, Greece has low income-replacement rates but high long-term unemployment due to its poor economic performance.

Notably, a handful of countries, including Iceland, Canada, Denmark and Norway, have similar long-term unemployment rates to New Zealand but with considerably higher income-replacement rates.

3.4 Evaluating New Zealand's income support system

New Zealand's income support system has strengths and weaknesses

In New Zealand, government benefits are not tied to a person's previous job history or the cause of unemployment (eg, redundancy, fixed-term job ending, unable to find a job after completing study).³¹ Anyone who meets the income test, is out of work, and is available and searching for work, can receive support. This includes those who were previously self-employed or working in a casual or fixed-term job. The income support system does not discriminate in favour of some types of work (or workers) or create disincentives for people to take on non-traditional employment arrangements. This contrasts with systems in other countries, which exclude types of workers from some forms of assistance, especially the self-employed and people who work part-time.

³¹ Those who voluntarily leave their job must wait 13 weeks before they are eligible for Jobseeker Support.

Those who experience long spells of unemployment do not face declining levels of support. This provides some degree of certainty and protection for vulnerable New Zealanders. Long-term levels of support in New Zealand are about average compared to other OECD countries.

More broadly, the income support system complements New Zealand's labour market, which has been characterised by comparatively low levels of unemployment, short average unemployment spells, and high rates of labour-force participation (Chapter 1).

Current benefit rates are low relative to the cost of living

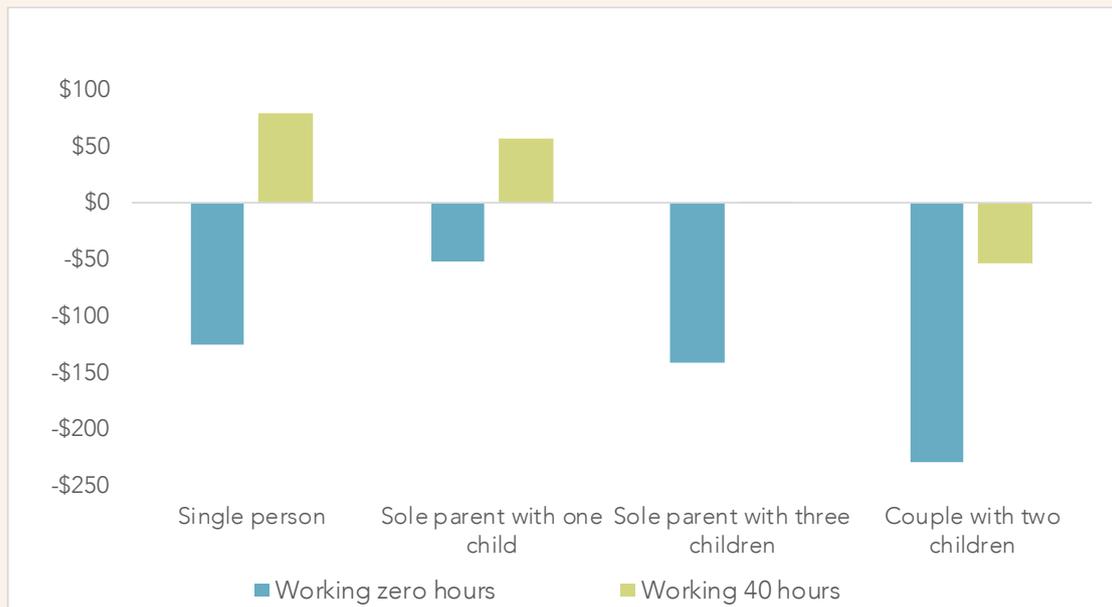
The welfare system aims to avoid severe hardship for households with low incomes. However, at current benefit rates, those who are unemployed and qualify for support may still struggle to cope financially (Box 3.6).

Box 3.6 Evaluating the adequacy of government benefits for preventing hardship

For many who are reliant on government-funded support (eg, those unemployed with minimal personal savings), the current level of assistance is suitable as a stop gap between jobs but not, on its own, adequate for long-term support.

The Welfare Expert Advisory Group (WEAG, 2019b) modelled income and "core" expenses for four representative households, with and without a working adult. WEAG estimated that benefit payments were \$51 to \$230 a week lower than "core" expenses for households without an income from work (Figure 3.8).

Figure 3.8 Difference between weekly household income and "core" expenses for four representative households, with and without a working adult, New Zealand



Source: WEAG (2019b).

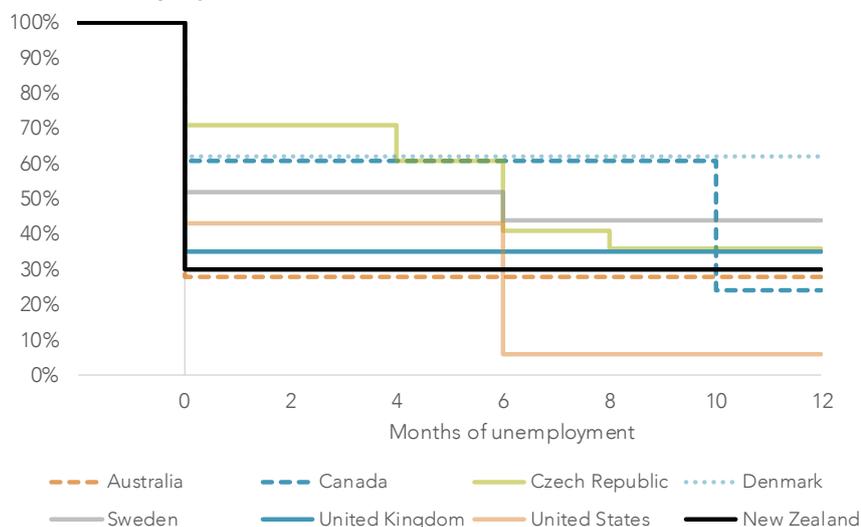
Notes:

1. Core expenses include rent, electricity, gas, water, food, phone and broadband, clothes, medical and dental costs, transport costs, bank fees, insurance (contents, car), personal care, household contents and services, school costs and childcare costs.
2. The model assumes that households are located in Manurewa, South Auckland and workers earn \$18 an hour. In the couple with two children household, the model assumes that only one adult works.

Some workers face sharp drops in income

The absence of an income smoothing mechanism like UI combined with low rates of means-tested benefits means that some displaced workers in New Zealand face a much more significant and immediate drop in income compared to those in many other OECD countries (Figure 3.9).

Figure 3.9 Income-replacement rates for a single person previously earning the average wage, first year of unemployment, selected OECD countries



Source: OECD (2019f).

Notes:

1. See notes for Figure 3.6 regarding the OECD's methodology for calculating income-replacement rates.
2. People in different circumstances (eg, family status, income) will face different post-displacement income-replacement rates.

The majority of New Zealand workers do not have redundancy provisions in their employment contract. Many New Zealand households have limited savings to draw on to cope with sustained income shortfalls (section 3.2). Sharp losses of income are likely to be especially difficult for households reliant on expected ongoing income to meet financial commitments (eg, mortgage, rent). The New Zealand Council of Trade Unions (NZCTU, sub. 41, p. 25) submitted that:

Income replacement is too low, both to enable workers and their families to continue to live in dignity and maintain their commitments such as mortgages and rent, and in comparison with other OECD countries, particularly in northern Europe. Eligibility requirements disqualify too many workers, primarily because eligibility is assessed including a spouse's income. This applies whatever the employment relationship – permanent, full time or part time, casual, seasonal or unsecure.

New Zealanders who lose their job often face a large income drop in subsequent jobs

Most New Zealanders who lose a job find a new job relatively quickly. Yet displaced workers can suffer a significant and persistent drop in incomes in subsequent jobs.

Two New Zealand studies have looked at outcomes for workers who reported involuntarily job loss.

- Hyslop and Townsend (2017) matched people who reported having been laid off, dismissed or made redundant in New Zealand over 2001–10 with workers who had similar characteristics but did not lose their job. They found that displaced workers who re-gained employment had 25% lower earnings in the first year after job loss (compared to matched non-displaced workers) and about 15% lower five years after.
- Dixon and Maré (2013), with a smaller sample, estimated the drop in hourly wage rates for displaced workers. Using the same definitions as Hyslop and Townsend, they estimated a 12% drop in wages in the first year after job loss, 11% in the second year and 7% in third year.

Hyslop and Townsend (2017) posited possible explanations for income scarring, including a loss of workers' firm- and industry-specific human capital, the loss of a high-quality match with their employer, or the loss of

their union or industry wage premiums. Another plausible explanation is selection effects, that is, the displaced workers in the study had unobserved characteristics that differed from those in the control group, and these characteristics contributed to their lower subsequent incomes.³²

The income-scarring effect is not just an issue for less-educated workers. Hyslop (2019) found that displaced workers with degree-level education have larger and more persistent relative earnings losses compared to other displaced workers. Hyslop posited that more-educated displaced workers face a greater loss of match quality, firm- and industry-specific human capital, or wage premiums.

These studies considered only those who actually lost their jobs. Those better informed or able to forecast impending job loss may seek, and find, another job before their job ends. These people may not suffer income scarring.

Studies of other countries also find negative impacts of job loss.

- Upward and Wright's (2019) study of the effects of job displacement in the United Kingdom found that earnings in the short term were about 40% lower than pre-displacement earnings, rising to about 10% lower after 10 years. About 80% of the 10-year earnings gap was because of reduced pay; the other 20% was due to those workers leaving the workforce at a greater rate.
- Couch and Placzek (2010) estimated earnings losses for displaced workers in Connecticut in the United States from 2003 to 2014. They found losses of around 32% in the period immediately after job loss. Six years after job loss, earnings losses of 13–15% were estimated for people who separated from jobs because of mass lay-offs, and 7–9% for other displaced workers.

A limitation of comparing job displacement impacts across countries is that different studies use varying definitions of displacement, data sources (eg, administrative vs self-reported survey data) and methodologies, and are designed to answer different questions (OECD, 2013). The size of displacement effects is also affected by the time period covered by the study. Additionally, the New Zealand studies had small sample sizes compared to these international studies. Further research would help to better understand the income effects of involuntary job loss in New Zealand.

F3.1

Workers who lose their job can face lower earnings in subsequent jobs. Such "income scarring" appears to be large and long lasting in New Zealand. However, research is based on small samples and is possibly subject to selection effects. Further research would help to better understand the extent and causes of income scarring in New Zealand.

Poor matching may contribute to income scarring

An explanation for the scarring effects described in the previous section is poor matching of worker skills with the requirements of jobs. Such poor matches could come about through two sources.

The first source is financial stress. A displaced worker under financial pressure may choose to quickly take on a new job with a poorer-quality match in terms of their skills, and thus with reduced wages. Acemoglu and Shimer (2000) posited that higher levels of income security could enable US workers to find more productive jobs.

Conventional wisdom views unemployment insurance as a serious distortion that we have to live with in order to smooth income risk and consumption variability ... [W]e have argued that moderate unemployment insurance may actually improve the allocation of resources. Unemployment insurance enables workers to pursue riskier options, including jobs that are harder to get, but possibly also more productive. (p. 1221)

Nekoei and Weber (2015) concluded that a nine-week increase in the duration of the Austrian UI scheme meant unemployed workers stayed jobless for two days longer on average, but workers obtained jobs with

³² For example, the displaced workers in the study may have characteristics that reflect a higher propensity to be made redundant, or a lower likelihood of making a quick transition to an equally or better remunerated job.

0.5% higher wages. A similar study in Germany found the effect of benefit duration on wages to be positive, but small (Caliendo, Tatsiramos, & Uhlendorff, 2013).

However, some earlier studies (eg, Card, Chetty and Weber 2007) did not find a statistically significant link between income security and future wages.³³ Moreover, the extent to which the conclusions from international studies are relevant for New Zealand is unclear, as most of these studies examined countries with much higher income-replacement rates than New Zealand.

A second, and more likely, cause of poor matching is New Zealand's thin labour markets. Small and thin labour markets make it harder for workers – particularly those in specialised fields – who lose a job to find suitable new employment.

F3.2

Poor job matches may contribute to income scarring in New Zealand. Financial stress on displaced workers and New Zealand's thin labour markets may underlie poor job matches.

Summary: the case for improved income smoothing

Improving income smoothing would benefit New Zealand workers who lose their jobs. Under current arrangements, some workers face sharp drops in income. Most receive no income support from government. And for those who do receive income support, benefit rates are low relative to the cost of living.

Income smoothing also contributes to productivity growth and greater wellbeing, by facilitating labour-market dynamism, better labour-market matching, building human capital and improving attitudes towards technology (section 3.1).

Fears of adverse consequences from technology adoption can lead to public pushback that might delay or halt productivity-improving technology adoption. Individuals in work might be fearful of involuntary job loss, which can have significant personal income and wellbeing consequences. Government policies that are effective in reducing such fears may lead, over time, to a society more accepting of technology, and thus higher productivity and living standards (Chapter 5).

F3.3

Improved income smoothing mechanisms in New Zealand would increase the wellbeing of displaced workers. It would also facilitate labour-market dynamism, improve labour-market matching, build human capital, and foster favourable attitudes towards technology adoption.

The remainder of this chapter considers policy options for income smoothing that reduce the immediate loss of income for those entering unemployment.

³³ Weber (2015) argued that the differing results of Nekoei and Weber (2015) and earlier studies such as Card, Chetty and Weber (2007) can be reconciled. Weber noted that "[t]hese different empirical findings do not contradict theory once we take into account duration dependence, meaning that the job-seeker's opportunities and skills deteriorate the longer she remains out of a job, which at the same time unemployment benefits decrease" (p. 4).

3.5 Improving income smoothing

This chapter makes a partial analysis of policy options. Given the complexity of the existing welfare and tax systems, and the likelihood of significant fiscal implications of any changes, this report does not recommend specific policy changes. The Commission will undertake further analysis for the inquiry's final report.

What others have said

Box 3.7 outlines changes to New Zealand's income support system recommended by inquiry participants and others.

Box 3.7 Other proposals to change the income support system

Several groups have proposed specific changes to the current income support system, including increasing benefit rates, widening access to benefits, mandating redundancy payments, and linking income-replacement levels to a person's prior earnings.³⁴

- The Public Advisory Group on Restructuring and Redundancy (2008) recommended that the Government should consider introducing a statutory requirement for compensation in the event of redundancy, either funded through employee/employer levies or general taxation.
- The OECD (2017) report *Back to work: New Zealand – Improving the re-employment prospects of displaced workers* recommended that the Government adopt an “active redundancy insurance system” that combines both financial support and active labour-market policies.
- The Welfare Expert Advisory Group (2019) recommended that the Government significantly increase benefit rates (including increasing Jobseeker Support rates by 40–49%), and introduce a six-month benefit for partnered people who lose their jobs by disregarding partner income up to a specified amount when testing benefits.
- NZCTU (sub. 41, p. 26) recommended a universal entitlement to a temporary income replacement based on previous earnings, and a “legislated entitlement to redundancy payments set at four weeks payment for the first year plus two weeks for each year thereafter up to a maximum of 26 weeks' pay”.
- Economic Development New Zealand (sub. 7, p. 7) suggested “exploring ways of expanding ACC's role in worker insurance to extend to redundancy”.

Criteria for evaluating policy options

A policy option for improving income smoothing would ideally meet many criteria, including the following:

- Does it **effectively target** those facing, or at risk of, job loss?
- Is it **affordable**, for workers, firms and taxpayers?
- Is it **coherent**, fitting well with related policies?
- Does it support **good job matching, labour-market dynamism and work participation**?
- Is it **simple** to understand, administer and interact with?
- Is it **neutral towards work arrangements** (eg, self-employed, casual, fixed-term, permanent)?
- Does it **minimise the risk of perverse outcomes**, such as discouraging firms from hiring workers (Box 3.8)?

³⁴ Some of these proposals were recommended to address problems outside the context of this inquiry.

Box 3.8 The inconvenient effects of labour-market interventions

Income smoothing can provide benefits for workers and the wider economy. But every intervention to smooth incomes comes with negative effects. Increasing income support through the welfare system relies on general taxation. UI schemes typically rely on contributions from employers and employees. In each case revenue raising creates a “wedge” between the cost of labour for the employer, and the net wage received by the worker.

Increasing the cost of labour can discourage firms from hiring and encourage the adoption of labour-replacing technology. It also encourages firms towards work arrangements not subject to the wedge, for example, contracting and offshoring.

Reducing net wages reduces worker wellbeing, unless the expected value of the benefits they might receive outweigh the premium they pay.

Greater income support can weaken the financial incentives for unemployed people to participate in, or search for, work and encourage dependence on that support. Other policies can reduce these effects – Denmark, for example, has strict requirements for job search and time-limited payments.

Making support conditional on actual redundancy encourages people to wait until they receive redundancy and may discourage job searching, contributing to low labour-market dynamism and job mobility.

Policies should be evaluated in terms of their distinct effects on insiders (those in jobs) and outsiders (those not currently in work). Anything that discourages hiring or firing favours insiders over outsiders.

The next five sections cover the options considered by the Commission.

3.6 Mandatory redundancy payments

Mandatory redundancy payments provide a source of income for displaced workers to use while they look for work. Workers only receive a payout if they stay in their job until redundancy or firm failure. The Government could mandate that employees receive a lump sum on redundancy, with payments based on tenure. Mandated payments do not need sophisticated administrative systems and require few public resources.

Researchers with the International Labour Organisation, Asenjo and Pignatti (2019) noted that payments rely on financial solvency of firms that are laying off their workers. Commonly, employers are required to compensate laid-off workers directly.³⁵ Requiring financially distressed firms to pay redundancy compensation is particularly problematic, as costs fall when firms are least able to afford them. As a result, workers risk delays and partial- or non-payment of redundancy.

A limited mandatory redundancy scheme (eg, four weeks’ pay for all workers) would reduce the financial burden on such firms and the likelihood of non-payment. Alternatively, government can guarantee employee entitlements for firms entering administration or liquidation, as is the case in Australia.

Redundancy payments can discourage labour mobility and better job matching. It is more difficult for displaced workers to find new jobs if they are all searching for a new job at the same time. This can be a problem in thin labour markets.

Redundancy payments provide some income security for insiders (those currently in work), and indirectly contribute to their job security (by making redundancy more expensive for firms). However, as redundancy payments increase the cost of employing people, it discourages firms from hiring workers and thus reduces

³⁵ An alternative arrangement is that employers pay a levy into a national fund that compensates laid-off workers. But there are moral hazard problems with such a scheme.

opportunities for outsiders (those searching for work).³⁶ It also incentivises firms to avoid redundancy costs by moving to fixed-term appointments, contracting and other non-standard hiring arrangements.

Mandatory redundancy payments provide a relatively blunt form of income smoothing, because payments based on tenure do not reflect the actual costs that displaced workers experience. A worker will get the same pay-out whether they start a new job the next day or after several months. And while longer-tenured workers may *on average* face greater financial upset from losing a job, this does not of itself justify tenure-based payments. Young workers, for example, can face significant costs and upset from job loss and are likely to have less savings as a buffer. Redundancy payments lack the risk pooling benefits of UI schemes.

According to Holzmann and Vodopivec (2012, p. 2):

... these programs are often considered to be one of the least appropriate options for income protection: They not only provide deficient and incomplete protection but are often responsible for distorting the behavior of firms and workers, and thus imposing other efficiency costs.

Blanket rules mandating redundancy payments make workers and employers pay for insurance that they may not value at the associated price. Further, they blunt otherwise voluntary signals from employers that the jobs they offer are secure. These jobs, well signalled, are especially attractive to workers who value job security.

Negotiated, voluntary redundancy pay is an important signal of job security

Workers and employers should be free to negotiate redundancy payments and other risk sharing and support arrangements for workers who lose their jobs. Well-designed redundancy payment provisions negotiated by employers and workers can increase commitment by both parties, encourage investment in firm- and job-specific skills, and boost productivity. By contrast, mandated schemes are unlikely to provide differentiation and flexibility (Holzmann & Vodopivec, 2012).

F3.4

Mandatory redundancy payments provide a source of income for displaced workers to use while they look for work. However, mandatory redundancy payments directly increase the cost of labour, and can encourage non-standard forms of employment over standard forms. Payments received do not reflect the costs that displaced workers face. Further, mandatory schemes blunt voluntary signalling of job security.

The Commission does not see merit in further investigating this option as a means of improving income smoothing.

3.7 Portable individual redundancy accounts

With portable individual redundancy accounts, each worker contributes to their own account throughout their working life. They can withdraw from this account in the event of job loss and can typically access any remaining balance on retirement. Austria adopted such a system in 2003 (Box 3.9). McKay, Pollack and Fitzpayne (2018) proposed an individual savings account system as an income security solution for independent contractors in the United States who are ineligible for UI.

Workers who move jobs are not penalised by losing entitlements, because the funds in their account go with them to their next job. People are, in effect, drawing on their own savings. Unemployed workers can choose not to withdraw their full balance, retaining funds for future labour-market events or retirement.

Portable individual redundancy accounts do not have the moral hazard problem associated with redundancy payments and UI systems. In those systems, payments are conditional on unemployment, so people face weaker incentives to search for a job.

³⁶ Redundancy payments do not directly increase the cost of hiring workers. However, they create a contingent liability for employers, which, on average and over time, increases the expected cost of each worker hired.

Box 3.9 Portable individual redundancy accounts in Austria

Austria switched from mandatory redundancy payments to portable individual redundancy accounts in 2003, to promote labour-market flexibility while maintaining income security.

Prior to 2003, firms were mandated to provide laid-off workers with a lump-sum payment based on their tenure. This system was replaced by a system of occupational pension accounts, where an employing firm makes monthly payments into a worker's (interest-earning) account. These accounts are portable – they follow the worker from firm to firm. A laid-off worker can access funds from their account at a rate based on their previous earnings history. Workers can access any remaining funds when they reach pension age (currently 65 in Austria). Relative to mandatory redundancy payments, this system provides stronger incentives for workers to shift jobs.

Under the old system, severance-pay claims were lost [on changing jobs]. Under the new system, the worker continued to own the funds accumulated on her pension account. As a result, the incentive to "wait for a layoff" (and the associated severance payment) was strong under the old system, but disappeared under the new system. Hence, new-system workers should be more likely engaged in on-the-job search, most particularly when faced with a high layoff risk. (Kettemann, Kramarz, & Zweimüller, 2017, pp. 9–10)

Kettemann, Kramarz and Zweimüller (2017) found that Austria's reform increased the rate of job separations prior to mass lay-offs by 40%. The new system encouraged workers to move "from 'bad' to 'good' firms with potentially important consequences for the allocation of workers and total factor productivity" (p. 41).

In New Zealand, balances in individual redundancy accounts could be transferred to a KiwiSaver account on retirement. The system could be more fully integrated with KiwiSaver. For example, a person's individual redundancy account could sit alongside their KiwiSaver account, managed by their KiwiSaver fund.

A system of portable individual redundancy accounts would require a higher level of savings (and hence higher employer or employee contributions). Such contributions increase the cost of labour.

Portable individual redundancy accounts cannot adequately support all workers because they do not pool risk. Risk pooling refers to the ability, under insurance schemes, for those who do not face an unfavourable experience (ie, job displacement) to pay for the losses of those who have. Sharing gains and losses across a larger pool of people protects individuals against negative events at a lower cost than if they had to save for every eventuality. As portable redundancy accounts are individualised, they do not allow for sharing of gains and losses and hence individuals must meet their own job displacement costs from prior savings.

Young people, and others who have only recently entered the workforce, have limited funds in their accounts and hence little scope for income-smoothing. Workers who experience multiple job losses may quickly deplete their accounts and, as with the current KiwiSaver system, self-employed people would not benefit from employer contributions. The Government could underwrite the accounts of younger workers or those with depleted balances, but this would add complexity to the system (as government agencies would need to identify who was eligible for an underwrite and manage any perverse incentives).

F3.5

Portable individual redundancy accounts could promote labour-market flexibility while enhancing income security. However, such accounts do not pool risk across workers, and may provide low levels of support for young workers or those who experience multiple job losses.

The Commission sees merit in further investigating this option as a means of improving income smoothing.

3.8 Unemployment insurance

A UI system, with support payments at a high income-replacement rate, would smooth the incomes of displaced workers, helping to minimise their adjustment costs. The NZCTU (sub. 41, pp. 25) submitted that

To ensure that such support is available to workers in all forms of employment relationship, income replacement should be a universal entitlement. This means it should not be tied to tenure or contribution levels. We see a suitable package having the following features:

- It should be funded partly from compulsory experience- and size-rated employer levies and partly from general taxation, underwritten by government, and including the following features.
- Maintenance of 90 percent of prior income during unemployment for up to 12 months, conditional on commitment by the worker to acquiring new skills if necessary, and job searching ...

Payments can create incentives for people to delay their job search, but this will depend on the income-replacement rate and the duration of payments. The experience of European countries, such as Denmark, Iceland and Sweden, indicates that higher levels of income security, with the right additional policy settings in place, do not necessarily mean more short-term or long-term unemployment.

A higher income-replacement rate or a longer duration of payments requires higher firm, employee or government contributions. Where firms or employees pay, this directly increases the cost of labour and may discourage hiring.

The Government could develop a UI system for workers who lose their job, perhaps modelling it on the ACC insurance system (Box 3.10). Such a system would be funded by worker and/or firm contributions with payments on job loss based on a worker's prior earnings. The Government could create a new agency similar to ACC to oversee a UI system, it could expand the scope of ACC to cover job loss, or it could create a regulated market for commercial insurers. Economic Development New Zealand (sub. 28, p. 7) suggests that the inquiry explore:

... ways of expanding ACC's role in worker insurance to extend to redundancy as the collection system is already in place. We would expect worker and employer co-contributions. Redundancy, then, would be assessed on an individual income basis rather than household and would become work-related rather than social service and unemployment related. We acknowledge the complexity involved in different government departments working together, for example WINZ and ACC, but think that a state-owned insurer could smooth work transitions with other public policies and benefits.

Box 3.10 The ACC insurance system

The Accident Compensation Commission began on 1 April 1974, following the passing of the Accident Compensation Act 1972. It is now the Accident Compensation Corporation (ACC), operating under the Accident Compensation Act 2001.

ACC provides weekly compensation to people unable to work following an injury. It is unique in New Zealand's social security system because the rate of compensation is based on a worker's prior earnings. Weekly payments are set at 80% of prior earnings up to a maximum annual income of \$128 470 (so the maximum compensation amount is \$102 776 a year). This rate is unaffected by partner income or any other income of the claimant. Payments are not time limited and cease three months after a person is assessed as fit to return to work.

Eligibility extends to self-employed workers, those who were soon to start a new job, and seasonal workers in certain cases. ACC payments are funded by an Earner's Levy that is deducted from worker salary and wages by employers and collected by Inland Revenue. The current rate is 1.21% (excluding GST) of employment income (up to \$128 470). Self-employed workers pay the levy straight to ACC based on the same rate.

Source: Spencer (2019); ACC (2018; 2019).

Ideally, any UI scheme in New Zealand would also cover the self-employed and workers in other non-standard work arrangements (as is currently the case with ACC). Such universal coverage is unusual in overseas UI schemes. The OECD (2019e) noted that 11 out of 28 developed countries provided no access to unemployment protection for self-employed workers, and another 11 offered only voluntary or partial access. Similarly, not all OECD countries covered part-time or fixed-term contract employees or provided the same levels of support to full-time employees.

Treating employees and the self-employed (or others in non-standard work arrangements) differently encourages employers to shift towards non-standard work arrangements. The OECD (2019e, p. 296) reported that “in the Netherlands, the total employment cost for a dependent employee can be 60% higher than for an otherwise similar independent contractor”. The Taylor review of modern work practices in the United Kingdom cited concerns that national insurance levies on employees (but not contractors) encourage “employers to use flexible workers whenever possible” (2017, p. 68).

F3.6

An unemployment insurance system funded by employers and workers, with payments linked to previous earnings, would smooth the incomes of displaced workers. It could be designed to cover self-employed workers. However, it would reduce net wages, increase the cost of labour, and discourage hiring.

The Commission sees merit in further investigating this option as a means of improving income smoothing.

3.9 Universal basic income

Concerns about technological change have fuelled interest in radical income support options, such as a universal basic income (UBI). UBI refers to unconditional payments made to all adults without means tests or obligations to work or seek work. The idea of a UBI is not new. For instance, UK Labour Party member Dennis Milner proposed an unconditional weekly allowance paid to every individual near the end of World War One (Arthur, 2016).

Roos (sub. 46, p. 34) provided further examples, and noted that “the concept is deceptively simple in theory and very complex indeed in practice”. Economic Development New Zealand (sub. 28, p. 8) similarly noted that a UBI would have “complex interrelatedness and interdependencies with other labour market and social policies”. Although, arguably, New Zealand already provides a UBI for its residents over 65 in the form of New Zealand Superannuation.

The Australian Productivity Commission (2016, p. 79) listed some of the asserted benefits of a UBI – that it:

- eliminates poverty traps that low-income earners may fall into due to the conditions and inflexibility of welfare payments;
- provides persistent and predictable wage support, an arrangement that would suit those involved in the gig economy or other intermittent work;
- has the potential to improve work incentives as it lowers the effective marginal tax rate associated with the loss of welfare payments as wages increase; and
- is relatively inexpensive to oversee and administer compared to means-tested programmes.

The impacts of a UBI on employment are not clear. Preliminary results from a recent UBI trial in Finland where 2000 unemployed people were given a monthly payment of €560 suggest that “recipients were no better or worse at finding employment than those in the control group” but they also had “significantly fewer problems related to health, stress and ability to concentrate” (Kangas, Jauhiainen, Simanainen, & Ylikännö, 2019, pp. 29–30).

A UBI would have large fiscal costs. For example, a modest UBI of \$200 a week for each New Zealander aged 18–65 would cost roughly \$30 billion per year, which is close to the cost of Vote Education (\$11.8b) and Vote

Health (\$19.9b) combined.³⁷ Funding a UBI would involve substantial modifications to tax rates or to the taxation system (Perce Harpham, sub. 2).

Policies that provide universal and unconditional payments to a wide population are unavoidably expensive if they are set at levels that support a decent standard of living (Milligan, 2016). Having higher tax rates earlier in the income schedule could help to fund such a policy, but at the cost of further reducing incentives to participate in work. Although some of the costs of a UBI would be offset by reduced welfare payments, some benefits would likely need to be maintained to avoid some beneficiaries facing lower levels of support.

Moreover, while it could have benefits such as avoiding poverty traps, reducing the stigma around accessing benefits and providing more security for those in precarious work, a UBI would also reduce the funds available to support those with the greatest need. A 2019 report by Coote and Yazici on behalf of Public Services International (PSI) – a global union federation – argued:

Whereas universal benefits such as healthcare or unemployment payments are provided to all who need it, UBI is provided to all regardless of need. Inevitably it is not enough to help those in severe need but is a generous gift to the wealthy who don't need it. It is the expenditure equivalent of a flat tax and as such is regressive. (Coote & Yazici, 2019, p. 4)

Other policy options, such as lifting benefits and abatement thresholds or removing stand-down periods, would likely be much more cost effective in addressing issues such as stigma, financial hardship and high effective marginal tax rates (EMTRs).

With a UBI, while the workforce disincentives from high EMTRs are partially addressed, there are few mechanisms to ensure employment and thus the tax base. Other policy instruments may be more appropriate: full employment at adequate wages; workforce encouragement through removal of constraints on entering the labour market such as lack of appropriate skills; offsetting adverse backgrounds such as prison history, tattoos, drugs, etc.; and lifelong training opportunities for re-education. The automatic payment of a UBI fails to address any of these issues. (Stephens, 2019, p. 36)

The predictions of high levels of technological unemployment used to justify many overseas UBI proposals are very unlikely to eventuate (NZPC, 2019). In the words of Marlborough District Council (sub. 8, p. 3):

Given the national situation ... chronic labour shortages, an ageing population and an increasing rather than declining trend in the number of available employment opportunities, it would appear unlikely that the New Zealand economy will in the short term require the development of interventions such as Universal Basic Income, even in scenarios of significant technological disruption to existing employment opportunities.

The case for a UBI in New Zealand is weak. According to Stephens (2019, p. 30) "... while the current [New Zealand] tax/benefit system represents a 'welfare mess', and needs substantial restructuring, a UBI does not necessarily provide an adequate income for poverty relief, nor ensure labour force incentives, at an acceptable fiscal cost".

F3.7

Technological change does not create a case for a universal basic income in New Zealand. Universal and unconditional payments to a wide population are unavoidably expensive if they are set at levels that support a decent standard of living. There are better ways to address concerns about technological change.

The Commission does not see merit in further investigating this option as a means of improving income smoothing.

³⁷ A UBI could at least partially offset existing primary income support payments, supplementary grants and tax credits. The total cost of such transfer payments and subsidies, excluding New Zealand Superannuation, was approximately \$13.5 billion in the year to June 2019.

3.10 Changes to benefits and tax credits

This option provides greater income smoothing following job loss, by extending existing income support and/or establishing new supports.

The current welfare system is based on household income, whereas the tax system is based on individual income. This creates various distortions, including different treatment of displaced workers in very similar circumstances (Box 3.11).

Box 3.11 Income smoothing for households or individuals?

The New Zealand tax system is based on the income that individuals receive from employment. By contrast, its welfare system is based on household income, which assumes that two people in a relationship will share their income to provide for each other and their dependent children. The two systems come into conflict in the case of job loss.

Income support for displaced workers can potentially follow either model. Joint-income testing is the norm across other OECD countries for government-funded assistance, although not for UI (Fletcher, 2015).

To address this conflict in New Zealand, WEAG (2019d) recommended that the first \$48 000 of displaced workers' partners income should be disregarded for six months after job loss. Current policy settings discourage recipients from disclosing that they are in a relationship.

Some argue that the household-income model is outdated, and the welfare system should shift towards benefits against individual income to match the tax system (Fletcher, 2018; WEAG, 2019d). Resolving the underlying frictions between these models is outside the scope of this inquiry. The inquiry has considered only options consistent with the constraints imposed by the different underlying models of the existing tax and welfare systems.

A higher rate of income support for displaced workers paid through the welfare system could offer a greater degree of income smoothing than current arrangements. This would be less than that offered by a UI scheme, as payments would not reflect prior incomes.

A package of smaller changes could address eligibility and level of support for the period immediately following job loss, thereby smoothing incomes.

This package could include one or more of the following components:

- changing Jobseeker Support to disregard a displaced worker's partner's income for a limited period;
- paying a higher, fixed rate of payment for Jobseeker Support for a limited period;
- a grace period for households whose total weekly working hours fall below the eligibility criteria for the In-Work and Minimum Family tax credits (due to displacement) to continue receiving support; or
- creating new benefits or tax credits available for a limited period after job loss.

This package could be neutral with respect to work arrangements, as the current tax and welfare system is relatively neutral in this regard. The package could have an advantage over other options, in that it would not directly discourage hiring (as it would be funded from general taxation).

Depending on details, it could be complex and involve significant fiscal costs for the Government. It could increase EMTRs.³⁸ High EMTRs discourage labour-market participation.

³⁸ EMTRs "reflect the interaction of the personal income tax scale, main benefits and supplementary benefits. They show how a dollar increase in gross income translate to an increase in income in the hand (after taxation and the withdrawal of income-tested assistance)" (Nolan, 2018, p. 1).

F3.8

A package of changes to benefits and tax credits that provide greater, time-limited, support for displaced workers would build off an existing system that is relatively neutral to work arrangements. Unlike portable individual redundancy accounts and unemployment insurance, changes to benefits and tax credits would not discourage hiring because they would be funded from general taxation.

However, such changes could involve significant costs to the Government and greater complexity (especially the interaction between benefits and taxes, and impacts on effective marginal tax rates).

The Commission sees merit in further investigating this option.

3.11 Next steps

The Commission sees merit in three options for improving income smoothing on job displacement in New Zealand:

- portable individual redundancy accounts;
- short-term unemployment insurance; and
- changing benefits and tax credits.

However, comprehensive analysis and policy work is needed to fully understand the relative costs and benefits of these options, as all three options involve significant changes to policy, processes and institutions.

Portable individual redundancy accounts would likely interact with the retirement savings system. Social insurance schemes (especially those with multiple non-government insurers) can provide good opportunities and incentives for innovation but can be “challenging and slow to design and implement” (NZPC, 2015, p. 246). Moreover, expanding existing income supports or introducing new ones also involves difficult and complex trade-offs between providing adequate support, controlling costs to the Government, and avoiding perverse outcomes such as high EMTRs.

Determining which option is best will require further analysis and modelling to assess:

- the direct fiscal costs, and likely costs to firms and workers;
- interactions with other policies;
- the elasticities of demand for labour; and
- behavioural impacts.

One particularly important piece of information currently unavailable is the scale and distribution of income losses under existing policies. For example, the income loss results presented in Figure 3.6 and Figure 3.9 are estimates based on a small set of individual or household circumstances. In practice, the income losses on displacement vary considerably. For example, individuals who were earning less than the average wage will experience lower losses as a share of their previous income than those earning higher wages. Gaining a better understanding of this distribution will help inform decisions about which policies are most suitable. The Commission intends to carry out a distributional analysis using information from the Integrated Data Infrastructure between now and the release of the inquiry’s final report in March 2020.

4 Labour-market programmes

Key points

- Governments have a wide variety of programmes and other supports (*labour-market programmes*) that have, at least in part, employment-related objectives. These are intended to help the unemployed, those at risk of unemployment, or those seeking additional work; or to achieve wider labour-market outcomes. The New Zealand Government spends over \$1.6 billion per year on labour-market programmes. This excludes spending on the education and training system.
- A subset of such programmes is known as active labour-market policies (ALMPs). The distinction between policies that do and do not count as ALMPs is arbitrary and varies across countries. This makes international comparison difficult. New Zealand's spending on ALMPs is low internationally, according to the OECD. This is not, of itself, a reason to increase spending.
- Employment and income support services are closely integrated within the Ministry of Social Development (MSD). Consequently, many MSD programmes are not available to, or designed for, workers who have lost their job and seek a new one, for workers at risk of unemployment, or those seeking to enter the workforce
- There would be benefits for displaced workers, at-risk workers and the labour market more generally, if suitable and cost-effective labour-market programmes were available to a wider group of people.
- There is insufficient information at the present time on the cost-effectiveness of existing programmes to justify expanding these programmes. The measured introduction of small-scale pilots could generate the information required to assess the value of current and new programmes, for a wider group of people. Subsequent expansion should be conditional on robust evaluation.
- Expanded programmes could be integrated with the income-smoothing options canvassed in Chapter 3. Under an unemployment insurance system, for example, the insurer has strong incentives to get a displaced worker back into the workforce. Responsibility for labour-market programmes for their clients might best be assigned to the insurer. Similarly, the changes to the benefit and tax system canvassed could usefully be supplemented by obligations to participate in labour-market programmes.

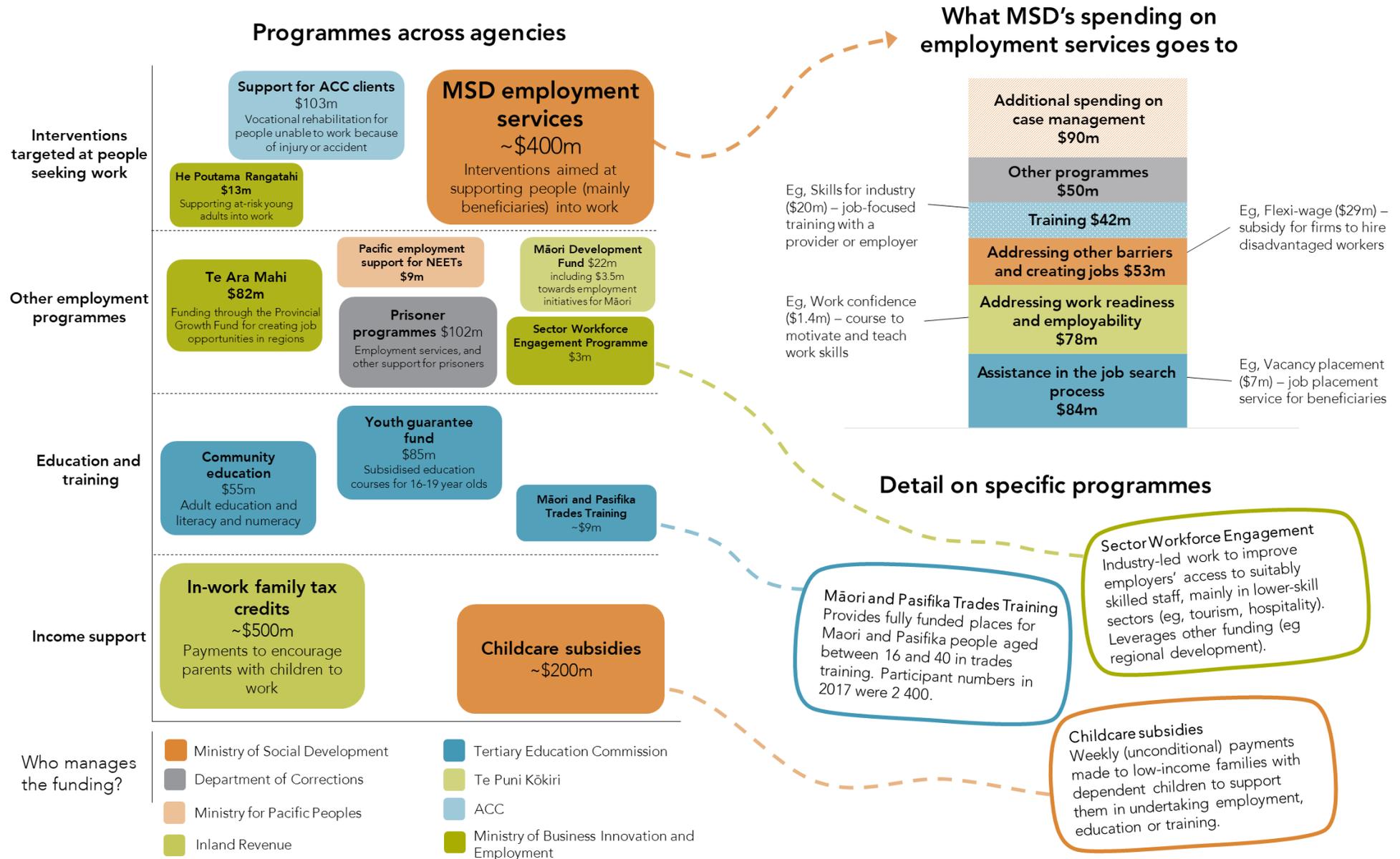
Governments have a wide variety of *labour-market programmes* – that is, programmes and other supports that have, at least in part, employment-related objectives. These programmes are intended to help the unemployed, those at risk of unemployment, or those seeking additional work; or to achieve wider labour-market outcomes.

This chapter examines labour-market programmes due to concerns that technological change will increase the rate of job displacement, and that the adverse effects of this will be borne by disadvantaged groups of New Zealanders. Current New Zealand labour-market indicators do not show any overall increase in job churn or job displacement (Chapter 1). Nonetheless, policy makers should consider whether labour-market programmes could better help New Zealanders manage labour-market change.

4.1 New Zealand's labour-market programmes

The New Zealand Government spends over \$1.6 billion per year on labour-market programmes (Figure 4.1).

Figure 4.1 Labour-market programmes, including ALMPs, New Zealand



Source: Treasury (2019b, 2019a); Te Puni Kōkiri (2018); WEAG (2019a); (2018); de Boer and Ku (2019); (2019); ACC (2018).

Note: Spending is either budgeted spending for 2018/19, or actual spending for 2017/18 (or 2016/17 where this is the latest available).

The estimates in Figure 4.1 exclude spending on the education and training system.

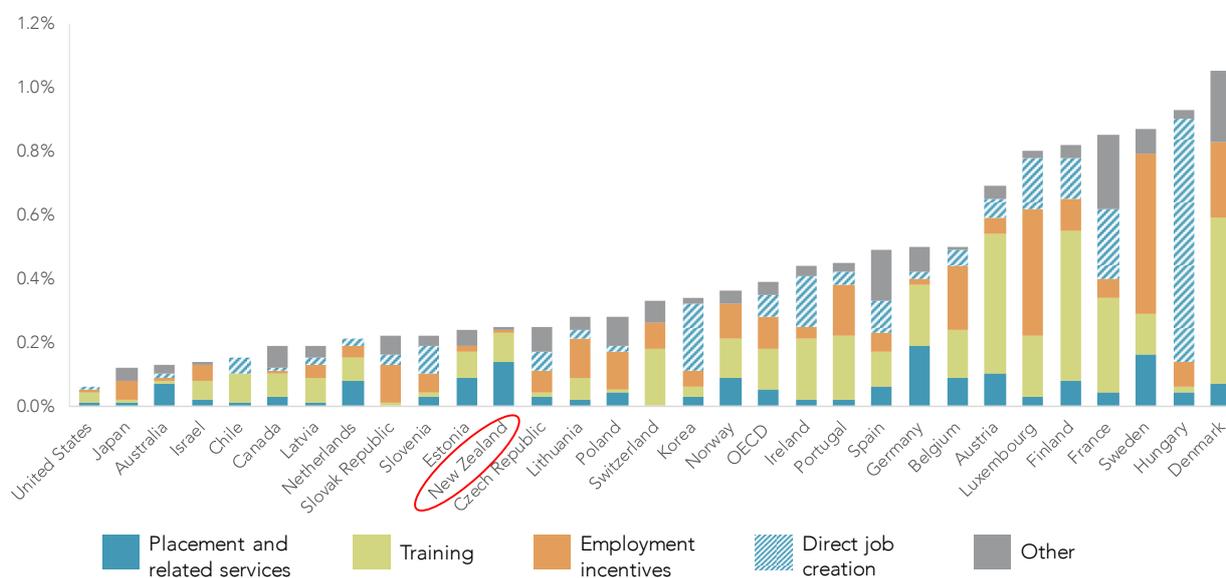
A subset of such programmes is known as active labour-market policies (ALMPs).³⁹ ALMPs is a term used internationally and by the OECD for a variety of government programmes designed and targeted to help people find or sustain employment. New Zealand's annual total spending on ALMPs – based on information reported to the OECD – is around \$700 million (OECD, 2019f).⁴⁰

According to the OECD, New Zealand's spending on ALMPs is low ...

New Zealand's reported spending on ALMPs as a share of GDP is at the lower end of that reported across OECD countries but higher than other "Anglosphere" countries – the United States, Australia and Canada.⁴¹ Nordic countries along with Hungary and France report the highest rates of ALMP spending (Figure 4.2).

New Zealand's reported spending on ALMPs fell from 0.37% of GDP in 2004 to 0.29% in 2016.⁴² New Zealand's spending as a share of GDP was as high as 0.9% of GDP in the late 1980s (Martin, 1998). The latter figure, at the time, put New Zealand above the OECD average and among the highest spenders on ALMPs per-unemployed-person.

Figure 4.2 Public spending on ALMPs as a share of GDP for OECD countries, 2016



Source: Productivity Commission; OECD (2019f).

Notes:

- Figure 4.2 uses a similar approach as OECD (2019c) by excluding spending on (a) ALMPs targeted at people with health disabilities and a reduced capacity to work and (b) administering income support. Although both these are reported as ALMP spending for the purpose of OECD statistics, the former is not directly relevant for displaced workers while the latter is barely related to ALMPs.
- The spending categories are based on the OECD's classification (see OECD (2015) for more details).
- Placement and related services include "employment counselling and case-management, referral to opportunities for work, and information services." Training includes "targeted institutional and workplace-based training". Employment incentives include "incentives where the employer covers the majority of the labour cost, and job rotation/sharing schemes where a targeted person substitutes for an employee for a fixed period" Direct job creation "relates to new jobs where the labour cost is majority funded by public funds for a limited period" (OECD, 2019c).
- The OECD does not have estimates for Greece, Italy and the United Kingdom.

³⁹ "Active" is in contrast to "passive" income supports.

⁴⁰ The estimate of \$700 million includes spending on ALMPs for groups such as youth not in education, employment and training, and people with health conditions and disabilities.

⁴¹ The OECD does not have data on spending for the United Kingdom.

⁴² This reported ALMP spending for 2004 and 2016 includes spending on ALMPs targeted at people with a reduced capacity to work. This spending is not included in Figure 4.2 (see note 1 to the figure).

... but cross-country spending comparisons should be interpreted with caution

For several reasons, cross-country comparisons of ALMP spending should be interpreted with caution. The distinction between policies that do and do not count as ALMPs is arbitrary making international comparison difficult.

- Countries with higher unemployment rates (especially long-term unemployment) will tend to spend more on policies to support people into employment, other things being equal. New Zealand's ALMP spending per-unemployed-person is much closer to the OECD average (WEAG, 2019a).
- Aggregate reported ALMP spending does not capture differences in programme efficiency. Higher spending does not necessarily translate into higher effectiveness.
- Countries operate and report very different mixes of ALMPs, with spending targeted to different groups of people. It is also not clear to what extent the OECD's reported cross-country differences reflect true spending differences, or differences in the ways that member countries classify and report their ALMPs.
- ALMP spending estimates exclude policies with similar objectives to ALMPs, but with broader eligibility or coverage (eg, spending on general vocational training and tertiary education).

Figure 4.2 demonstrates the significant variation in the types of ALMP spending across countries. For example, both Sweden and Denmark have high reported spending. Yet just under 60% of Sweden's reported spending is on employment incentives such as wage subsidies, while about half of Denmark's goes to training programmes. Overall, New Zealand's spending mix on ALMPs is very different to that of other OECD countries. For example, nearly half of all ALMP spending in New Zealand is on job placement and related services. Although New Zealand's total reported spend on ALMPs is relatively small, its spending on ALMP training programmes relative to GDP ranks around the middle of the OECD (OECD, 2019f).

A comparatively low spend on programmes is not by itself a good rationale for increasing a country's spending on ALMPs. As WEAG (2019a, p. 5) noted:

... while there may be a case for higher spending, it should be based on the value to be gained from extra spending, and we should first be confident in the value delivered by the existing spending.

F4.1

Active labour-market policies (ALMPs) is a term used internationally and by the OECD for a variety of government programmes designed and targeted to help people find or sustain employment. The distinction between policies that do and do not count as ALMPs is arbitrary and varies across countries, making international comparison difficult. The mix of spending on ALMPs in New Zealand is very different to that of other OECD countries.

F4.2

New Zealand's spending on AMLPs is low internationally, according to the OECD. This is not, of itself, a reason to increase spending. New Zealand's ALMP spending per-unemployed-person is much closer to the OECD average.

4.2 New Zealand's labour-market programmes are tightly integrated with the welfare system

Labour-market programmes arose in many countries to reduce the risk of long-term benefit dependency.

[They] were primarily developed for people receiving an income replacement benefit, to enforce a principle of "mutual obligation" and contain the risks of benefit dependency, loss of human capital among the long-term unemployed and, ultimately, higher public spending on labour market and social policies. Elements of these strategies typically originated in countries with longer-lasting or indefinite duration insurance or assistance benefits for job seekers. (Immervoll & Scarpetta, 2012, p. 3)

New Zealand largely follows this model, as it provides indefinite benefits for the unemployed and its programmes are tightly integrated with its welfare system. For example, Work and Income delivers both employment and income support services on behalf of the Ministry of Social Development (MSD). Work and Income is commonly referred to as a “one-stop shop”.

Many labour-market programmes are not available to people that might benefit from them

Access in New Zealand is limited for many displaced workers. MSD’s employment services, for example, are mostly for people who are receiving a main benefit (ie, people not in employment or in limited employment, and in low-income households). About two-thirds of people who report losing a job do not receive Jobseeker Support (Chapter 3), which limits their eligibility to MSD funded programmes.

Although linking ALMPs to income support is a common approach in other OECD countries, access to ALMPs in New Zealand is particularly narrow. This is because New Zealand’s income support coverage is narrow compared to most other OECD countries (Chapter 3).

F4.3

Access to ALMPs in New Zealand is narrow compared to most OECD countries. This is because most programmes are linked to income support, and access to income support in New Zealand is narrow.

MSD allocates its employment services funding across specific programmes and towards specific target groups. These allocations are strongly influenced by MSD’s goals: to help get people into work and reduce current and future fiscal costs for government. These goals are appropriate for MSD (NZPC, 2015). The design and delivery of specific programmes also reflect these goals.

A consequence of the close integration of employment and income support services is that many MSD programmes are not available to, or designed for, workers who have lost their job and seek a new one, workers at risk of unemployment, or those seeking to enter the workforce.

F4.4

Employment and income support services are closely integrated within the Ministry of Social Development (MSD). Consequently, many MSD programmes are not available to, or designed for, workers who have lost their job and seek a new one, for workers at risk of unemployment, or for those seeking to enter the workforce but not eligible to receive a main benefit.

4.3 Are labour-market programmes effective?

There is a large gap between good intent and robust evaluation of the effectiveness of labour-market programmes. Few programmes are subject to robust evaluation.

Of labour-market programmes, ALMPs have received more evaluation effort. The results of those evaluations are not encouraging.

Concern about the effectiveness of ALMPs goes back as far as the 1990s. For instance, in 1998, John Martin from the Reserve Bank of Australia argued that:

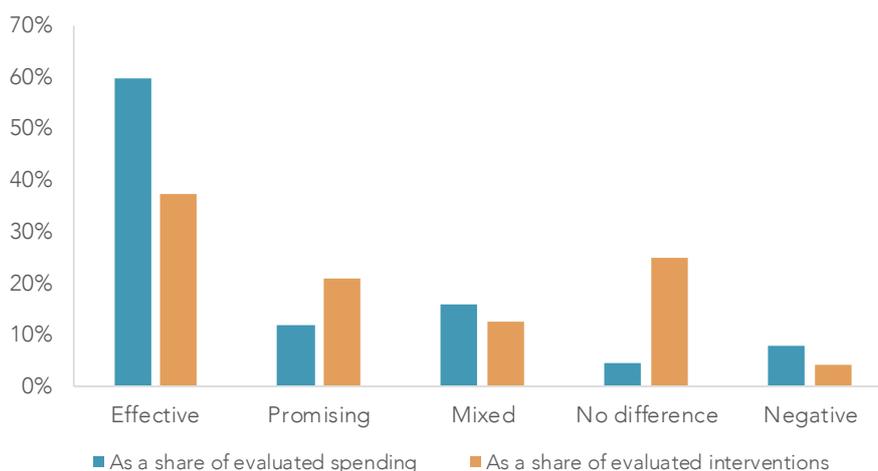
... at first sight, the bottom line from recent OECD research on the effectiveness of active labour market policies is not terribly encouraging. The track record of many active measures is mixed in terms of raising the future employment and earnings prospects of job-seekers and producing benefits to society ... it is important to be realistic about their likely impacts on unemployment; one should not oversell the case for active labour market policies. (Martin, 1998, p. 1)

The effectiveness of ALMPs appears to be highly context specific. International studies evaluating the effect of ALMPs across countries have reported mixed results. For example:

- Card, Kluge and Weber's (2010, p. 3) meta-analysis of 199 programme evaluations (covering 26 countries) concluded that job-search assistance schemes had "generally positive impacts, especially in the short run", while subsidised public-sector employment programmes were "less likely to yield positive impacts". Training programmes were less likely to have positive results in the short run but had higher impacts after two years.
- Immervoll and Scarpetta's (2012, p. 14) review of policies in OECD countries noted that training schemes took time to have positive impacts on employment. The results tended to be "small or insignificant for men" and for basic education courses. Public-sector job creation schemes mostly had negative effects, and evaluations of private-sector job subsidies did not "give a strong indication either way".

MSD evaluates the effectiveness of its employment services annually.⁴³ de Boer and Ku (2019) examined employment services delivered in the 2016/17 year. They evaluated 24 interventions. A further 27 interventions were not evaluated for reasons including that it was too soon to test the interventions effectiveness, and that it was not technically feasible to do so. Just under 60% of the interventions evaluated received an "effective" or "promising" rating (Figure 4.3). These interventions collectively represent about 70% of evaluated spending. A quarter of interventions were rated as making "no difference" while one intervention (the service for youth not in education, employment or training) was rated as having a "negative" impact.

Figure 4.3 Ratings for evaluated MSD employment interventions, New Zealand, 2016/17



Source: Productivity Commission; De Boer and Ku (2019).

Notes:

1. De Boer and Ku excluded case management services.
2. Evaluations were based on the impact on participant outcomes across five domains: time in employment, overall income, time in corrections services, education qualifications gained, and independence of welfare assistance. An "effective" rating means that the intervention had a positive impact on more than one domain (and no negative impact on any other domain), while "promising" means that recent trends suggest the intervention will have a significantly positive impact in the medium to long-term.

Evaluation of social services programmes in New Zealand is patchy and rarely robust (NZPC, 2015). MSD's employment services evaluations are better than most in the wider social-services sector. But these still fall short of the coverage and accuracy required for agencies and governments to know where to direct resources to the greatest effect.

⁴³ Some, but not all, of these services would fit the OECD's definition of an ALMP.

Measuring the performance of labour-market programmes is hard

Evaluating labour-market programmes reliably can be difficult, and in some cases, infeasible (Box 4.1).

Box 4.1 Why it is difficult to evaluate labour-market programmes

Evaluating the effectiveness of labour-market programmes can be challenging, because:

- Some programmes have only a small number of participants. Post-programme evaluations will have a small sample size, and any results are unlikely to have statistical significance.
- Finding an appropriate control group is difficult or infeasible for some programmes. And control groups may not control for unobservable characteristics.
- Isolating the *additional* benefit of a programme is tricky. For instance, some labour-market programmes subsidise activities that participants would have pursued on their own. People who choose to participate in programmes are likely to be more motivated, and motivated people may find a job quickly regardless of programme participation.
- The benefits of some labour-market programmes might take years to fully materialise, so post-programme evaluations are not useful unless undertaken some time after delivery. By then the programme may no longer exist in its original form.
- The indirect effects of programmes, both positive (eg, improved self-esteem) and negative (eg, substitution effects) are typically hard to measure.
- Evaluations focus on individual programmes, so cannot measure the benefits of interactions between different programmes (Immervoll & Scarpetta, 2012).

The statistical power of evaluations can be significantly improved with random assignment of people to interventions. Such assignment, however, is rarely done in New Zealand as it raises political risks for agencies and ministers.

Work opportunities for participants in programmes can come “at the expense of other workers or jobseekers”, because of substitution effects where employers hire subsidised workers rather than other candidates, and displacement effects where firms employing subsidised workers gain market share at the expense of unsubsidised firms (Maré, 2005, p. 32). de Boer and Ku (2019) were “cautious” about their cost-benefit analysis for MSD’s employment services because they had not accounted for effects on non-participants. Substitution and displacement effects are hard to measure, but the available evidence suggests they can be substantial.⁴⁴

Further, it is hard to determine the extent to which a person’s employment outcomes can be attributed to any specific labour-market programme. For instance, some people will find a new job quickly regardless of whether they participated in a programme. Case managers may have incentives to fill programmes with such people, as case manager performance is often measured by the number of their clients moved off benefits. Evaluators can control for selection bias of this type using observable client characteristics, but not the selection bias attributable to unobservable characteristics.

Overall, the Commission cannot say whether New Zealand’s labour-market programmes are effective or not.

F4.5

Reliably measuring the effectiveness of labour-market programmes is challenging. Programme evaluation is patchy and rarely robust. International and New Zealand evidence suggests that labour-market programmes in general, and ALMPs in particular, have mixed effectiveness.

⁴⁴ Dahlberg and Forslund (2005) estimated that employment subsidy programmes in Sweden had substitution effects of around 65%.

A constructive response to measurement difficulties

These difficulties notwithstanding, it is possible to do better. Useful steps include:

- closing down programmes with zero or negative effectiveness;
- building evaluation into the design of all new programmes (to the extent practical);
- steering funding towards programmes whose cost-effectiveness has been robustly established;
- understanding how institutional architecture affects the incentives to evaluate programmes, and the incentives to act on the results of such evaluations;
- the intelligent use of small-scale pilots, with subsequent expansion conditional on robust evaluation; and
- being clear about objectives, target groups and suitable measures of effectiveness (Table 4.1).

Table 4.1 Example labour-market programmes: objectives, target groups and effectiveness measures

Programme	Objective	Target group	Effectiveness measures
Job-brokering services	Improving the speed and quality of matching of jobseekers and jobs	People out of the workforce (or at risk of exiting the workforce) who are work-ready and seeking work	<ul style="list-style-type: none"> • Wages in new job compared to prior job • Length of unemployment • Perception of job-match quality
Industry-focused training	Raising the human capital (and productivity) of jobseekers	People out of work (or at risk of exiting the workforce)	<ul style="list-style-type: none"> • Human capital as measured by education qualifications • Post-training wage and employment outcomes
Wage subsidies for disadvantaged workers	Helping people attain work experience and translating that into ongoing employment	People with low skills or reduced capacity to work	<ul style="list-style-type: none"> • Labour-force participation • Effect on household income • Ongoing employment once subsidies end
Motivational courses for unemployed young adults	Lifting the work-readiness of young adults to assist them into employment.	Young adults, unemployed or dependent on benefits for long periods	<ul style="list-style-type: none"> • Ongoing employment • Independence from the welfare system

4.4 Improving labour-market programmes

Labour-market programmes help people adjust to change

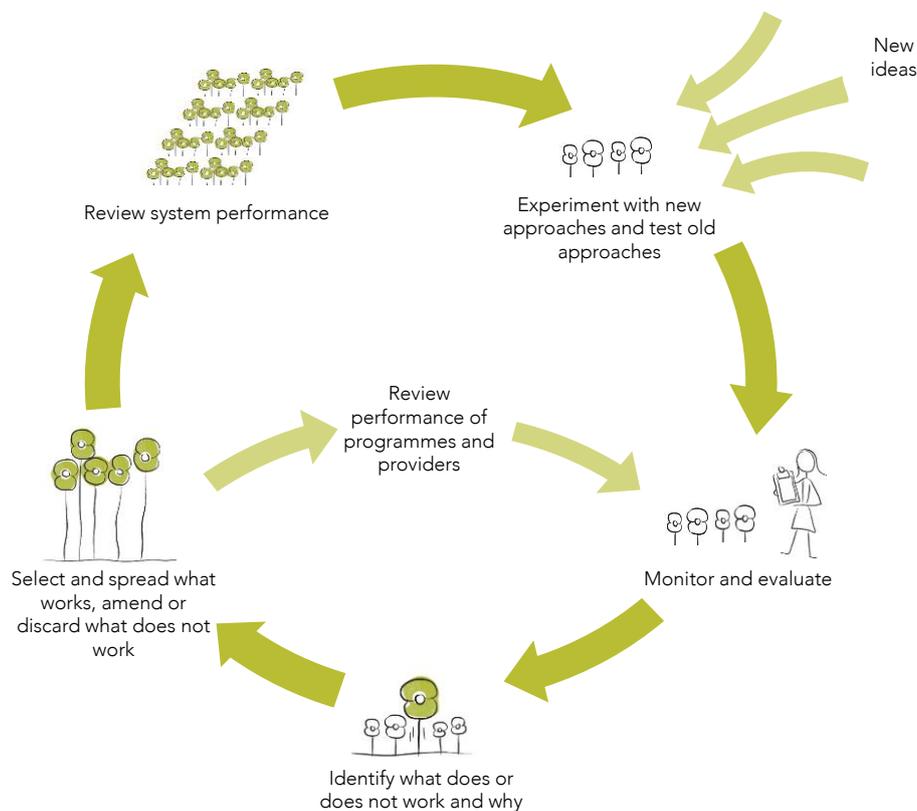
Labour-market programmes can have significant benefits for some people. Johri et al. (2004, p. 2) pointed out that “overall, there is no ‘golden bullet’ or single programme [that] will be successful for all job seekers; however, most programmes are effective for some participants”. Working sometimes for some people, and a perceived need for such programmes, motivates the continuation of existing programmes, and calls for:

- additional funding for existing programmes;
- new programmes targeted at those currently eligible;
- expanded eligibility for existing programmes; and
- new programmes targeted at those not currently eligible.

It is not clear to the Commission which, if any, of these four expansions would lead to an overall improvement in labour-market outcomes for individuals, as the evidence base is lacking. Moreover, such expansions undertaken within the current social services system are unlikely to generate the information that would lead to being able to make better decisions in future.

The Commission's *More effective social services* inquiry (NZPC, 2015) describes the characteristics of a system able to learn (Figure 4.4).

Figure 4.4 A system that learns and innovates



Source: New Zealand Productivity Commission (2015).

Should the Government desire to better support people, or support people currently ineligible, via labour-market programmes then it needs to first consider how to modify the current system so that it learns and innovates. This means considering issues of system architecture, service commissioning and evaluation.⁴⁵ It would be useful to examine moving responsibility for labour-market programmes outside MSD to decouple these programmes from the welfare system.

Labour-market programmes help dynamism

A related but separate motivation for labour-market programmes is to lift the dynamism of labour markets. Like income-smoothing mechanisms (Chapter 3), labour-market programmes can:

- achieve better labour-market matching – by improving job search capability and building skills demanded in the labour market; and
- make workers less fearful about switching jobs and more accepting of labour-market settings that promote dynamism in the economy but reduce job security.

⁴⁵ These issues are addressed in Chapters 5, 6 and 7 respectively of New Zealand Productivity Commission (2015).

F4.6

There would be benefits for displaced workers, at-risk workers and the labour market more generally, if suitable and cost-effective labour-market programmes were available to a wider group of people.

There is patchy information at the present time on the cost-effectiveness of existing programmes for existing clients. This is inadequate to justify expanding these programmes to a wider group of people. The measured introduction of small-scale pilots could generate the information required to be confident that programme expansion would be beneficial.

R4.1

The Government should not create new or expand existing labour-market programmes without considering issues of system architecture, service commissioning and evaluation.

Integrating labour-market programmes with income smoothing

There would be advantages to integrating labour-market programmes with the income-smoothing options canvassed in Chapter 3.

Under an unemployment insurance system (section 3.8), for example, the insurer has strong incentives to get a displaced worker back into the workforce. Responsibility for labour-market programmes for their clients might best be assigned to the insurer, who has the right incentives to design, evaluate and improve programmes for different types of client.

Portable individual redundancy accounts (section 3.7) create incentives for the unemployed to find work. Labour-market programmes can assist them to do so.

Similarly, obligations to participate in labour-market programmes could usefully supplement the changes to benefit and tax credits canvassed in section 3.10.

Chapter 5 considers labour-market programmes and income smoothing in the wider context of a labour market that supports technology adoption.

5 A labour market that encourages technology adoption

Key points

- Labour markets are places that create and sustain employment relationships. Two parties participate in those relationships – firms and workers. Chapters 1–4 focus on the worker side of these relationships. This chapter adds the firm perspective.
- Firms rely on the firm-specific and general human capital of their employees. Firms combine this with physical and intellectual capital to create value for their customers.
- Firms adopt technology to better serve their customers, to reduce costs, to allow expansion, to be more competitive and to improve the work environment. Technology adoption can change the mix of skills and capital they require. Firms are more likely to adopt technology if the adjustment costs they face, including labour-related costs, are low relative to the benefits they anticipate from adoption. Labour-market settings, particularly those that favour workers' job security, can increase these costs.
- The OECD found that overly strict employment protection regulations can reduce job flows, have a negative impact on employment of outsiders, encourage labour market duality and hinder productivity and economic growth. New Zealand is about average within OECD countries on "procedural inconvenience", which includes measures of notification obligations, consultation procedures and delays.
- For workers, income security can at least partially substitute for job security. Income smoothing policies (Chapter 3) and labour-market programmes (Chapter 4) can support workers through change, and reduce the costs faced by firms when restructuring as part of technology adoption.
- Countries that have adopted policies that favour income security over job security are more open to technology adoption on both sides of the employment relationship. This model, termed "flexicurity" is common in Northern Europe. It contrasts with a Southern European model that seeks both job and income security but has poor labour-market outcomes and low technology adoption.
- New Zealand follows a broader "Anglosphere" model, characterised by medium levels of job security with low-to-medium income security for workers. A move from the New Zealand model to flexicurity is attractive on many fronts, including its potential to increase technology adoption and thus improve productivity and living standards.
- Such a move would require parties with bargaining power to reconsider long-held positions. But finding a way to do so could improve productivity, wages and living standards.
- The Tripartite Forum on the Future of Work appears to be a suitable vehicle to further explore a route towards a new labour-market model for New Zealand that is more supportive of technology adoption and productivity growth.

Labour markets are places that create and sustain employment relationships. Two parties participate in those relationships – firms and workers. Chapters 2–4 largely address the worker side of these relationships. This chapter introduces the firm perspective.

The chapter starts by asking what might convince both firms (section 5.1) and workers (section 5.2) to be more open to technology adoption? It then characterises New Zealand's labour market, contrasting it with

Northern and Southern European models (section 5.3). The flexicurity (Northern European) model has many attractive features, including better incentives for technology adoption, whereas the Southern European model is more an example of what to avoid.

The chapter closes with the choice that New Zealand faces (section 0). Moving to flexicurity is attractive, but no-one should be under the illusion that such a move would be straightforward. The Tripartite Forum on the Future of Work is one setting where this discussion could start.

5.1 What might dissuade firms from adopting technology?

Innovation is costly and risky for firms

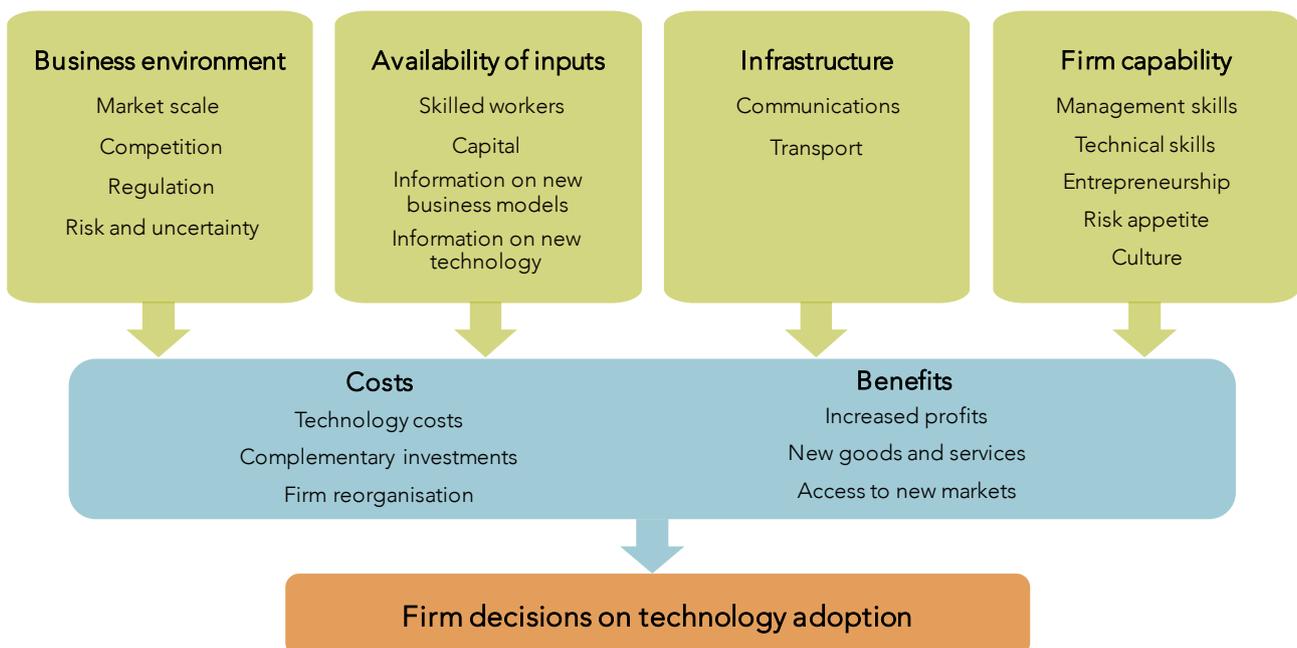
Innovation is costly and risky and has uncertain impacts on firm performance. By changing the way firms do things, innovation exposes them to a very real risk of failure; new products may not catch on or process changes could disrupt systems that were working efficiently. Even when innovation is successful, rivals may copy it and capture a large share of the returns.

To successfully innovate and make the most of new technology, firms need to reinvent many aspects of their operation – including process and service design, software development, organisation structure and marketing. This requires not only R&D capability, but also considerable management expertise. This can be a daunting challenge for firms.

Many factors influence technology adoption decisions

Firms take many factors into account when deciding to adopt technology (Figure 5.1).

Figure 5.1 Factors influencing firm decisions to adopt technology



Source: Based on NZPC (2014, fig. 9.2).

Surveys suggest that the main factors that discourage New Zealand firms from investing in technology are the overall financial case and limited capital, and, of lesser importance, limited information, and limited access to skills (NZPC, 2014). The Commission is interested in learning more about the factors that influence the technology adoption decisions of New Zealand firms.

Q5.1

Does Figure 5.1 fully capture the factors that influence the technology adoption decisions of New Zealand firms? Which factors are the most influential, and why?

This chapter concentrates on labour-market costs as part of the overall financial case. More specifically, it addresses workforce adjustment costs. The inquiry's draft report 3 will cover access to skills, and draft report 4 will address other aspects of the overall financial case, along with access to information and capital.

Labour is valuable

Labour represents a significant cost for most firms, but labour is also valuable. Firms rely on the firm-specific and general human capital of their employees. Firms combine this with physical and intellectual capital to create value for their customers. A workplace is a community. The Institute of Directors emphasised that:

... having a strong culture will be a key factor in creating and maintaining a strong work ecosystem and team ... adopting an agile working model, building a culture that fosters the continuous learning and wellbeing of employees, and building an inclusive culture that fosters the acceptance of different sources of labour including digital, human and gig workers. (sub. 4, p. 6)

Firms adopt technology to better serve their customers, to reduce costs, to allow expansion, to be more competitive and to improve the work environment. Technology adoption can change the mix of skills and capital they require. However, firms face a variety of adjustment costs when adopting technology.

Q5.2

What adjustment costs discourage firms from adopting technology? How relevant are they in a New Zealand setting?

Restructuring costs

Firms are more likely to adopt technology if the adjustment costs they face, including labour-related costs, are low relative to the benefits they anticipate from adoption. Labour-market settings, particularly those that favour workers' job security, can increase these costs.

Technology adoption can involve some combination of:

- upskilling existing workers;
- hiring new workers;
- changing the work performed by existing workers; and
- making existing workers redundant.

Labour law in New Zealand constrains firm behaviour on the last two of these points, though it can indirectly affect the first two.

In cross-country analyses of labour markets, New Zealand rates as comparatively flexible (eg, OECD (2013)). And indeed, it lacks some of the job-security regulation found in other countries. Job-security regulation in New Zealand is primarily concerned with process. As long as a firm successfully navigates the specified process, then, in theory at least, it can restructure its workforce at relatively low cost.

In a 2013 comparison of employment protection legislation across the OECD, New Zealand had very low notice and severance pay requirements for no-fault dismissal, and was somewhat below the OECD average in "difficulty of dismissal" – the extent to which legal processes favour worker protections over employer flexibility. However, for "procedural inconvenience", which includes measures of notification obligations, consultation procedures and delays, New Zealand was close to the average (OECD, 2013, fig. 2.4).

[Employment protection legislation (EPL)] – the rules governing the hiring and firing of workers – can be justified by the need to ensure that firms internalise some of the social costs of labour turnover as well as protecting workers from arbitrary actions by their employers. Nevertheless, by restricting labour turnover, EPL also constrains firms' ability to respond quickly to changes in technology or consumer demand and efficiently reallocate labour resources. Recent research on the labour market impact of employment protection has found that overly strict regulations can reduce job flows, have a negative impact on employment of outsiders, encourage labour market duality and hinder productivity and economic growth. (OECD, 2013, p. 68)

There is some evidence to suggest that New Zealand’s employment protection legislation creates costs and legal risks for firms. Firms fear a legal challenge that might complicate or delay a restructure. Legal cases are decided on whether the firm strictly adhered to the specified process.

The Commission is interested in understanding the costs and risks that New Zealand firms face in adjusting their workforces as a consequence of adopting technology.

Q5.3

How difficult and expensive is it for New Zealand firms to adjust their workforces when adopting technology? More specifically, how does employment protection legislation affect their ability to:

- upskill existing workers?
- hire new workers?
- change the work performed by existing workers?
- make existing workers redundant?

5.2 What puts off workers and the public from supporting technology adoption?

Workers are concerned about technology and job loss

The Institute of Directors (sub. 4, p. 6) reported on worker concerns from the 2019 Edelman Trust Barometer:

- 59% of employees are worried about job loss due to [a] lack of the necessary training and skills to get a good paying job; and
- 55% are worried about job loss due to automation and/or other innovations taking their job away.

NZPC (2019) found fears of mass job losses from automation to be unsubstantiated. However, it is unrealistic to expect worker fears to diminish in the short-to-medium term. And people may be legitimately concerned about their own circumstances, regardless of the average or aggregate effects of technological change.

Public acceptance of new technology may require supportive institutions

Researchers have argued that social support systems underpin economically dynamic and productive societies. Hammond (2018, pp. 1–2), for example, proposed rejecting the “prevailing view of social welfare ... as simply a tool for addressing poverty or income inequality” and instead viewing social insurance as a “risk-pooling arrangements [that] represent a positive-sum, cooperative institution”. When designed well, such programmes can “promote entrepreneurial risk-taking and ease credit constraints in low-income households” and “address the ‘adjustment costs’ associated with globalization and rapid technological change” (ibid).

Swedish economic historian Carl Benedikt Frey (2019) argued that many developed countries face the risk of a “technology trap”, in which income and economic growth slows because public concern acts as a brake on the introduction of new technologies. Frey noted that this trap explains why living standards were stagnant for much of history, and policies that eased adjustment costs for affected workers facilitated technological adoption.⁴⁶ Frey has argued for more generous and broader-based assistance (eg, tax credits, retraining grants, unemployment insurance) to help smooth transitions, and regulatory reform to make it easier for people to move locations and jobs (eg, zoning reform, occupational licensing reform).

⁴⁶ For example, the “Old Poor Law”, a collection of laws passed between the 16th and 18th centuries, provided income support.

Bredgaard and Daemmrich (2012, p. 2) described the Danish “flexicurity” system (Box 3.2) as a strategy for “economic competitiveness and sustainable national prosperity”.

Firms in Denmark gain competitive advantages from a mobile labour force and government funding of public services and infrastructure, while workers benefit from domestic employment opportunities and continuing training.

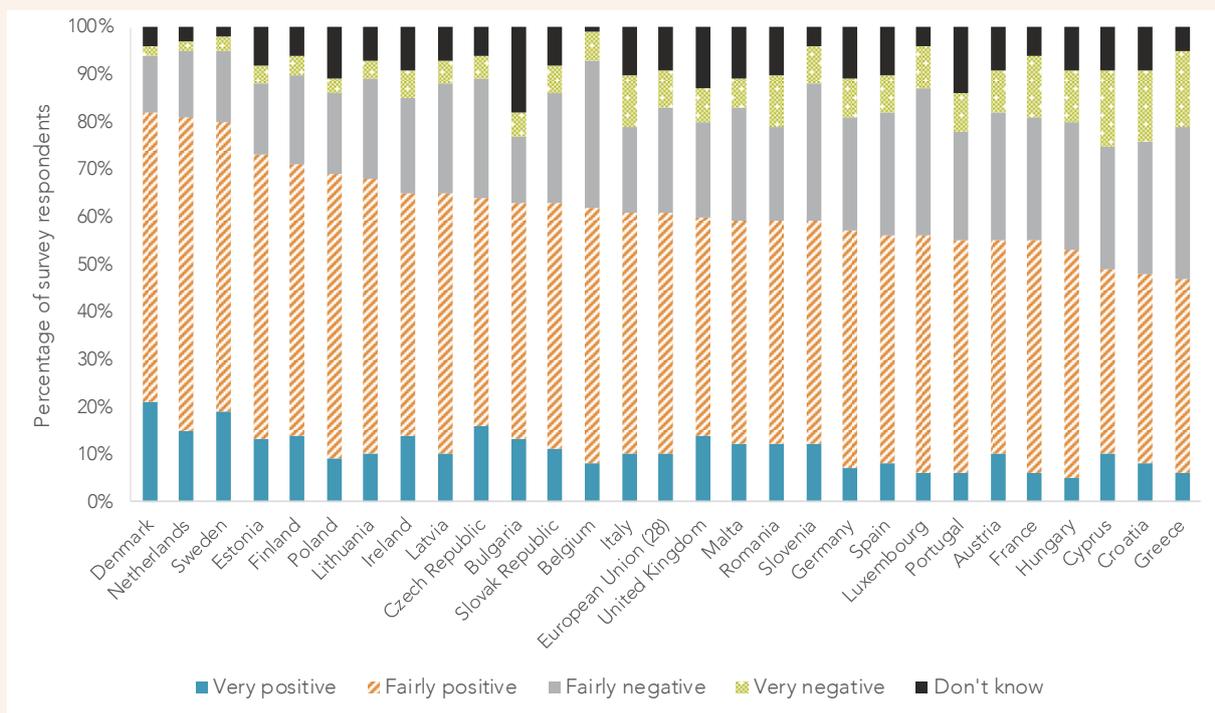
They contend that the flexicurity model played a role in Denmark’s “rather uniquely smooth transition from an economy dominated by manufactured goods and agricultural products to rising international trade in services” (p. 8), in part because it gave workers more confidence that they could adjust. The Danish approach effectively seeks to increase workers’ *income security* (through training support that keeps their skills current and employment opportunities broad, and income support that provides greater smoothing of consumption), rather than *job security*. Chapter 3 explores this distinction.

It is notable that people in Denmark, Finland, Sweden and the Netherlands have some of the most favourable attitudes towards technology (Box 5.1). These countries’ labour-market institutions have similar characteristics. These institutional arrangements appear to encourage favourable attitudes to technology.

Box 5.1 Favourable attitudes to technology

Denmark, Finland, Sweden and the Netherlands, all with similarly supportive policies and institutions for displaced workers, have some of the most favourable attitudes in Europe towards emerging technologies. Also notably, countries with higher levels of job protections, such as France (Tirole, 2017), have some of the least favourable attitudes towards robots and artificial intelligence (Figure 5.2).

Figure 5.2 Attitudes towards robots and artificial intelligence, EU countries, 2017



Source: Productivity Commission; European Commission (2017).

Chapters 3 and 4 make the case that improved income smoothing and labour-market programmes can reduce the risks that workers face, and in doing so contribute to worker acceptance of technology adoption.

Q5.4

What influences the attitudes of New Zealand workers and the public towards technology adoption in the workplace?

Chapter 2 points out that while fears of technological job displacement and gig work have spread from other countries to New Zealand, those countries have very different labour-market settings. The consequences of changing jobs are lower for New Zealand workers than for workers in countries where health insurance, maternity provisions, pensions etc. are tied to their current job.

Q5.5

What adjustment costs drive workers' fears of technology adoption in New Zealand?

5.3 Characterising New Zealand's labour market

Three international models of labour-market settings

Tirole (2017, p. 234) identified three groups of countries with very different labour-market outcomes:

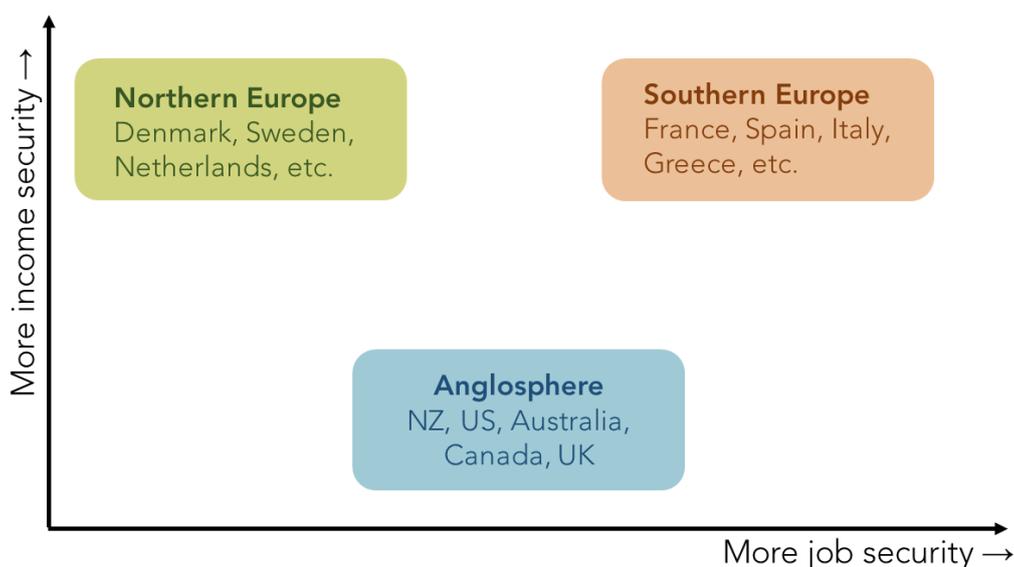
Unemployment is much higher in France than in Northern European countries (Germany, the Netherlands, the Scandinavian countries) or the developed English-speaking countries (US, UK, Canada, Australia).

These country groups have very different labour-market settings. They can be very broadly characterised as:

- Southern Europe – high job security, low labour-market flexibility, high income security, high public spending on labour-market programmes.
- Northern Europe – low job security, high labour-market flexibility, high income security, high public spending on labour-market programmes.
- Anglosphere – medium job security, medium labour-market flexibility, low-to-medium income security, low public spending on labour-market programmes.

Notwithstanding significant differences between countries within each group, these groupings seem robust. Figure 5.3 shows a highly stylised representation of where these groups sit on two axes: income security and job security.

Figure 5.3 Three international models of countries' labour-market settings



Not shown in Figure 5.3 is the relationship between the axes and two outcomes: unemployment levels and technology adoption. Generally speaking, unemployment levels are generally lower in the bottom left corner and higher in the upper right corner. Technology adoption is higher in the bottom left corner and lower in the upper right corner. However, there are substantial differences in technology adoption rates across the Anglosphere countries. The United States, for example, has much higher technology adoption than does New Zealand.

Antipodean countries (Australia and New Zealand) stand out from the other Anglosphere countries not having unemployment insurance. The Commission is interested in whether the characterisation in Figure 5.3 is useful and, if so, whether the countries are correctly placed.

Q5.6

Does it make sense to group New Zealand with the other four “Anglosphere” countries in Figure 5.3? If not, where would you place New Zealand?

5.4 A new labour-market model for New Zealand?

High-income economies are characterised by highly skilled workers with high capital-intensity jobs and the rapid uptake of emerging technologies. These features drive a high output per hour worked – that is, high labour productivity – and support high incomes and living standards. The New Zealand economy appears stuck with low wages, low productivity growth, low economic growth and low technology adoption, compared to better-performing countries. What would it take to move it?

A new model for New Zealand’s labour market would have to be part of such a move. The Northern European (“flexicurity”) model appears attractive on many fronts, including its potential to increase technology adoption and thus improve productivity and living standards. Such a move would require parties with bargaining power to reconsider long-held positions. But finding a way to do so could improve productivity, wages and living standards.

It is hard to shift from here to there

There are economic and political reasons why it is hard to move.

- Prices are “baked” into the current system. This includes wage levels and business investments.
- Settings in the current system are self-reinforcing.
- Each party with bargaining power stands to lose something in the short run, notwithstanding the likelihood of being better off in the long run.
- Fears of ending up in a worse position discourages even trying.

A cooperative solution is possible

A cooperative solution is possible if each major party sees benefit in the entire package of changes, even though specific changes may be to their detriment. Parties may have to overcome their history and culture to sign up to a package that contains measures they have resisted in the past.

Broadly speaking, a move to flexicurity could be a net benefit for firms, workers and government.

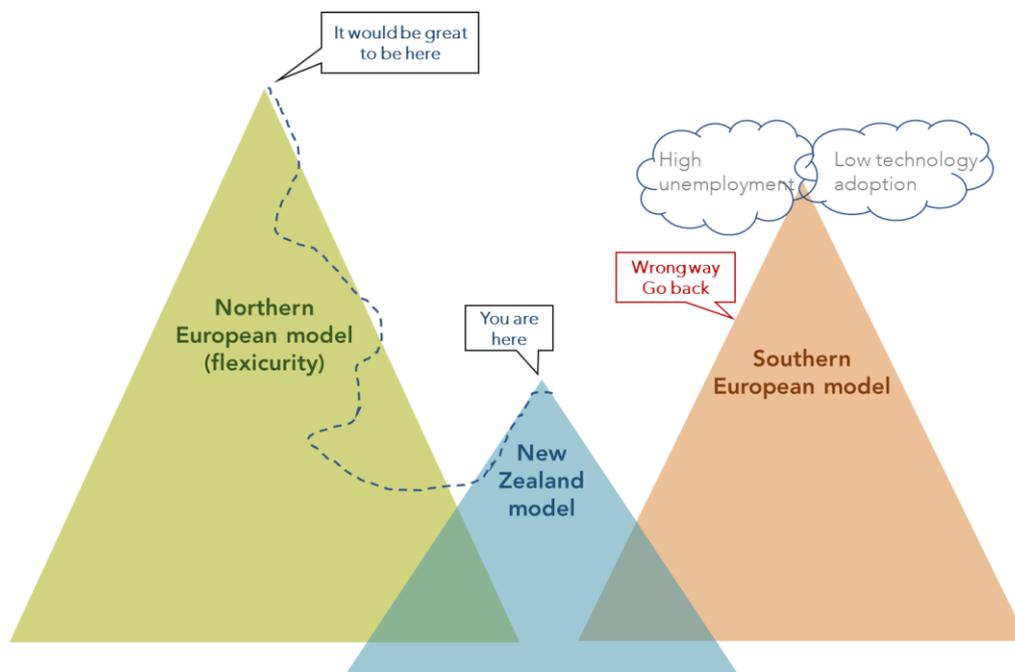
- For current workers, an increase in income security may offset a reduction in job security. They may face lower net wages, through contributions to, for example, portable individual redundancy accounts, and/or a higher level of general taxation. Higher overall productivity would allow for ongoing wage growth.
- For the future workforce, there would be greater rewards to investment in their skills and more opportunities to increase their wages and conditions by moving jobs.
- For government, this move should improve productivity and living standards. However, it would increase fiscal costs, necessitating higher taxes. The Government will likely carry residual risk in an unemployment insurance scheme or find itself topping up portable redundancy accounts with low balances. Any move from the status quo could be politically risky.
- For firms, lower restructuring costs and lower labour-market process costs could be attractive. But firms would have to accept higher labour costs, such as those necessary to support an unemployment insurance scheme, and/or a higher level of general taxation. Easier technology adoption could boost productivity and profits.

Microsoft (sub. 43, attachment 1, p. 133) identified the opportunity for firms:

... businesses should engage in discussions about the importance of next-generation versions of unemployment insurance and employment services that take into account newer models of work; anticipate that individuals may move in and out of the workforce with greater frequency; promote greater labor mobility; and help workers gain new skills and connect with new opportunities.

New Zealand's position might be described as standing on the summit of a foothill, with a view to higher mountains (Figure 5.4). A step in any direction would be downhill, and likely to be resisted by those negatively affected in some way. But finding a route to a higher peak could benefit all.

Figure 5.4 The route from here to there starts by going downhill



F5.1

There is a strong case for the Government to consider whether a move to a flexicurity model for New Zealand's labour market is desirable.

Should the Government accept this case, it would then need to consider how to proceed.

Who would need to be at the table?

The Government, and representatives of workers and firms would need to be involved. Unions and employer groups at least partially cover existing workers and firms. However, the interests of their existing members may conflict with those of other existing and future workers and firms. It is these people that have a large stake in the future of work.

Government has a special role. It needs to represent directly, or ensure the representation of, potential workers and firms, and the wider public interest. The Government is also a large employer in New Zealand, and their interests as an employer may not be fully compatible with the wider public interest.

A role for the Tripartite Forum?

The Tripartite Forum on the Future of Work could usefully explore a transition to a flexicurity approach. It would require a commitment to work together and a willingness to reconsider long-held positions. The role of the Government within the Forum would be to represent those not at the table.

F5.2

The Tripartite Forum on the Future of Work appears to be a suitable vehicle to further explore a route towards a new labour-market model for New Zealand that is more supportive of technology adoption and productivity growth.

Findings, recommendations and questions

Chapter 1 – Technology and the New Zealand labour market

Findings

F1.1

Distinguishing the effects of technology from other sources of labour-market change is hard and not necessarily helpful for policy making. Policies to support workers adversely affected by labour-market change should treat those affected by technology no differently from those similarly affected by other causes.

F1.2

Inwards and outwards migration are responsible for numerically larger effects on the size and composition of New Zealand's labour force than is the output of its school system.

Policy makers, employers, unions and others often characterise the broader education system as a "skills pipeline". Inwards and outwards migration, and changes in the labour-supply choices of the existing workforce, invariably overwhelm attempts to forecast demand and fine tune the supply of skills in the workforce.

F1.3

Demographic and social changes have seen an increase in the proportions of women and older people participating in the labour market, alongside high levels of net migration. New Zealand has had low rates of unemployment while having its highest-ever rates of labour-force participation. Under-employment is also low and largely short term. All these factors are strengths of New Zealand's current labour market.

F1.4

New Zealand's labour market appears dynamic on multiple measures, which is a further strength of the labour market. However, data on the rate at which people switch from one job to another does not point to increasing labour-market dynamism over the past two decades.

F1.5

New Zealand has persistently weak labour productivity growth. Growth since 1996 has averaged 1.4%. It has further slowed since the Global Financial Crisis, in common with other advanced economies.

F1.6

New Zealand's economic growth since 1996 has been achieved mostly through more people participating in the workforce rather than by improving productivity as measured by the value of output per hour worked. This type of growth does not support increased wages.

F1.7

Average New Zealand wages are around three-quarters of those in Australia, and below those in many advanced economies.

F1.8

The benefits and costs of greater technology adoption will likely fall unevenly on workers and households, creating significant costs for some. However, to lift overall incomes and wellbeing, policy settings must encourage greater technology adoption. Government should resist policies that protect existing firms and workers as these tend to discourage technology adoption.

Chapter 2 – Digital platforms, gig work and employment relationships

Findings

F2.1

Issues of insecure work, poor job quality, low wages and equity of opportunities are not specific to digital labour platforms. Policies should target these issues rather than the platforms or their underlying technology.

F2.2

That people make trade-offs to participate on labour platforms is not in itself a policy problem. Trade-offs are a feature of participation in most, if not all, social and economic processes.

F2.3

Digital labour-platform operators seek to recruit and retain participants to achieve market liquidity, scale economies and network effects. Operators are sensitive to reputation and platform switching. So that poor performance and bad practices have reputational consequences, the Government should encourage choice and mobility between platforms and transparency of their labour-market practices. This approach is preferable to the prescriptive regulation of platform business models and rules.

F2.4

The proportion of people doing platform-mediated “gig work” is very small in New Zealand, and there is little evidence of an increasing trend. Most workers undertake platform-mediated work for short periods, and for supplementary income, rather than as a main job.

F2.5

Increases in platform-mediated work may not be to the detriment of traditional jobs. There are limits to the potential for jobs to be subdivided into discrete tasks and shifted to work-mediating platforms. Traditional employment models will likely predominate where job- and firm-specific skills and knowledge matter, continuity of relationships is valuable, or firms value self-directed workers.

F2.6

In contrast to many other countries, New Zealand’s healthcare, income support, tax and worker’s compensation (ACC) systems treat employees and contractors on a largely equivalent basis. This reduces incentives for firms to classify workers as contractors to avoid costs, and the extent to which contractors and the self-employed are disadvantaged compared to employees.

F2.7

Legal risks discourage firms from offering better conditions and benefits to contractors. Clarifying the law on the employment status of workers and contractors could incentivise firms to compete on quality and conditions of work.

One way to do this would be to provide some form of “safe harbour” to firms wishing to offer benefits such as access to group discounts, training or health support to their contractors.

F2.8

There is no strong case for the introduction of a new category of employment status between employee and contractor.

Recommendations

R2.1

Stats NZ should work with the Ministry of Business, Innovation and Employment and Inland Revenue to improve measurement of non-standard work and of work mediated by digital labour platforms.

R2.2

The Government should explore options to modify the legal tests for employee status. The tests should focus on the fundamental nature of the work relationship – the extent of employer control, worker autonomy and choice, and the extent of lock-in to a specific firm. Whether work is “fundamental” or “supplementary” to a firm’s business should not be part of the legal test.

R2.3

To give greater legal certainty to firms that wish to offer independent contractors a wider range of benefits and support, the Government should explore options to provide some form of “safe harbour” that reduces the risk of legal challenge to the employment status of their contractors.

Chapter 3 – Income smoothing for workers

Findings

F3.1

Workers who lose their job can face lower earnings in subsequent jobs. Such “income scarring” appears to be large and long lasting in New Zealand. However, research is based on small samples and is possibly subject to selection effects. Further research would help to better understand the extent and causes of income scarring in New Zealand.

F3.2

Poor job matches may contribute to income scarring in New Zealand. Financial stress on displaced workers and New Zealand’s thin labour markets may underlie poor job matches.

F3.3

Improved income smoothing mechanisms in New Zealand would increase the wellbeing of displaced workers. It would also facilitate labour-market dynamism, improve labour-market matching, build human capital, and foster favourable attitudes towards technology adoption.

F3.4

Mandatory redundancy payments provide a source of income for displaced workers to use while they look for work. However, mandatory redundancy payments directly increase the cost of labour, and can encourage non-standard forms of employment over standard forms. Payments received do not reflect the costs that displaced workers face. Further, mandatory schemes blunt voluntary signalling of job security.

F3.5

Portable individual redundancy accounts could promote labour-market flexibility while enhancing income security. However, such accounts do not pool risk across workers, and may provide low levels of support for young workers or those who experience multiple job losses.

F3.6

An unemployment insurance system funded by employers and workers, with payments linked to previous earnings, would smooth the incomes of displaced workers. It could be designed to cover self-employed workers. However, it would reduce net wages, increase the cost of labour, and discourage hiring.

F3.7

Technological change does not create a case for a universal basic income in New Zealand. Universal and unconditional payments to a wide population are unavoidably expensive if they are set at levels that support a decent standard of living. There are better ways to address concerns about technological change.

F3.8

A package of changes to benefits and tax credits that provide greater, time-limited, support for displaced workers would build off an existing system that is relatively neutral to work arrangements. Unlike portable individual redundancy accounts and unemployment insurance, changes to benefits and tax credits would not discourage hiring because they would be funded from general taxation.

However, such changes could involve significant costs to the Government and greater complexity (especially the interaction between benefits and taxes, and impacts on effective marginal tax rates).

Chapter 4 – Labour-market programmes

Findings

F4.1

Active labour-market policies (ALMPs) is a term used internationally and by the OECD for a variety of government programmes designed and targeted to help people find or sustain employment. The distinction between policies that do and do not count as ALMPs is arbitrary and varies across countries, making international comparison difficult. The mix of spending on ALMPs in New Zealand is very different to that of other OECD countries.

F4.2

New Zealand's spending on AMLPs is low internationally, according to the OECD. This is not, of itself, a reason to increase spending. New Zealand's ALMP spending per-unemployed-person is much closer to the OECD average.

F4.3

Access to ALMPs in New Zealand is narrow compared to most OECD countries. This is because most programmes are linked to income support, and access to income support in New Zealand is narrow.

F4.4

Employment and income support services are closely integrated within the Ministry of Social Development (MSD). Consequently, many MSD programmes are not available to, or designed for, workers who have lost their job and seek a new one, for workers at risk of unemployment, or for those seeking to enter the workforce but not eligible to receive a main benefit.

F4.5

Reliably measuring the effectiveness of labour-market programmes is challenging. Programme evaluation is patchy and rarely robust. International and New Zealand evidence suggests that labour-market programmes in general, and ALMPs in particular, have mixed effectiveness.

F4.6

There would be benefits for displaced workers, at-risk workers and the labour market more generally, if suitable and cost-effective labour-market programmes were available to a wider group of people.

There is patchy information at the present time on the cost-effectiveness of existing programmes for existing clients. This is inadequate to justify expanding these programmes to a wider group of people. The measured introduction of small-scale pilots could generate the information required to be confident that programme expansion would be beneficial.

Recommendations

R4.1

The Government should not create new or expand existing labour-market programmes without considering issues of system architecture, service commissioning and evaluation.

Chapter 5 – A labour market that encourages technology adoption

Findings

F5.1

There is a strong case for the Government to consider whether a move to a flexicurity model for New Zealand's labour market is desirable.

F5.2

The Tripartite Forum on the Future of Work appears to be a suitable vehicle to further explore a route towards a new labour-market model for New Zealand that is more supportive of technology adoption and productivity growth.

Questions

Q5.1

Does Figure 5.1 fully capture the factors that influence the technology adoption decisions of New Zealand firms? Which factors are the most influential, and why?

Q5.2

What adjustment costs discourage firms from adopting technology? How relevant are they in a New Zealand setting?

Q5.3

How difficult and expensive is it for New Zealand firms to adjust their workforces when adopting technology? More specifically, how does employment protection legislation affect their ability to:

- upskill existing workers?
- hire new workers?
- change the work performed by existing workers?
- make existing workers redundant?

Q5.4

What influences the attitudes of New Zealand workers and the public towards technology adoption in the workplace?

Q5.5

What adjustment costs drive workers' fears of technology adoption in New Zealand?

Q5.6

Does it make sense to group New Zealand with the other four "Anglosphere" countries in Figure 5.3? If not, where would you place New Zealand?

References

- ACC [Accident Compensation Corporation]. (2018). Annual report 2018. Retrieved from <https://www.acc.co.nz/assets/corporate-documents/a85ddef227/ACC-Annual-Report-2018-ACC7919.pdf>
- ACC. (2019). Getting paid if you can't work. Retrieved from www.acc.co.nz/im-injured/financial-support/weekly-compensation/?smooth-scroll=content-after-navs
- Acemoglu, D., & Shimer, R. (2000). Productivity gains from unemployment insurance. *European Economic Review*, 44, 1195–1224.
- AlphaBeta. (2019). *Flexibility and fairness: What matters to workers in the new economy*. Retrieved from alphaBeta strategy x economics website: <https://ubernewsroomapi.10upcdn.com/wp-content/uploads/2019/03/Alphabetareport-Flexibility-and-fairness-what-matters-to-workers-in-the-new-economy.pdf>
- Andrea Bassanini, & Garnero, A. (2012). Dismissal protection and worker flows in OECD countries: Evidence from cross-country/cross-industry data. *Labour Economics*.
- Andrews, D., Deutscher, N., Hambur, J., & Hansell, D. (2019). *Wage growth in Australia: Lessons from longitudinal microdata*. Retrieved from The Australian Treasury website: https://treasury.gov.au/sites/default/files/2019-07/2019-04_wage_growth_in_australia_lessons_from_longitudinal_microdata.pdf
- APC [Australian Productivity Commission]. (2016). *Digital disruption: what do governments need to do?* [Productivity Commission research paper]. Retrieved from Australian Productivity Commission website: <https://www.pc.gov.au/research/completed/digital-disruption/digital-disruption-research-paper.pdf>
- APC, & NZPC [Australian Productivity Commission & New Zealand Productivity Commission]. (2012). *Strengthening trans-Tasman economic relations*. Retrieved from New Zealand Productivity Commission website: www.productivity.govt.nz/assets/Documents/760c766c01/Final-report-v4.pdf
- APC, & NZPC. (2019). *Growing the digital economy in Australia and New Zealand: maximising opportunities for SMEs*. Retrieved from New Zealand Productivity Commission website: https://www.productivity.govt.nz/sites/default/files/Growing%20the%20digital%20economy%20in%20Australia%20and%20New%20Zealand_Final%20Report.pdf
- Arthur, D. (2016). Basic income: a radical idea enters the mainstream. Retrieved 22 March 2019, from https://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary_Library/pubs/rp/rp1617/BasicIncome#_Toc467232164
- Asenjo, A., & Pignatti, C. (2019). *Unemployment insurance schemes around the world: Evidence and policy options* (No. 49; p. 43). Retrieved from International Labour Office (ILO) website: https://www.ilo.org/wcmsp5/groups/public/---dgreports/---inst/documents/publication/wcms_723778.pdf
- Australian Fair Work Ombudsman. (n.d.). Redundancy overview. Retrieved from Australian Government Fair Work Ombudsman website: <https://www.fairwork.gov.au/ending-employment/redundancy>
- Balaram, B., Warden, J., & Wallace-Stephens, F. (2017). *Good gigs: a fairer future for the UK's gig economy*. Retrieved from RSA Action and Research Centre website: https://www.thersa.org/globalassets/pdfs/reports/rsa_good-gigs-fairer-gig-economy-report.pdf
- Baldwin, R. (2019). *The globotics upheaval: Globalization, robotics, and the future of work*. New York, USA: Oxford University Press.

- Berger, T., Chen, C., & Frey, C. B. (2018). Drivers of disruption? Estimating the Uber effect. *European Economic Review*, 110, 197–210. <https://doi.org/10.1016/j.euroecorev.2018.05.006>
- Bloom, N., Handley, K., Kurmann, A., & Luck, P. (2019). *The impact of Chinese trade on U.S. employment: The good, the bad, and the apocryphal*. Retrieved from https://nblloom.people.stanford.edu/sites/g/files/sbiybj4746/f/bhkl_posted_draft.pdf
- Bouzol-Broitman, B., Thevenon, O., Adema, W., & Clarke, C. (2016). *Be Flexible! Background brief on how workplace flexibility can help European employees to balance work and family*. [Briefing paper]. Retrieved from OECD Directorate for Employment, Labour and Social Affairs website: <https://www.oecd.org/els/family/Be-Flexible-Background-Workplace-Flexibility.pdf>
- Bredgaard, T., & Daemrich, A. (2012, July 2). *The welfare state as an investment strategy: Denmark's flexicurity policies*. Presented at the International Labour and Employment Relations Association Congress, Philadelphia, USA. Retrieved from <http://ilera2012.wharton.upenn.edu/RefereedPapers/BredgaardThomas%20ArthurDaemrich.pdf>
- Butler, S. (2018, June 28). Deliveroo couriers win six-figure payout in employment rights case. *The Guardian*. Retrieved from <https://www.theguardian.com/business/2018/jun/28/deliveroo-couriers-win-six-figure-payout-in-employment-rights-case>
- Caliendo, M., Tatsiramos, K., & Uhlendorff, A. (2013). Benefit duration, unemployment duration and job match quality: A regress-discontinuity approach. *Journal of Applied Econometrics*, 28(4), 604–627. <https://doi.org/10.1002/jae.2293>
- Campbell, A. F. (2019, September 18). California just passed a landmark law to regulate Uber and Lyft. Retrieved 16 October 2019, from Vox website: <https://www.vox.com/2019/9/11/20850878/california-passes-ab5-bill-uber-lyft>
- Card, D., Chetty, R., & Weber, A. (2007). Cash-on-hand and competing models of intertemporal behavior: New evidence from the labor market. *The Quarterly Journal of Economics*, 50.
- Card, D., Kluve, J., & Weber, A. (2010). *Active labor market policy evaluations: A meta-analysis* (No. w16173). National Bureau of Economic Research. Retrieved from <https://doi.org/10.3386/w16173>
- Causa, O., & Hermansen, M. (2018). *Income redistribution through taxes and transfers across OECD countries* [Working Paper]. Paris: OECD.
- CIPD. (2017). *To gig or not to gig? Stories from the modern economy*. Retrieved from Chartered Institute of Personnel and Development website: https://www.cipd.co.uk/Images/to-gig-or-not-to-gig_2017-stories-from-the-modern-economy_tcm18-18955.pdf
- Coleman, A., & Zheng, G. (2019). *Job-to-job transfers and the regional job-ladder* [Productivity Commission Working Paper]. Wellington: New Zealand Productivity Commission.
- Coleman, A., Zheng, G., & Maré, D. (2019). *New jobs, old jobs and the evolution of work in regional New Zealand* [Research Note]. Retrieved from New Zealand Productivity Commission website: <https://www.productivity.govt.nz/research/new-jobs-old-jobs/>
- Coote, A., & Yazici, E. (2019). *Universal basic income - A union perspective*. Retrieved from Public Services International website: http://www.world-psi.org/sites/default/files/documents/research/en_ubi_full_report_2019.pdf
- Couch, K. A., & Placzek, D. W. (2010). Earnings losses of displaced workers revisited. *American Economic Review*, 100(1), 572–589. <https://doi.org/10.1257/aer.100.1.572>
- Crerar, P. (2018, November 8). Gig economy workers' rights to be given boost in overhaul. *The Guardian*. Retrieved from <https://www.theguardian.com/business/2018/nov/08/gig-economy-workers-rights-to-be-given-boost-in-overhaul>

- CXC Global. (2019, February 8). The top 8 workforce trends of 2019. Retrieved 15 October 2019, from <https://www.cxcglobal.com/top-8-workforce-trends-2019>
- Dahlberg, M., & Forslund, A. (2005). Direct displacement effects of labour market programmes. *The Scandinavian Journal of Economics*, 107(3), 475–494.
- Dasgupta, P. (2001). *Human well-being and the natural environment*. Oxford [England]; New York: Oxford University Press.
- de Boer, M., & Ku, B. (2019). *Cost-effectiveness of MSD employment assistance: summary report for 2016/2017 financial year*. Retrieved from <https://www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/research/employment-assistance-effectiveness/ea-effectiveness-07022019.pdf>
- De Groen, W. P., Kilhoffer, Z., Lenaerts, K., & Mandl, I. (2018). *Employment and working conditions of selected types of platform work*. Retrieved from https://www.eurofound.europa.eu/sites/default/files/ef_publication/field_ef_document/ef18001en.pdf
- De Neve, J. E., Ward, G., De Keulenaer, F., Van Landeghem, B., Kavetsos, G., & Norton, M. I. (2018). The asymmetric experience of positive and negative economic growth: Global evidence using subjective well-being data. *Review of Economics and Statistics*, 100(2), 362–375.
- De Stefano, V. (2016). *The rise of the 'just-in-time workforce': On-demand work, crowd work and labour protection in the 'gig-economy'*. (71). <https://doi.org/10.2139/ssrn.2682602>
- Dixon, S., & Maré, D. (2013). *The costs of involuntary job loss: impact on workers' employment and earnings* (Motu Working Paper 13-03). Retrieved from Motu Economic and Public Policy Research website: <https://motu.nz/assets/Documents/our-work/population-and-labour/individual-and-group-outcomes/13-03.pdf>
- East, C. N., & Kuka, E. (2015). Reexamining the consumption smoothing benefits of unemployment insurance. *Journal of Public Economics*, 132, 32–50. <https://doi.org/10.1016/j.jpubeco.2015.09.008>
- Employment & Social Development Canada. (2019). EI Regular Benefits - Overview [Program descriptions]. Retrieved 12 November 2019, from Government of Canada - Canada.ca website: <https://www.canada.ca/en/services/benefits/ei/ei-regular-benefit.html>
- Employment New Zealand. (2019). Contractor versus employee. Retrieved 14 October 2019, from Employment New Zealand website: <https://www.employment.govt.nz/starting-employment/who-is-an-employee/difference-between-a-self-employed-contractor-and-an-employee/>
- Erwin, C., Dasgupta, K., & Pacheco, G. (2019). *Characterising New Zealand's underutilised workforce: Evidence from the household labour force survey*. Retrieved from AUT New Zealand Work Research Institute website: www.mbie.govt.nz/dmsdocument/6976-characterising-new-zealands-underutilised-workforce-evidence-from-the-household-labour-force-survey-pdf
- European Commission. (2019). Your Social Security Rights in Denmark. Retrieved 11 November 2019, from European Commission Employment, Social Affairs & Inclusion website: <https://ec.europa.eu/social/main.jsp?catId=1107&langId=en>
- Farrell, D., Greig, F., & Hamoudi, A. (2018). *The online platform economy in 2018: Drivers, workers, sellers and lessors*. Retrieved from JPMorgan Chase Institute website: <https://www.jpmorganchase.com/corporate/institute/report-ope-2018.htm>
- Fletcher, M. (2015). *The structure and generosity of financial assistance for beneficiaries: how New Zealand compares with other OECD countries*. Retrieved from <https://www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/research/social-assistance-international-comparisons/social-assistance-international-comparisons-publication-version.docx>

- Fletcher, M. (2018). Individualising entitlements in New Zealand's benefit and social assistance systems. [Report prepared for Superu] Retrieved 16 April 2019, from https://workresearch.aut.ac.nz/data/assets/pdf_file/0006/181437/Superu-Individualisation-Report-FINAL.pdf
- Frey, C. B. (2019). *The technology trap: capital, labor, and power in the age of automation*. Princeton, NJ, USA: Princeton University Press.
- Golan, A., Lane, J., & McEntarfer, E. (2007). The dynamics of worker reallocation within and across industries. *Economica*, 74(293), 1–20.
- Grossman, G. M., & Krueger, A. B. (1991). *Environmental impacts of a North American free trade agreement* (No. 3914). National Bureau of Economic Research.
- Gruber, J. (1994). *The consumption smoothing benefits of unemployment insurance*. National Bureau of Economic Research, 4750.
- Hall, J. V., & Krueger, A. B. (2018). An analysis of the labor market for Uber's driver-partners in the United States. *ILR Review*, 71(3), 705–732. <https://doi.org/10.1177/00197939171717222>
- Hammond, S. (2018). *The free-market welfare state: preserving dynamism in a volatile world* [Niskanen Center Policy Essay]. Retrieved from Niskanen Center website: https://www.niskanencenter.org/wp-content/uploads/old_uploads/2018/04/Final_Free-Market-Welfare-State.pdf
- Holzmann, R., & Vodopivec, M. (2012). Severance pay under review: Key issues, policy conclusions, and research agenda. In *Reforming severance pay - An international perspective* (pp. 1–15). Retrieved from <http://documents.worldbank.org/curated/en/977071468330895674/pdf/655470PUB0EPI2065712B09780821388495.pdf>
- Hyslop, D. (2019). *The impacts of job displacement on workers by education level*. Retrieved from Motu Economic and Public Policy Research website: https://www.productivity.govt.nz/assets/Documents/6fda36e50d/Motu-Aug-2019_The-impacts-of-job-displacement-on-workers-by-education-level.pdf
- Hyslop, D., & Townsend, W. (2017). *The longer term impacts of job displacement on labour market outcomes* (Motu Working Paper No. 17–12).
- Immervoll, H., & Scarpetta, S. (2012). Activation and employment support policies in OECD countries. An overview of current approaches. *IZA Journal of Labor Policy*, 9. <https://doi.org/10.1186/2193-9004-1-9>
- Inland Revenue. (2019). Can I get Working for Families? Retrieved from www.ird.govt.nz/topics/working-for-families/can-i-get-working-for-families
- Johri, R., de Boer, M., Pusch, H., Ramasamy, S., & Wong, K. (2004). *Evidence to date on the working and effectiveness of ALMPs in New Zealand*. Retrieved from Ministry of Social Development website: www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/evaluation/evidence-effectiveness-almeps-nz-report.pdf
- Kangas, O., Jauhiainen, S., Simanainen, M., & Ylikännö, M. (2019). *The basic income experiment 2017–2018 in Finland – Preliminary results* (Reports and Memorandums of the Ministry of Social Affairs and Health No. 2019:9).
- Kenney, M., & Zysman, J. (2016). The rise of the platform economy. *Issues in Science and Technology*, 32(3, Spring 2016), 61–69. Retrieved from <https://brie.berkeley.edu/sites/default/files/kenney-zysman-the-rise-of-the-platform-economy-spring-2016-istx.pdf>
- Kenney, M., & Zysman, J. (2018). *Work and value creation in the platform economy* (Working Paper No. 2018–4). Retrieved from University of California, Berkeley website: https://brie.berkeley.edu/sites/default/files/brie_working_paper_2018-4.pdf

- Kestenbaum, D., & Goldstein, J. (2017). Episode 606: Spreadsheets! [Podcast]. Retrieved 15 April 2019, from Planet Money website: <https://www.npr.org/sections/money/2017/05/17/528807590/episode-606-spreadsheets>
- Kettemann, A., Kramarz, F., & Zweimüller, J. (2017). Job mobility and creative destruction: flexicurity in the land of Schumpeter. *IDEAS Working Paper Series*.
- KiwiSaver. (2019). KiwiSaver Statistics. Retrieved from www.kiwisaver.govt.nz/statistics/ks-stats-index.html
- Kuhn, P., & Mansour, H. (2014). Is internet job search still ineffective? *The Economic Journal*, 124(581), 1213–1233. <https://doi.org/10.1111/eoj.12119>
- Maddock, T., & Genet, T. (2019, March 8). The Productivity Commission’s Tim Maddock and Terry Genet analyse NZ’s labour market ahead of an inquiry into technological disruption and the future of work. Retrieved 7 April 2019, from <https://www.interest.co.nz/opinion/98536/productivity-commissions-tim-maddock-and%20A0terry-genet-analyse-nzs-labour-market-ahead>
- Maré, D. (2005). *Indirect effects of active labour market policies* (Motu Working Paper 05-01). Retrieved from Motu Economic and Public Policy Research website: http://motu-www.motu.org.nz/wpapers/05_01.pdf
- Martin, J. (1998). *What works among active labour market policies: Evidence from OECD Countries’ experiences*. Retrieved from Reserve Bank of Australia website: www.rba.gov.au/publications/confs/1998/martin.html
- McAllister, J., St John, S., & Johnson, A. (2019). *The accommodation supplement - The wrong tool to fix the house*. Retrieved from www.cpag.org.nz/assets/190503%20AS%20report%20May%202%20final%20EMBARGO%20MAY%2019%202019.pdf
- McKay, C., Pollack, E., & Fitzpayne, A. (2018). *Modernizing unemployment insurance for the changing nature of work*. Retrieved from Aspen Institute website: https://assets.aspeninstitute.org/content/uploads/2018/01/Modernizing-Unemployment-Insurance_Report_Aspen-Future-of-Work.pdf
- McKinsey Global Institute. (2016). *Independent work: choice, necessity and the gig economy*. Retrieved from McKinsey Global Institute website: <https://www.mckinsey.com/~media/McKinsey/Featured%20Insights/Employment%20and%20Growth/Independent%20work%20Choice%20necessity%20and%20the%20gig%20economy/Independent-Work-Choice-necessity-and-the-gig-economy-Full-report.ashx>
- McMillan, J. (2002). *Reinventing the bazaar: a natural history of markets*. New York London: W. W. Norton.
- Milenkovic, M. (2019, August 20). The future of employment – 30 telling gig economy statistics. Retrieved 1 November 2019, from SmallBizGenius website: <https://www.smallbizgenius.net/by-the-numbers/gig-economy-statistics/>
- MSD [Ministry of Social Development]. (2019). Benefit fact sheets. Retrieved from <https://www.msd.govt.nz/about-msd-and-our-work/publications-resources/statistics/benefit/index.html>
- Myers, J. (2019, October 29). Uber, Lyft, DoorDash launch a \$90-million fight against California labor law. *Los Angeles Times*. Retrieved from <https://www.latimes.com/california/story/2019-10-29/uber-lyft-door-dash-fight-california-labor-law-ab5>
- Nekoei, A., & Weber, A. (2015). Does extending unemployment benefits improve job quality? *Institute for the Study of Labor*. <https://doi.org/10.1257/aer.20150528>
- New Zealand Institute for Economic Research. (n.d.). NZIER Data1850. Retrieved 30 October 2019, from Data1850 website: <https://data1850.nz>

- Nolan, P. (2018). Effective marginal tax rates: The New Zealand case. *New Zealand Productivity Commission Working Paper 2018/01*. Retrieved from New Zealand Productivity Commission website: <https://www.productivity.govt.nz/sites/default/files/Effective%20Marginal%20Tax%20Rates.pdf>
- Nolan, P., Pomeroy, R., & Zheng, G. (2019). *Productivity by the numbers: 2019* (Research Paper No. 2019/2). Retrieved from New Zealand Productivity Commission website: <https://productivity.govt.nz/sites/default/files/Productivity%20by%20the%20Numbers%202019.pdf>
- NZPC. (2014). *Boosting productivity in the services sector* [Final report]. Retrieved from New Zealand Productivity Commission website: <https://www.productivity.govt.nz/assets/Documents/cf6ed35675/Final-report-Boosting-productivity-in-the-services-sector.pdf>
- NZPC. (2015). *More effective social services* [Final report]. Retrieved from New Zealand Productivity Commission website: <http://www.productivity.govt.nz/sites/default/files/social-services-final-report-main.pdf>
- NZPC. (2019). *New Zealand, technology and productivity* [Technological change and the future of work, Draft report 1]. Retrieved from New Zealand Productivity Commission website: https://www.productivity.govt.nz/assets/Documents/740ce1e715/Draft-report-1_NZ-technology-and-productivity-v4.pdf
- OECD. (2013). *OECD employment outlook 2013*. Retrieved from <http://public.eblib.com/choice/publicfullrecord.aspx?p=1389098>
- OECD. (2015). *Coverage and classification of OECD data for public expenditure and participants in labour market programmes*. Retrieved from <http://www.oecd.org/els/emp/Coverage-and-classification-of-OECD-data-2015.pdf>
- OECD. (2017). *Back to work - New Zealand: Improving the re-employment prospects of displaced workers*. Paris: OECD.
- OECD. (2018). *Good jobs for all in a changing world of work: The OECD jobs strategy*. <https://doi.org/10.1787/9789264308817-en>
- OECD. (2019a). Average wages (indicator). Retrieved 3 November 2019, from OECD Data website: <https://doi.org/10.1787/cc3e1387-en>
- OECD. (2019b). Benefits and wages. Retrieved 18 April 2019, from www.oecd.org/social/benefits-and-wages/
- OECD. (2019c). *Going digital: shaping policies, improving lives*. Retrieved from OECD Publishing website: <https://doi.org/10.1787/9789264312012-en>
- OECD. (2019d). Net replacement rates in unemployment [Database]. Retrieved 11 November 2019, from OECD.Stat website: <https://stats.oecd.org/Index.aspx?DataSetCode=NRR>
- OECD. (2019e). *OECD employment outlook 2019: The future of work*. <https://doi.org/10.1787/9ee00155-en>
- OECD. (2019f). Statistics. Retrieved 8 April 2019, from <https://stats.oecd.org/#>
- Pallais, A. (2014). Inefficient hiring in entry-level labor markets. *American Economic Review*, 104(11), 3565–3599. <https://doi.org/10.1257/aer.104.11.3565>
- Parrott, J. A., & Reich, M. (2018). *An earnings standard for New York City's app-based drivers: Economic analysis and policy assessment* [Report for the New York City Taxi and Limousine Commission]. Retrieved from Center for New York City Affairs and Center on Wage and Employment Dynamics website: <http://www.centernyc.org/an-earnings-standard>
- PricewaterhouseCoopers. (2018a). *Economic contribution of the music industry in New Zealand 2016: a report for the New Zealand music industry*. Retrieved from PricewaterhouseCoopers New Zealand

website: <https://www.recordedmusic.co.nz/wp-content/uploads/2018/05/NZ-Music-Industry-Economic-Report-2016-Final.pdf>

PricewaterhouseCoopers. (2018b). *Economic contribution of the music industry in New Zealand 2017: A report for the New Zealand music industry*. Retrieved from PricewaterhouseCoopers New Zealand website: <https://www.recordedmusic.co.nz/wp-content/uploads/2018/12/NZ-Music-Industry-Economic-Report-2017.pdf>

PricewaterhouseCoopers. (2019, July). *Global top 100 companies by market capitalisation*. Retrieved from <https://www.pwc.com/gx/en/audit-services/publications/assets/global-top-100-companies-2019.pdf>

Provincial Development Unit. (2019). Sector workforce engagement programme. Retrieved from <https://www.growregions.govt.nz/about-us/sector-workforce-engagement-programme/>

Public Advisory Group on Restructuring and Redundancy. (2008). *Restructuring and redundancy*. Department of Labour. Retrieved from <https://thehub.sia.govt.nz/assets/documents/Report%20of%20the%20Public%20Advisory%20Group%20on%20Restructuring%20and%20Redundancy.pdf>

Rashbrooke, G., Rashbrooke, M., & Molano, W. (2017). *Wealth disparities in New Zealand: final report* (Institute for Governance and Policy Studies Working Paper No. 17/02). Retrieved from Victoria University of Wellington School of Government website: https://www.victoria.ac.nz/_data/assets/pdf_file/0008/1175246/WP17-02-Wealth-Disparities-in-NZ-Final-2017.pdf

Riggs, L., Sin, I., & Hyslop, D. (2019). *Measuring the “gig” economy: Challenges and options* (Working Paper No. 19–18). Wellington: Motu Economic and Public Policy Research. Retrieved from <https://www.productivity.govt.nz/assets/Documents/4a91b2689d/Measuring-the-gig-economy-Motu.pdf>

Sacks, D. W., Stevenson, B., & Wolfers, J. (2010). *Subjective well-being, income, economic development and growth* (No. 16441). National Bureau of Economic Research.

Sacks, D. W., Stevenson, B., & Wolfers, J. (2012). The new stylized facts about income and subjective well-being. *Emotion*, 12(6), 1181.

Shapiro, C., & Varian, H. R. (1999). *Information rules: A strategic guide to the network economy*. Boston, MA: Harvard Business School Press.

Spencer, K. (2019). *Unemployment insurance: what can it offer NZ?* New Zealand Productivity Commission. Retrieved from <https://www.productivity.govt.nz/assets/Documents/74b7e80d3a/Unemployment-insurance-what-can-it-offer-NZ-Kathy-Spencer.pdf>

Stephens, R. (2019). The Universal Basic Income should it replace the existing social security system? *Policy Quarterly*, 15(1), 30–37. Retrieved from <https://ojs.victoria.ac.nz/pq/article/download/5293/4648/>

Stewart, A., & Stanford, J. (2017). Regulating work in the gig economy: What are the options? *The Economic and Labour Relations Review*, 28(3), 420–437. <https://doi.org/10.1177/1035304617722461>

Taylor, M. (2017). *Good work: the Taylor review of modern working practices*. 116. Retrieved from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/627671/good-work-taylor-review-modern-working-practices-rg.pdf

Te Puni Kōkiri. (2018). *Vote Māori Development*. Retrieved from <https://www.tpk.govt.nz/en/a-matou-mohiotanga/corporate-documents/vote-maori-development-2018>

Tertiary Education Commission. (2018). *Annual Report for the year ended 30 June 2018*. Retrieved from Tertiary Education Commission website: <https://www.tec.govt.nz/assets/Reports/8608f1b51c/TEC-Annual-Report-2017-2018.PDF>

- The Treasury. (2019a). Vote Corrections - Justice Sector - Estimates 2018/2019. Retrieved from <https://treasury.govt.nz/publications/estimates/vote-corrections-justice-sector-estimates-2018-2019>
- The Treasury. (2019b). Vote Māori Development - Māori Affairs Sector - Estimates 2019/2020. Retrieved from <https://treasury.govt.nz/publications/estimates/vote-m%C4%81ori-development-m%C4%81ori-affairs-sector-estimates-2019-2020-html#child-0>
- Tirole, J. (2017). *Economics for the common good* (S. Rendall, Trans.). Princeton: Princeton University Press.
- UK Government. (n.d.). Employment status. Retrieved 16 October 2019, from <https://www.gov.uk/employment-status>
- Unédic. (2019a). Unemployment insurance: Key statistics 2018. Retrieved 11 November 2019, from Unédic website: <https://www.unedic.org/publications/assurance-chomage-les-chiffres-qui-comptent>
- Unédic. (2019b, October 28). Unemployment insurance: renewing its purpose. What developments on November 1st? [Media release]. Retrieved 11 November 2019, from Unédic website <https://www.unedic.org/espace-presse/actualites/assurance-chomage-refait-le-point-quelles-evolutions-au-1er-novembre>
- Upward, R., & Wright, P. W. (2019). Don't look down: The consequences of job loss in a flexible labour market. *Economica*, 86(341), 166–200. <https://doi.org/10.1111/ecca.12254>
- US Department of Labor. (2019, October 29). Trade Adjustment Assistance for workers. Retrieved 30 October 2019, from TradeAct, Employment & Training Administration (ETA) website: <https://www.doleta.gov/tradeact/>
- WEAG [Welfare Expert Advisory Group]. (2018). *The take up of income support - Analysis and options*. Retrieved from www.weag.govt.nz/assets/documents/WEAG-report/background-documents/38f35441ff/Take-up-of-Income-Support-010419.pdf
- WEAG. (2019a). *Employment & labour market: Active labour market policies in the New Zealand context*. Retrieved from www.weag.govt.nz/assets/documents/WEAG-report/background-documents/29c1cc3696/Employment-and-Labour-market-010419.pdf
- WEAG. (2019b). *Example families and budgets - Investigating the adequacy of incomes*. Retrieved from www.weag.govt.nz/assets/documents/WEAG-report/background-documents/5269349623/Example-families-010419.pdf
- WEAG. (2019c). *The income support system*. Retrieved from www.weag.govt.nz/assets/documents/WEAG-report/background-documents/757c27caff/Income-support-system-040319.pdf
- WEAG. (2019d). *Whakamana Tāngata – Restoring Dignity to Social Security in New Zealand*. Retrieved from <http://weag.govt.nz/assets/documents/WEAG-report/aed960c3ce/WEAG-Report.pdf>
- Weber, A. (2015). Do unemployment benefits help people find better jobs? Retrieved 23 July 2019, from World Economic Forum website: <https://www.weforum.org/agenda/2015/07/do-unemployment-benefits-help-people-find-better-jobs/>
- Welfare Working Group. (2010). *Long-term benefit dependency: the issues*. Retrieved from Welfare Working Group website: http://img.scoop.co.nz/media/pdfs/1008/WWG_Detailed_Paper.pdf
- Work and Income. (2019). Check what you might get. Retrieved from www.workandincome.govt.nz/online-services/eligibility/index.html
- Yoffie, D. B., Gawer, A., & Cusumano, M. A. (2019, May 29). A study of more than 250 platforms reveals why most fail. *Harvard Business Review*. Retrieved from <https://hbr.org/2019/05/a-study-of-more-than-250-platforms-reveals-why-most-fail>

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