Commentary: Labour market change and employee protection in New Zealand in light of the 'future of work' debate

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Abstract

Much has been written internationally about the likely labour market impacts of the so-called 'future of work' or the 'fourth industrial revolution' (Schwab, 2016). In New Zealand, the 'future of work' has also attracted considerable academic, political and public commentary. This commentary seeks to set some of the issues around technological change and employee protections in context, by drawing on evidence from the recent past, current New Zealand data on temporary and casualised employment and on a few examples from the international literature. We argue that two separate sets of issues are often conflated in the New Zealand discussions. Both have important employment protection implications, but they differ significantly in the policy responses needed. While it is too soon to be sure, it is also likely that they differ in scale. One set of issues surrounds the way people work and, in particular, questions around casualisation, precarious employment, and the rise of the 'gig economy'. The other set of issues concerns job losses, technological redundancy and structural labour market change. Our analysis of the broad data presented in the commentary suggests that casualised employment has not yet increased significantly, although we do not rule out the possibility that it will do so in the future. Reviewing the outcomes of the large scale, structural labour market change during the 1980s and 1990s, we argue that policy needs to learn from the failings of that period to minimise the long-term negative social and economic consequences in which those changes resulted.

Keywords: New Zealand; Future of work; Employment relations; Employee protection; Precarious employment; Labour market casualisation; Workplace technological change.

Introduction

It has become a commonplace notion that new technologies, especially in the form of robotics and machine learning, are developing so rapidly and substantially that a large amount of the work now done by people will soon be able to be performed by machines. The frequently cited study by Frey and Osbourne (2013) concluded that the jobs of 47 per cent of all current US employees could be carried out by machines and computers within the next 20 years. Doomsday labour market predictions are not new, of course. A slew of books and articles since the 1990s predicted some version of the 'end of work' (Rifkin, 1995) or the 'de-jobbed world of work' (Bridges, 2005). Despite those forecasts not coming to pass, many commentators argue that the situation is different this time and that the world is now entering a 'fourth industrial revolution' involving large-scale disruptions and a 'time of great promise and great peril' (Schwab, 2016, p2).

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In New Zealand, 'the future of work' has also been widely discussed (see, for example, New Zealand Labour Party, 2016). Based on a brief overview of the 'future of work' debate, we suggest that two strands of thinking and research are prominent, and tend to get conflated, despite relating to different phenomena and having different implications. The first concerns the nature of work and the way people will earn an income in the future. Drawing on writers, such as Standing (2011; 2014) and, in New Zealand, Groot et al., (2017), this strand focusses on the increase in contingent forms of employment – temporary employment, contracting, and 'platform'-based work. This leads to concerns about insecurity of income, low-income work, loss of employment (and other) protections, lack of access to training and career progression (Stewart & Stanford, 2017). Although low-skill, low-earning activities predominate, concerns about increasing employment precarity extend to other occupations, such as the tertiary education sector (Bentley et al., 2014; TEU, 2019). The impact of precarity on various groups of New Zealanders is surveyed in Groot et al., (2017).

There have been no New Zealand-specific studies of the numbers of jobs likely to be affected by what Brougham and Haar (2017) call Smart Technology, Artificial Intelligence, Automation, Robotics and Algorithms (STAARA). However, Arntz et al., (2016), using an activity-based, more conservative approach than Frey and Osborne (2013), estimated that an overall figure of nine per cent of jobs across 21 OECD countries, with a range of between six and 12 percent over the next 10 to 20 years for the countries they studied. Even at the lower end of that range, technological redundancies of that magnitude, overlaid on top of the usual dynamism of the labour market, implies considerable adjustment challenges.

The commentary starts with a brief overview of the current economic and labour market situation in New Zealand where strong economic growth in the post Global Financial Crisis (GFC) has increased employment, decreased unemployment and prompted employer concerns about skill shortages. However, there are a number of embedded issues, ranging from low pay, gender and ethnicity issues, and long working hours. On that background, statistical information on casualisation is analysed and it is shown that the proportion of part-time employed and self-employed, in respect of total employed, has been fairly constant since 1990. The percentage of temporary employed in terms of total employed has also been broadly stable around 10 per cent since the start of official statistics in 2008.

In this recent historical labour market context, the commentary overviews briefly the past and recent claims about the 'future of work' (though this is clearly a part of the commentary where further literature review and research are necessary). However, we suggest that, while wholesale de-jobbing is highly unlikely, a more active government policy response is needed, in respect of both casualisation and technological unemployment.

The current economic and labour market situation

The New Zealand economy has experienced relatively strong growth in the post Global Financial Crisis (GFC) period. Annual GDP growth has averaged close to 3.0 per cent between 2014 and 2018, compared to an OECD average growth rate of 2.3 per cent. As in many countries, price inflation has been low and was 1.5 per cent for the year to December 2018. Despite significant rises in government debt during 2008-2014, New Zealand still has a relatively low government debt to GDP ratio of around 20 per cent. (By comparison, Australia's debt to GDP ratio is around 40 per cent.)

Employment growth has also been strong with an average annual increase of 81,000 people employed (or over three per cent per annum) between 2013 and 2018. Moreover, 70 per cent of the increase is in full-time jobs. Labour force participation is higher than at any point since the Household Labour Force Survey began in 1986: 76 per cent for men aged 16 and over and 66 per cent for women in December 2018. Unemployment increased sharply at the beginning of the GFC but has since fallen back to 4.5 per cent seasonally adjusted, approximately the same rate as a decade earlier in December 2008. Thus, the current employment situation is a far cry from the massive job losses experienced between 1986 and 1991. In fact, many employers are generally concerned about skill shortages and insufficient labour supply in the immediate future (MBIE, 2018).

This generally rosy picture hides, however, a number of embedded issues that have showed little improvement over the cyclical upswing. Real wage growth, especially across the lower half of the wage distribution, has been weak (Rosenberg, 2017). Low pay remains common, with almost the same proportion of workers paid less than two-thirds of the median wage in 2015 as in 2006 (11.1 per cent compared to 12.3 per cent (Cochrane et al., 2018]). The gender pay gap (12.8 per cent) is also about the same as it was in 2003 (Pacheco et al., 2017). More broadly, there has been no improvement in income inequality, and poverty and child poverty indicators show only slight (and mixed) signs of improvement (Perry, 2017).

Unemployment also remains high among some groups. Most notably, unemployment among Māori and Pacific youth aged 16 - 24 remains at 21.8 per cent and 20.1 per cent, respectively. The period of strong employment growth has also done little to dent the youth NEET (young people Not in Employment, Education or Training) rate which has averaged around 12 per cent over the 2013 - 2016 period.

While many other OECD countries would envy the headline economic statistics, the embedded social, infrastructure and employment issues leave no place for complacency. Its context has been one of benign international trends in, for example, New Zealand's terms of trade. However, there have been warnings that New Zealand's foreign debt has risen to a dangerous level which makes New Zealand economic activity vulnerable to the risk of adverse global financial market trends (Fallow, 2019). This could make it harder to make progress on these pre-existing issues.

Casualisation

Casualisation is usually described in terms of the number of workers on temporary or fixed-term contracts, in part-time employment (especially if they would prefer more hours), or a rise in self-employment (often associated with new forms of working). Despite the media and other discussions of 'the future of work', the high-level data show no evidence of any increase in these forms of work in New Zealand. Part-time employees and the self-employed represent no higher percentage of the total employed in 2017 than they did in 2000 (see Figure 1). Both these categories of employment showed some proportional increase from the mid-1980s through to the late-1990s, probably due to the decline in full-time employment during the early part of that period. However, that trend has not continued. Among the part-time employees, approximately one-in-five report wanting to work more hours.

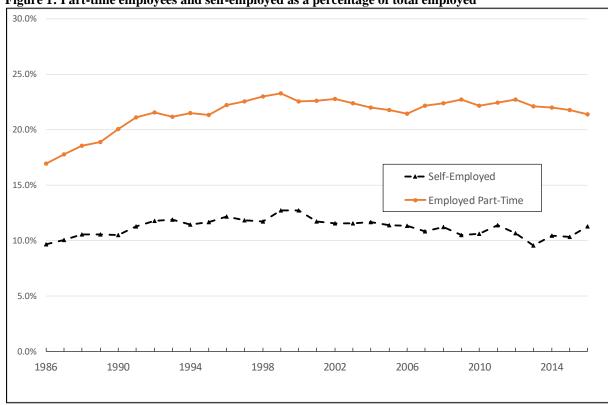


Figure 1: Part-time employees and self-employed as a percentage of total employed

Similarly, there is, as yet, no sign of a growth in temporary employment relationships. New Zealand data on employment by type of employment relationship only goes back to the first Survey of Working Life in 2008. In 2008, 9.6 per cent of the workforce were employed (in their main job) in one or other form of temporary employment relationship. That figure rose to 10.9 per cent in the 2012 survey and had fallen slightly to 9.4 per cent by December 2018. The different forms of temporary employment relationships have also remained more or less stable over the same period. In December 2018, 4.1 per cent of the workforce were casual workers, 2.1 per cent were on fixed-term contracts, 2.7 per cent were in seasonal employment and 0.4 per cent were temping. Women are somewhat more likely than men to be in temporary employment relationships: 10.6 per cent compared to 8.2 per cent.

Table 1. The main categories of 'temporary' working arrangements as percent of total employed population (main job)¹

Types of employment	2008 (Mar qtr)	2012 (Dec qtr)	2018 (Dec qtr)
Casual Work	4.0	4.1	4.1
Fixed-term agreements	1.9	2.6	2.1
Temping	0.6	0.7	0.4
Seasonal employment ²	3.2	3.5	2.7
Total	9.6	10.9	9.4

Source: Survey of Working Life, Statistics New Zealand.

Compared to other OECD countries, New Zealand has an above average percentage of parttime employees, an about average proportion of self-employed and a slightly below average share of workers in temporary employment relationships. A key point, though, is that, across

¹ Note the employed population includes working employers and the self-employed.

² Comprises 'seasonal employee' and 'seasonal worker not further defined'.

the OECD as a whole, there is no observable rise in casualised employment, at least as far as these very broad indicators are concerned (see Tables 2 to 4).

Table 2: Part-time employment as a percentage of total employment, selected OECD and EU countries

	New Zealand	Australia	United Kingdom	Denmark	OECD	EU
2007	21.9	23.7	22.9	17.3	15.4	15.8
2008	22.1	23.8	23.0	17.8	15.6	15.8
2009	22.4	24.6	23.9	18.8	16.5	16.3
2010	21.8	24.8	24.6	19.2	16.6	16.6
2011	22.1	24.7	24.7	19.2	16.8	16.8
2012	22.3	24.6	25.0	19.4	16.8	17.2
2013	21.6	24.9	24.6	19.2	17.0	17.4
2014	21.5	25.2	24.1	19.7	16.9	17.3
2015	21.3	25.2	24.0	20.0	16.8	17.2
2016	21.2	25.9	23.8	21.7	16.7	17.0

Source: OECD Labour Force Statistics, 2017

Table 3: Self-employment as a percentage of total employment, selected OECD and EU countries

	New Zealand	Australia	United	Denmark	United States	EU		
			Kingdom	Kingdom				
2007	17.2	11.7	13.4	9.0	7.2	16.9		
2008	17.3	11.5	13.3	8.8	7.0	16.5		
2009	16.4	11.5	13.6	9.3	7.1	16.6		
2010	16.2	11.5	14.0	9.1	7.0	16.8		
2011	16.7	11.1	14.2	9.1	6.8	16.7		
2012	16.6	10.4	14.6	9.1	6.8	16.7		
2013	15.4	10.1	14.6	#N/A	6.6	16.5		
2014	15.3	10.2	15.2	8.9	6.5	16.4		
2015	14.8	10.3	15.0	8.7	6.5	16.1		
2016	17.9	10.1	15.4	9.1	6.4	15.8		

Source: OECD Labour Force Statistics, 2017

Table 4: Temporary employment as a percentage of total employment, selected OECD and EU countries

	New Zealand	Australia	Great Britain	Denmark	OECD	EU28
2007	#N/A	6.32	5.84	9.05	12.21	14.58
2008	9.6	5.89	5.41	8.53	11.94	14.16
2009	#N/A	5.94	5.64	8.71	11.79	13.61
2010	#N/A	5.7	6.11	8.43	11.84	13.95
2011	#N/A	6	6.17	8.84	11.95	14.06
2012	10.4	5.9	6.34	8.54	11.79	13.73
2013	#N/A	5.59	6.23	8.76	11.09	13.74
2014	#N/A	5.89	6.43	8.5	11.15	14.05
2015	#N/A	4.56	6.2	8.63	11.26	14.23
2016	8.6	#N/A	6.04	13.61	11.24	14.23

Source: OECD Labour Force Statistics, 2017

The data on casualisation does, however, need to be treated with some caution: it is also possible that the high-level data hide a more complex story. The Statistics New Zealand figures relate to people not jobs, and it is possible that an increasing number of people recorded as permanent employees are also earning part of their income from secondary work in casualised, gig-economy jobs. Others doing that type of work may not record themselves as either employees or self-employed (although the very high labour force participation rate suggests this is not likely to be a large factor).

The Ministry of Business, Innovation and Employment's (MBIE) 2014/15 National Survey of Employers included questions on 'non-standard' employment arrangements (MBIE, 2016). Their data show that, at the time of the survey, 30 per cent of businesses had at least one employee on a casual employment agreement, 18 per cent had at least one on a fixed-term agreement and 13 per cent were using dependent contractor(s). It is important to note that these

figures are not necessarily at odds with the Statistics New Zealand data from the Household Labour Force Survey or the Survey of Working Life as the MBIE figures relate to *employers* not to workers. Unsurprisingly, firms with more workers were more likely to have one or more person employed in a non-standard form of employment. Overall, though, the MBIE survey shows that 70 per cent of businesses were not using casualised employment and 82 per cent were not using fixed-term contracts. Moreover, although the survey question is imperfect, there is no evidence that those businesses that do use non-standard employment agreements do so because of technological reasons – fluctuating demand/seasonal work is the most common reason, followed by the need to cover staff absences or parental leave (MBIE, 2016).

The 'Future of Work' in New Zealand, structural labour market change and technological redundancies in an historical context

Despite the predictions made in the 1980s and 1990s, as the data above suggest New Zealand has yet to see any significant impacts from 'future of work' changes. The country does have recent experience of large-scale economic and labour market transformation, albeit policy-induced rather than driven by technological change. During the period from 1986 to 1992, employment fell by over 100,000 or 7.2 per cent, however, as the economy recovered from those changes, full-time permanent employment grew as much as part-time and temporary employment. The employer response to the economic upswing during the 2000s was primarily one of high labour-utilisation, fuelled by high immigration, rather than one of investing in labour-displacing technologies or in changed work and employment practices, or greater use of part-time and casual staff.

One lesson that can be drawn from the 1980s restructuring period is the need for active government engagement in managing the labour market transitions and in minimising the negative impacts. The absence of such an approach during that period contributed to the size and duration of the impact on unemployment and joblessness. It took until 2004 for the unemployment rate to return to its 1986 level; the Māori and Pacifica unemployment rate are still higher than they were 30 years ago. The 'future of work' impacts on the occupational, industry and regional structure of labour demand will be different from the changes that occurred during the 1980s. However, Arntz et al., (2016) estimates of between six and 12 per cent of jobs becoming redundant within the next two decades implies the need for a concerted focus on education, vocational training and retraining policies as well as welfare, redundancy and income support policies.

Recent employment relations and employee protection policies

Current employment relations and employee protection policies have been heavily influenced by key decisions made by the National Party since 2007. In 2007, the National Party moved from abolishing the Employment Relations Act to retaining the Act, subject to a number of specific changes. This public policy position prompted a number of changes to union and bargaining rights, individual employee rights and decision-making in the Employment Institutions (for a brief overview, see Table 2 in Foster & Rasmussen, 2017, p.102). While most of these changes had a negative impact on employee protection, there were also a number of changes with a positive impact. These positive changes ranged from stronger occupational health and safety (OHS) legislation, enhancing employment standards (including curtailing 'zero hours' agreements) to a significant pay equity settlement in the age care sector. Although

there were criticisms from the opposition parties, the changes indicated a significant shift in the National-led government's public policy position. We will briefly discuss the changes to employment standards, including the pay equity settlement in the age care sector before we overview proposed changes under the current Labour-led government.

Provisions in the Employment Standards Legislation Bill which came into force on 1 April 2016 dealt with various undesirable employer actions such as 'zero-hours agreements', unwarranted wage deductions, cancelling at short notice of shifts, and a general ban of unconscionable employer conduct (see Campbell (2018) for a detailed discussion). The term 'zero-hours agreements' is relatively new, but it gained notoriety in New Zealand following a sustained union campaign during 2013-2015. It is important to stress that 'zero-hours agreements' is normally regarded as a permanent employment situation where the employee has agreed to be on-call without being guaranteed a fixed number of hours.³ As such working arrangements can have very detrimental earning implications for employees, the National-led government agreed to amendments suggested by the Labour Party that such agreements could only be implemented for 'genuine reasons' and should include a guarantee of minimum hours and compensation for agreeing to such an arrangement. While the 'genuine reasons' stipulation is similar to the constraints on fixed-term employment agreements, Campbell (2018) has argued that the legislation provides neither a specific level of minimum hours nor a specific level of compensation.

The Court of Appeal decision in December 2014 in the so-called Terranova case on pay equity proved to be a vital turning point in several respects. The decision upheld a previous Employment Court decision in favour of the pay equity claim of Kristine Bartlett and her union. Faced with a possible string of pay equity court cases, the National-led government instituted a tripartite working group that presented recommendations about pay equity guidelines and what negotiation process employers and employees could use to address pay equity claims in May 2016. As many employers were dependent on government funding and service contracts, the Government implemented a special \$2 billion package in April 2017 that directly targeted workers in the aged-care sector. This train of events highlighted the return of tripartite negotiations in respect of dealing with low pay, pay equity and sectoral pay levels (Foster & Rasmussen, 2017; Douglas & Ravenswood, 2018).

It is too early to say with much precision about the new Labour-led government's overall employment relations policies, though, there appears to be a stronger approach to both employment relations, employee protection and preparing for the 'future of work' changes. The Employment Relations Amendment Act 2018 has reversed some of the changes made by the previous government and enhance employee protection since it came into force in May 2019 (Skilling, 2019).

The changes implemented so far have been described by the President of Council of Trade Unions (CTU), Richard Wagstaff, as being "largely focused on the margins" and restoring previous cuts to employee rights (Wagstaff, 2018, p.B4). It could also indicate the CTU's disappointment with public policy changes so far, including the continued existence of the '90-day trial period' option for small firms with less than 20 employees. Whether this will continue

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³ 'Zero-hours agreements' are quite similar to some casual employment arrangements. For example, the Government highlighted in 2006-2008 work arrangements in demand-driven industries where so-called casual employees worked irregular hours but had a permanent employment relationship with a particular employer. Thus, a stevedoring employee would work for a certain stevedoring firm but only when there were ships unloading in the harbour (see Rasmussen, 2009, pp.149-150).

to be the case will probably depend on changes associated with the response to reports from various Working Groups and the signalled increased legislative protection of contractors, including addressing the notorious 'Hobbit' legislation from 2010 (see Walker & Tipples, 2013; New Zealand Journal of Employment Relations Special Issue 36(3), 2011). The report from the Working Group on 'Fair Pay Agreements' was delivered in January 2019. While there were some critical remarks from employer associations, the report foreshadowed a limited application (as opposed to being labour-market-wide) and it is still unclear how far the Government will take these recommendations. Concerns about the protection of contractors have featured in Labour Party policies for some time (see Labour's previous legislative attempt to enhance contractor protection in Fenton, 2011). It has been suggested by the Government that this could include changes to the 'Hobbit' legislation but, again, it is unclear whether there will be any regulatory changes and, if so, when such changes would be implemented.

There are three other debates which could have significant impact on employment relations, employee protection and how to accommodate labour market changes: a stronger focus on labour market activation, the various debates of the 'future of work', and an overhaul of vocational education and training structures and approaches (VET). The stronger focus on labour market activation can be found in the current targeting of reducing young people categorised as NEET (Not in Employment, Education and Training). While there has been a decline recently, from a peak of 14.1 per cent in December 2009 to 11.9 per cent in December 2018, the numbers of 15 - 24 year old youth categorised as NEETs are still very high, considering the widespread skill shortages in many sectors. The report from the Welfare Expert Advisory Group, delivered in February 2019, also has a strong focus on labour market activation, including the recommendation of instituting a stronger employment service to align demand and supply of skilled people at a regional level (Welfare Expert Advisory Group, 2019). In particular, it highlighted how OECD reports have criticised the limited role of active labour market policies in New Zealand: "New Zealand is among the countries with the lowest spending on ALMPs in the OECD, and this spending has been falling for a long time" (Welfare Expert Advisory Group, p.134; see also OECD, 2017; 2018).

The 'future of work' debate has featured strongly, and dominated media reports and research initiatives in recent years (see for example, the literature overview by Balliester & Elsheikhi, 2018). Although it can also be argued that there are still many issues and trends which could benefit from more research. In New Zealand, the 'future of work' debate will probably benefit from the current work being undertaken by the New Zealand Productivity Commission which is trying to expand on the original research done by the Future of Work Commission (NZ Labour Party, 2016; NZ Productivity Commission, 2019). The 2018 report from the Prime Minister' Business Advisory Council also links new technology and automation with productivity and economic growth and analyses how automation can be leveraged to provide rapid and positive changes (PM's Business Advisory Council, 2018). However, a major part of the report highlights the necessity to focus on workforce implications: "How can New Zealand prepare and support displaced, continuing and future workers through the transition?" (ibid, p.5). While the report addresses the changes in skill demands, unemployment and inequality problems, there is obviously a lot of uncertainty surrounding these trends and issues. Other more critical and union-orientated views on the workforce implications can be found in Martin and Windelow (2018), though, this publication also seems to accept that there will be considerable work and workforce implications in the near future.

The overhaul of vocational education structures and approaches, announced in February 2019, addresses both labour market activation and the 'future of work' concerns (Ministry of

Education, 2019). The 'future of work' debate has clearly influenced the rationale for making changes:

Our current vocational education system is poorly positioned to deliver on our future needs. Technology continues to change the world in which we live, learn and work, both onshore and overseas, and these changes are likely to accelerate. Automation will change the nature of work in New Zealand, with around a third of current jobs likely to be significantly affected (Ministry of Education, 2019, p.11).

The proposed changes have both a centralising and regionalising intentions. A new central body, called the New Zealand Institute of Skills and Technology, would provide oversights of VET activities across the economy and be underpinned by a "unified vocational education funding system" while most of these activities would be co-ordinated and planned to meet regional education and training needs (see Tables 1 & 2, Ministry of Education, 2019: 19 & 23). Besides stronger local co-ordination, it is also envisaged that further investments in meeting VET needs at local and industry level are necessary, including leveraging the advantages and facing the challenges of new technology.

While the positive effects of the planned changes appear to be 'over-sold', the current shortfalls and labour market issues are highlighted (for example, see the table in Ministry of Education, 2019, p.16-17). Although the current shortfalls in terms of biases across the labour market, industries, regional areas and ethnic groups are well-documented, it is unclear whether the combination of centralised and regionalised focuses will be a 'game-changer'. An increase in funding and an emphasis on effectiveness of local delivery will be a positive step, but both increases in funding and regional delivery effectiveness are still to be seen. In particular, the link between schools and VET efforts would need to be enhanced. It also appears that the proposed changes fail to grapple with the role of employers. Although a stronger employer voice in the development and implementation of regionalised delivery is emphasised in several places, the limited VET role played by many employers, especially smaller employers, in the current system is not addressed at all. What are the new, different incentives for employers to re-training and upskilling their workers to overcome general shortfalls in VET efforts associated with a well-established 'free-rider' problem?

A new VET strategy and delivery modes could be a 'game-changer' but there are several unanswered questions. Criticisms from people with vested interest in the current system have dominated the media reports and the political opposition. More broadly, recent policy discussions have highlighted a number of concerns associated with the dynamics of the current labour market which are being overlaid with various 'future of work' concerns. These pressures may coalesce to create public policy changes which will lift active labour market, VET and employment policies to overcome the current concerns and prepare the New Zealand labour market against negative impact of the 'future of work'.

Welfare policies, and Work and Income's administration of the benefit system will also need to change. Government has indicated its response to the Welfare Experts Advisory Group report is on a 'three- to five-year' work programme, and it remains unclear how far-reaching its policy changes will be. In addition to the benefit inadequacy problems highlighted by the report, and the need for great focus on active labour market programmes discussed above, 'future of work' considerations imply the need for other welfare policy changes. In particular, to the extent there is growth in the number of people whose incomes are irregular and precarious; welfare administration will need to become more nimble so that people can receive financial assistance quickly and in full. Technological unemployment (and climate-change

related transitions) will also require policy to address the problem as couple-based benefit income testing that means one-earner families are not usually entitled to core benefit support. Such a policy is not consistent with a labour market where many families with children need two incomes but where redundancy and periods of retraining and job-search will become more common.

Discussion and conclusions: dealing with the impacts of future of work changes and moving beyond a narrow view of employment relations regulations

There is, quite rightly, some concern about the likely future impacts of technological change on employment and on workers' protections. At this stage, considerable uncertainty surrounds where 'the future of work' might lead and further analyses, beyond the brief overview of this commentary, are clearly necessary. That said, some of the more cataclysmic predictions are, in our view, overstated. Past experience does not support ideas of 'de-jobbing' or 'the end of work', and it is far from clear what effects the 'fourth industrial revolution' will have. Casualisation figures are, at present, quite low in New Zealand and we have not seen any significant evidence of increasing casualisation rates over the last decade.

At the same time, the likely labour market changes do require an active response by government. Two risks need to mitigated and/or managed. The first concerns risks around casualisation. Policy responses are needed to both control the growth of the forms of casualisation that undermine workers' protections, and to enhance the protections of vulnerable workers who are engaged in casualised work. We have already seen a number of employment regulation changes designed to better protect vulnerable workers. These include some of the provisions in the Employment Relations Amendment Act 2018; and the Government has signalled further changes down the track, including better regulation of triangular employment relationship, addressing the concerns surround contracting, and the introduction of mechanisms for negotiating industry-wide minimum conditions and wages under the proposed Fair Pay Agreements.

As we discuss above, the second area where new policy initiatives will be needed is to manage structural labour market change. There are similarities here with the 'Just Transition' policies for moving to a low-carbon economy that have been developed by the New Zealand Council of Trade Unions (NZCTU, 2017) and are incorporated in the Labour and Green Parties' confidence and supply agreement (New Zealand Parliament, 2017). Policies will be needed that cushion the impacts on workers whose skills and experience are in declining demand due to technological change, and which assist them to transition to new jobs where demand remains strong or is growing. This was signalled in the Speech from the Throne with the Government indicating it would "consider the long-term changes which need to occur to our systems of welfare and employment and education."

Work has begun in some aspects of these long-term changes with Government having announced major reform proposals in VET In welfare, however, reform is very slow and remains uncertain. With the possibility of a deterioration in global economic conditions, it would be wise to make headway on these problems while there is high labour demand and high levels of employment.

References

- Arntz, M., Gregory, T., & Zierahn, U. (2016). *The risk of automation for jobs in OECD countries: A comparative analysis*. OECD. https://www.oecd-ilibrary.org/social-issues-migration-health/the-risk-of-automation-for-jobs-in-oecd-countries_5]lz9h56dvq7-en
- Balliester, T. & Elsheikhi, E. (2018). *The Future of Work: a Literature Review*. (Research Department Working Paper, No. 29). International Labour Office.
- Bentley, T., McLeod, L. & Teo, S. (2014). *The State of the Tertiary Education Sector in New Zealand 2013* (Final Report of Findings from the Survey of Work and Wellbeing in the Tertiary Education Sector). New Zealand Work Research Institute, an Institude of AUT University
- Brougham, D., & Haar, J. (2017). Employee assessment of their technological redundancy. *Labour & Industry*, 27(3), 213-231.
- Campbell, I. (2018). Zero-hour work arrangements in New Zealand: Union action, public controversy and two regulatory initiatives. In O'Sullivan, M., Lavelle, J., McMahon, J., Ryan, L., Murphy, C., Turner, T. & Gunnigle, P. (eds.), *Zero Hours and On-call Work in Anglo-Saxon Countries* (pp.91-110). Springer.
- Cochrane, B., Fletcher, M., Pacheco, G., & Plum, A. (2018). Low pay in NZ (commissioned by Ministry of Business, Innovation & Employment). New Zealand Work Research Institute. https://www.mbie.govt.nz/assets/c92012e10c/low-pay-in-nz-january-2018.pdf
- Douglas, J., & Ravenswood, K. (2018). The Value of Care: Understanding the impact of the 2017 Pay Equity Settlement on the residential aged care, home and community care and disability support sectors. New Zealand Work Research Institute. https://workresearch.aut.ac.nz/ data/assets/pdf_file/0019/258130/Pay-Equity-Report_Digital_final.pdf
- Fallow, B. (2019). Kiwis up to nostrils in debt. (2019, June 21). Kiwis up to nostrils in debt. *New Zealand Herald*. https://www.nzherald.co.nz/business/news/article.cfm?c_id=3&objectid=12242317
- Fenton, D. (2011). Time for a Change in Employment Relations Approach. *New Zealand Journal of Employment Relations*, 36(2), 2-8.
- Foster, B. & Rasmussen, E. (2017). The major parties: National's and Labour's employment relations policies. *New Zealand Journal of Employment Relations*, 42(2), 95-109.
- Frey, C. B., & Osborne, M. (2013). *The future of employment: How susceptible are jobs to computerisation?* (Working Paper). Oxford Martin Programme on Technology and Employment. https://www.oxfordmartin.ox.ac.uk/publications/the-future-of-employment/

- Groot, S., van Ommen, C., Masters-Awatere, B., & Tassell-Matamua, N. (2017). *Precarity: Uncertain, insecure and unequal lives in Aotearoa New Zealand*. Massey University Press.
- Martin, S. & Windelov, K. (2018). *Progressive thinking: ten perspectives on the future of work*. NZPSA.
- MBIE Ministry of Buiness Innovation & Employment . (2016). *National Survey of Employers 2013/14*. MBIE. https://www.mbie.govt.nz/
- MBIE Ministry of Business Innovation & Employment. (2018). *National survey of employers 2017/18*. MBIE. https://www.mbie.govt.nz/dmsdocument/7101-national-survey-of-employers-2018-19-summary-of-findings
- Ministry of Education. 2019. *Reform of Vocational Education. Consultation discussion document*. Ministry of Education.
- New Zealand Labour Party. (2016). *Future of Work*. https://www.labour.org.nz/tags/futureofwork
- New Zealand Parliament. (2017). *Confidence and Supply Agreement*. (New Zealand Labour Party & Green Party of Aoteraoa New Zealand) [52nd Parliament]. https://www.parliament.nz/media/4487/nzlp_gp_c_s_agreement.pdf
- New Zealand Productivity Commission. (2019). *Technological change and the future of work: Issues paper.* www.productivity.govt.nz
- NZCTU New Zealand Council of Trade Unions. (2017). *Just transition: A working people's response to climate change*. https://www.union.org.nz/wp-content/uploads/2019/02/JustTransition.pdf
- OECD. (2017). Back to Work: New Zealand Improving the re-employment prospects of displaced workers. Paris, OECD Publishing. https://doi.org/10.1787/9789264264434-en
- OECD. (2018). *Good Jobs for All in a Changing World of Work: The OECD Jobs Strategy*. Paris, OECD Publishing. https://doi.org/10.1787/9789264308817-en
- Pacheco, G., Chao, L., & Cochrane, W. R. (2017). *Empirical Evidence of the Gender Pay Gap in New Zealand* (Report commission by the Ministry for Women, New Zealand). https://women.govt.nz/sites/public_files/Empirical%20evidence%20of%20GPG%20in%20NZ%20-%20Mar2017_0.pdf
- Perry, B. (2017). *Household incomes in New Zealand: Trends in indicators of inequality and hardship 1982 to 2016*. Ministry of Social Development.

 https://www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/monitoring/household-income-report/2017/2017-incomes-report-wed-19-july-2017.pdf

- Prime Minister's Business Advisory Council. (2018). *A Future that Works*. Wellington, PMBAC. https://api.pmbac.co.nz/wp-content/uploads/2019/05/A-Future-That-Works-PMBAC-Report.pdf
- Rasmussen, E. (2009). *Employment Relations in New Zealand*. Auckland: Pearson. *Rifkin, J.* (1995). The *end* of *work*: The *decline* of the *global labor force* and the *dawn* of the *post-market era*. G. P. Putnam's Sons
- Rosenberg, B. (2017). Shrinking portions to low- and middle-income earners: Inequality in wages and self-employment 1998 2015. CTU New Zealand Council of Trade Unions https://www.union.org.nz/wp-content/uploads/2017/08/Inequality-Wages-Self-Employment-1998-2015.pdf
- Schwab, K. (2016). The Fourth Industrial Revolution. Penguin.
- Skilling, P. (2019). Another swing of the pendulum: rhetoric and argument around the Employment Relations Amendment Act (2018). *New Zealand Journal of Employment Relations*, 44(1), 59-78.
- Standing, G. (2011). The precariat: A new dangerous class. Bloomsbury Academic.
- Standing, G. (2014). A precariat charter: From denizens to citizens. Bloomsbury Academic.
- Stewart, A. & Stanford, J. (2017). Regulating Work in the Gig Economy: What are the options? *Economic and Labour Relations Review*, 28(3), 420-437.
- TEU Tertiary Education Union. (2019). *State of the Tertiary Education Sector survey*. https://teu.ac.nz/news/tertiary-education-survey
- Wagstaff, R. (2018, February 5). Tossing low-wage economy in dumpster best for NZ. *New Zealand Herald*, p. B4.
- Walker, B. & Tipples, R. (2013). The hobbit affair: A new frontier for unions? *Adelaide Law Review*, 34(1), 65-80.
- Welfare Expert Advisory Group. (2019). *Whakamana Tāngata: Restoring dignity to social security in New Zealand*. Welfare Experts Advisory Group. http://www.weag.govt.nz/assets/documents/WEAG-report/aed960c3ce/WEAG-Report.pdf