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# Labour Force Participation and Well-being among Older New Zealanders

## Introduction

The population of New Zealand, along with those of other developed countries, is ageing rapidly. The rate of population ageing is unprecedented, with the number of New Zealanders aged 65 years and over projected to increase from 553,000 in 2009 to 1.07 million in 2031, and to 1.44 million in 2061 (Statistics New Zealand, 2010). Importantly, the ratio of those aged 65 years and over to those aged 15–64 is projected to increase from 0.19 (older people per person aged 15–64) in 2009 to 0.34 in 2031 and to 0.43 in 2061. This more than doubling of the ratio of older people to those in the prime working and income-earning ages represents a dramatic demographic shift which has implications for New Zealand, particularly in terms of the ability to support New Zealand

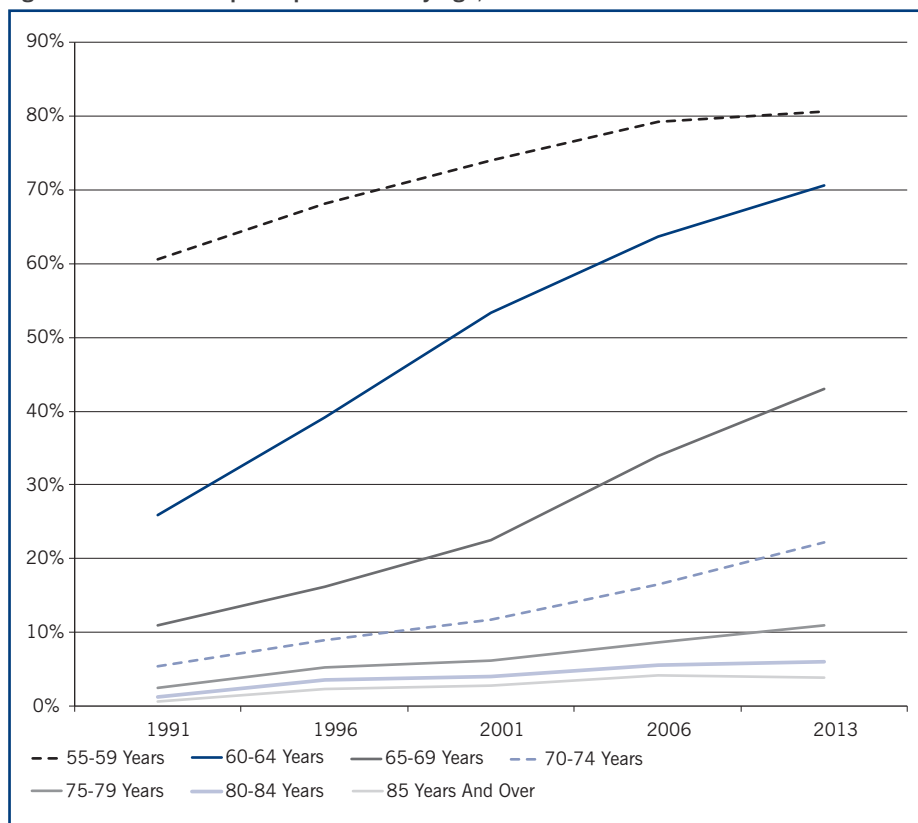
Superannuation (NZS) at current levels (Wilson and Rodway, 2006; Bascand, 2012; Treasury, 2013; Buckle and Creedy, 2014), retirement planning more generally (Jackson, Cochrane and McMillan, 2013), increased health-care costs (Bascand, 2012), potential skills shortages (Robson, 2001), and other challenges and opportunities for employers trying to cope with an ageing workforce (Davey, 2008).

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Figure 1: Labour force participation rate by age, 1991-2013



One of the more important transitions which will result from these demographic changes is an ageing of the labour force (Statistics New Zealand, 2006). Two effects contribute to this. First, there is the overall ageing of the population. Second, New Zealanders are living longer and, importantly, living longer in a healthier physical and mental state (Gorman, Scobie and Towers, 2012). Many older people want to continue working rather than retiring at the traditional age of eligibility for NZS, currently 65 years. Labour force participation rates among older people are increasing, as shown in Figure 1 which presents data from the Census of Population and Dwellings from 1991 to 2013. The proportion of older people participating in the labour force has increased substantially over this 22-year period: from 5.8% to 22.5% of those aged 65 years and over; and from 21.5% to 46.3% of those aged 55 and over. These trends are not unique to New Zealand, with Australia and its states following similar trajectories (Temple, 2014). However, New Zealand currently has one of the highest employment rates among older people in the OECD (Jackson, Cochrane and McMillan, 2013).

As well as a substantial increase in the older labour force on a cohort basis, older people are increasingly choosing part-time rather than full-time work, as many choose to delay retirement through a longer transition involving part-time or bridge employment (Cameron 2014; Cahill, Giandrea and Quinn, 2005; Statistics New Zealand, 2008).

These changes in labour force participation among older New Zealanders suggest differences in the retirement decisions between recent and earlier cohorts at the same age. On the one hand, working reduces the amount of leisure time for the individual, although this may be somewhat offset by the enjoyment received from working and the social aspects of work and active engagement (Longino and Kart, 1982). Working may also involve physical and/or mental exertion that might make the individual worse off (although, as noted by Hotopp (2007), this effect is no more apparent for older workers than for younger workers). On the other hand, employment generally provides the individual with a higher level of income, which they can use to satisfy their needs and wants. This trade-off between leisure

and income is not unique to older people, but the addition of ‘unearned income’ in the form of NZS and the social and individual expectations around retirement will change the calculus somewhat (Hurnard, 2005).

Higher labour force participation among more recent cohorts of older people may arise through several mechanisms. First, the rate of NZS has fallen from around 76% of the average wage in 1989 to 66% in 2010 (Bell et al., 2010). Alongside this, the recent recession may have kept older people in employment longer as investment income has been reduced and capital lost through finance company failures (Coile and Levine, 2011; Kendig, Wells and O’Loughlin, 2013). Third, as older people are healthier now than earlier cohorts were at the same age, this might allow them to work longer and capture both income and non-income benefits of working.

The purpose of this article is to explore the implications of older people’s increased labour force participation in terms of their overall (subjective) well-being. King and Waldegrave (2009) review the theoretical concept of subjective well-being in the context of older people in New Zealand. We note that subjective well-being often involves an evaluation of life satisfaction as a whole (Keyes, Shmotkin and Ryff, 2002). Thus, in this article we use self-reported life satisfaction as a proxy measure of subjective well-being.

**Labour force participation and well-being**

The relationship between labour force participation among older people and their well-being has important policy implications. It is almost inevitable that demand for older people’s labour will increase due to the demographic effects outlined above. Moreover, as the ratio of the number of NZS recipients to full-time income earners and taxpayers increases, the affordability of universal superannuation becomes increasingly questionable (Bell et al., 2010). Delaying the eligibility for superannuation or reducing its real value increase the incentives for older people to work (Hurnard, 2005). However, it is not clear a priori what effect these changes

will have on older people themselves. Will increasing labour force participation among older people make them better or worse off? This question could be answered objectively by looking at the changes in income of older people, but important aspects of this change are subjective rather than objective, meaning that the broader concept of subjective well-being or life satisfaction is a more appropriate metric.

Retirement has been shown to positively increase life satisfaction among older people (Reitzes, Mutran and Fernandez, 1996; Latif, 2011), especially among those who are resource-rich (Pinquart and Schindler, 2007). In apparent contrast, participation in paid or volunteer work has also been shown to increase older people's life satisfaction (Aquino et al., 1996). However, it is important to recognise that full-time and part-time work may exert different influences on life satisfaction or well-being. Chang and Yen (2011) show that older people in part-time work have higher life satisfaction than those not working, while full-time work is associated with lower life satisfaction. Similarly, Kim and Feldman (2000) showed that bridge employment (part-time or temporary work which follows an individual's career and precedes permanent retirement) is associated with higher life satisfaction than full-time employment (see also Wang, 2007). Voluntary retirement has been shown to have no significant relationship with life satisfaction (Bonsang and Klein, 2012), while involuntary retirement has been shown to be associated with lower life satisfaction (Herzog, House and Morgan, 1991; Cameron and Waldegrave, 2009; Bonsang and Klein, 2012).

These results may not be as incompatible as they seem at first glance. As noted above, older people may prefer retirement for the additional leisure opportunities that it provides, but may also prefer to work in part-time or bridge employment as they transition into permanent retirement. Thus, permanent retirement may increase life satisfaction relative to working for some older people, particularly those in full-time employment, while simultaneously reducing life satisfaction for those who

are retired but would rather be working (i.e. those who are involuntarily retired).

Remaining in work may also present opportunities for older people to invest in social capital, building or maintaining social networks which are important for subjective well-being (Helliwell, 2006). However, as discussed regarding leisure opportunities above, there are diminishing returns to social capital formation from additional time spent at work. It may be that the amount of work which provides

retirement (Cameron and Waldegrave, 2009). Using the same 2007 data, both self-reported physical and self-reported mental health status were shown to have a likely positive relationship with overall well-being (Pool et al., 2009). Given the importance of health, we investigate below the relationship between labour force participation and life satisfaction among older New Zealanders, controlling for the effects of health status.

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an optimal amount of income, social interaction and leisure time occurs at less than full-time employment.

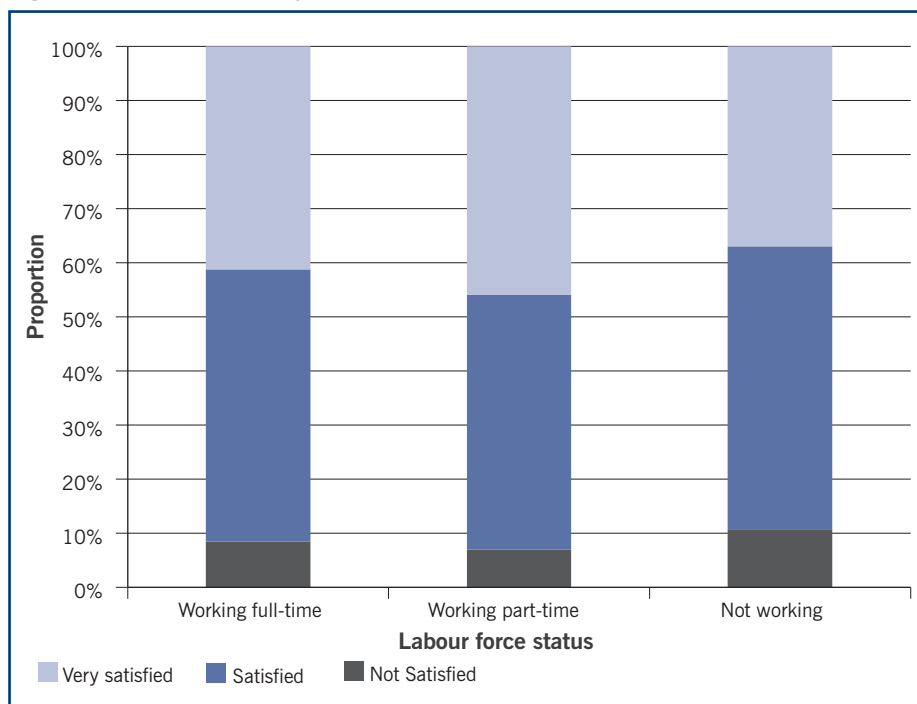
Health has critical relationships with both labour force participation and life satisfaction or subjective well-being. Labour force status affects health, with retirement having been shown to improve mental health status (Mein et al., 2003). In turn, health affects labour force status, as people with lower physical or mental health status are less able to work (Currie and Madrian, 1999), and older people may prefer to permanently retire in order to protect their health or make the most of their remaining life while healthy (Pond, Stephens and Alpass, 2010). The New Zealand Health, Work and Retirement survey demonstrated a difference in the probability of being in the workforce of 17 percentage points between those in good health and those in ill health (Gorman, Scobie and Towers, 2012). Within a large sample of New Zealanders aged 65–84 in 2007, poor health was the second most cited reason (behind family responsibilities) for periods of more than one year spent outside the workforce, and the third most cited reason (behind wanting to do other things, and reaching the pension age) for

### Identification strategy

There are two critical methodological issues which must be overcome in investigating the effects of labour force participation on life satisfaction or well-being. First is the role of selection bias. Older people choose whether or not to participate in the labour market, and it is likely that those who believe that their well-being is likely to be increased as a result of working will work, while those who believe that their well-being is likely to be reduced by working will choose not to work. Thus, simply comparing the well-being of older people who are working with those who are not working will not reveal the 'true' difference in well-being between an individual working and *that same individual* not working.

Second, as discussed above, any analysis of the relationship between labour force participation and well-being must take account of the critical role of health. Health affects labour force participation, as healthier workers are more able to work. However, health has been shown to have a separate direct effect on life satisfaction. This creates a problem of endogeneity. If we simply investigate the effect of labour force participation on life satisfaction while controlling for health, we would be

Figure 2: Life satisfaction, by labour force status



ignoring the fact that health also directly affects labour force participation.

To overcome both of these issues we use instrumental variables regression (Pearl, 2000; Angrist and Krueger, 2001). This approach requires at least one variable that affects labour force participation that does not separately affect life satisfaction. We argue that gender is one such variable. Men have higher labour force participation than women, and there is no theoretical reason why life satisfaction should be higher among men than women, or vice versa.

**Data and methods**

Our data come from a confidentialised unit record file (CURF) of the 2008, 2010 and 2012 waves of the New Zealand General Social Survey (NZGSS): a total of 4242 observations for those aged 65–79 years. The NZGSS collects data on a variety of social indicators and demographics. Importantly, the data set includes data on life satisfaction, self-reported health status and labour force status. Life satisfaction is measured as the response to the question: ‘How do you feel about your life as a whole right now?’ Responses are measured on a five-point Likert scale (1 = very satisfied; 2 = satisfied; 3 = no feeling either way; 4 = dissatisfied; and 5 = very dissatisfied). This measure is very similar to measures

of subjective well-being employed in other surveys in New Zealand and elsewhere (Koopman-Boyden and Waldegrave, 2009). We reduce the ordinal life satisfaction data to a binary variable that is equal to one only when the respondent was ‘very satisfied’ and zero otherwise.

Self-reported health status is measured using the SF-12 measures (Ware et al., 2007). The SF-12 can be used to produce two scales, a physical component summary (PCS) and a mental component summary (MCS), which are taken to represent physical health status and mental health status respectively (Pool et al., 2009). Labour force status is defined in terms of part-time or full-time work. For the purposes of this article we ignore those who define themselves as unemployed (who comprise only 0.36% of the sample of those aged 65–79 years), although technically they are part of the labour force. For most practical purposes in terms of well-being, there is likely to be little difference between an unemployed and a retired person, particularly given how few of them there are in the sample.

Overall levels of life satisfaction in the sample are very high, with nearly 90% of respondents stating ‘very satisfied’ or ‘satisfied’. This is similar in magnitude to other surveys of life satisfaction among older people in New Zealand (Waldegrave

and Koopman-Boyden, 2009). On average, physical health was below the standardised mean score, which is not surprising given that this was a sample of older people, while mental health was slightly above the standardised mean score. Just over 17% of the sample was in paid employment, with slightly more than half of those in full-time employment. Most of the sample was aged 65–69 years (56.3%), with 24% aged 70–74 years and 19.7% aged 75–79 years. Only 40.9% of the sample was male; most (84.5%) owned their own home.

**Results**

Figure 2 shows the relationship between life satisfaction and labour force status in our sample. Again, the level of life satisfaction in the sample overall is very high. Satisfaction is highest among those working part-time (45.9% very satisfied and 47.1% satisfied), followed by those working full-time (41.3% very satisfied; 50.3% satisfied), and lowest among those not working (37% very satisfied; 52.3% satisfied). However, the apparent differences in Figure 2 tell us little about whether there is any causal relationship between labour force status and life satisfaction, and importantly do not control for health status (healthier people are expected to both work more and have higher life satisfaction).

Accounting for selection bias, health status and the endogeneity of labour force participation, our econometric results of the final model specification are presented in Figure 3. As expected, self-reported health is highly significant in explaining life satisfaction. An additional standard deviation of self-reported physical health score is associated with a 5.9% higher probability of reporting being ‘very satisfied’. Similarly, an additional standard deviation of self-reported mental health score is associated with a 15.1% higher probability of reporting being ‘very satisfied’. Older people are less likely to report being ‘very satisfied’, with those aged 70–74 years being 7.5% less likely than those aged 65–69 years to report this level of life satisfaction, and those aged 75–79 years being 5.8% less likely (though the latter is not statistically significant).

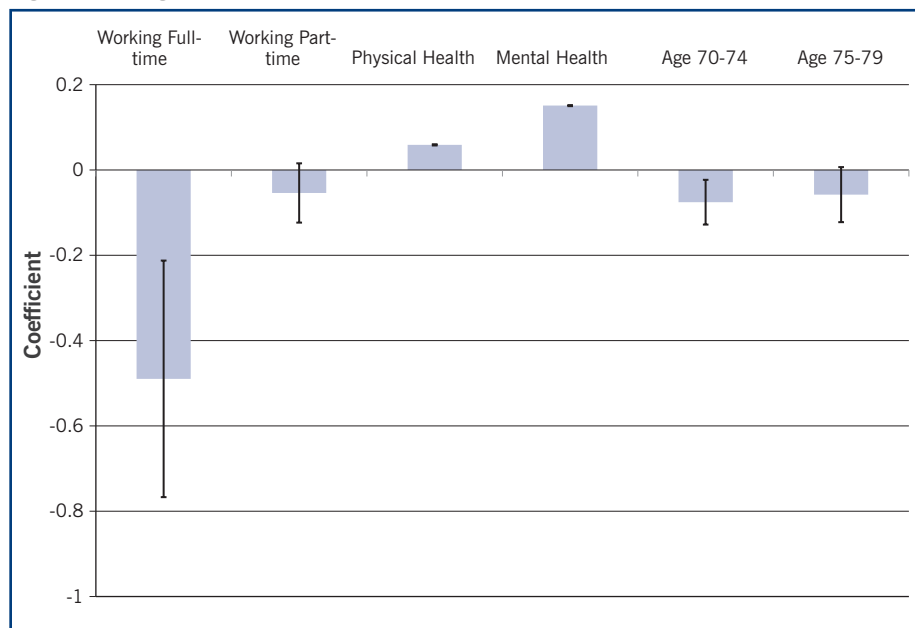
Of most interest in this article are the results for labour force status. Working full-time is associated with significantly lower life satisfaction after controlling for selection bias, endogeneity, age and self-reported health status. Compared with older people who are not working, those who are working full-time are 49% less likely to report being 'very satisfied' with their life, and 21.8% less likely to report being either 'satisfied' or 'very satisfied'. The results for working part-time are more equivocal. Compared with older people who are not working, those who are working part-time are not significantly less likely to report being 'very satisfied' with their life.

### Discussion and conclusion

Our results demonstrate that labour force status is strongly associated with life satisfaction among older New Zealanders, with those working full-time having significantly lower life satisfaction than those not working, while those who are working part-time have slightly lower life satisfaction than those not working. If improvements in well-being (or life satisfaction) are an important policy goal of government (as inferred in *The Social Report 2010* (Ministry of Social Development, 2010)), this result has important policy implications. The New Zealand population is ageing, and older people are healthier and increasingly prolonging their labour force involvement. While improved health has a protective effect on life satisfaction among older people, working full-time reduces life satisfaction according to this NZGSS data. Helping some older people to avoid the necessity of full-time work could potentially substantially improve their well-being.

Decreases in full-time work among older people could be achieved through developing mechanisms for assisting phased transitions from full-time work to retirement through a period of part-time or bridge employment (Cahill, Giandrea and Quinn, 2005). Indeed, phased retirement is becoming increasingly common both in New Zealand (Dixon and Hyslop, 2008) and elsewhere (Kohli and Rein, 1991). Moreover, a recent study found that around 20% of retired older

Figure 3: IV regression results



New Zealanders would like to have part-time work (Gorman, Scobie and Towers, 2012). However, despite the increasing role that phased retirement plays in retirement transitions for New Zealanders and the desirability of part-time work in later life, there is currently little government support to help older people negotiate this transition. The Careers New Zealand website ([www.careers.govt.nz](http://www.careers.govt.nz)) offers useful tips for mature workers, but these are targeted more towards older people who are looking to return to work or continue in employment, not those who are attempting to transition out. Work and Income New Zealand (WINZ) will offer older workers some support in finding work. However, it is difficult to believe that when WINZ has the option of matching a job vacancy to people on job seeker support (formerly the unemployment benefit) or people on NZS, preference will not be given to younger workers, given the opportunity to reduce the cost of government transfers.

A dedicated agency to help older workers into phased retirement would be ideal. Such an agency could fulfil multiple roles, including matching unemployed or underemployed older people to part-time or bridge employment, and helping full-time employed older workers to manage a transition to part-time or bridge employment. There would be additional benefits if such an agency was able to work with employers, particularly

small and medium enterprises which can face large risks associated with the retirement of their older workers. As part of a phased retirement plan, the agency could help the employer with succession planning by matching a job seeker (in concert with WINZ) with an employer that has an older worker who desires phased retirement. This would not only help the older worker to transition to retirement, but help the employer to find a suitable replacement while the older worker is still available to pass on job-specific knowledge and skills. Large employers are often able to manage these transitions without the assistance of an external agency, but small and medium enterprises could benefit greatly from such a service. Finally, an external agency with the roles described above could eventually help New Zealand adopt 'age management planning' processes similar to those of the European Union (Naegele and Walker, 2006), including coordinating training or re-skilling opportunities for older workers.

Helping New Zealanders to actively manage the transition in employment status from working full-time to full retirement through a period of bridge or part-time employment may have an added benefit of allowing a greater number of older people who would previously have permanently retired to remain in paid work for longer. If bridge employment is easier for older people to find through



government-sponsored employment matching programmes or similar, then this will both ease the transition for workers who are looking for phased retirement and provide additional opportunities for those who would otherwise have left the labour force. Simultaneously, aiding older people to remain in paid part-time (as opposed to full-time) work would not necessarily impede their important roles in volunteering and unpaid caring.

The potential gains from bridge employment may differ substantially between men and women, who have different retirement aspirations and make different transitions from employment to permanent retirement (Noone, Alpass and Stephens, 2010). Unfortunately, the nature of the analysis presented here precludes a detailed exploration of the potential differential effects on well-being of labour force status by gender. This question clearly warrants attention in future research.

Having fewer older New Zealanders in full-time employment and more in part-time employment will necessarily require a greater consideration of the income support available, including the level of and age of eligibility for NZS. Some older workers may be working full-time because they are supporting a younger non-working spouse who is not yet eligible for NZS. In 2014, NZS for a couple where one of them qualifies

is \$302.27 a week before tax, and where both qualify is \$638.46 before tax.<sup>1</sup> This substantial difference may encourage some older people to continue working full-time, whereas allowing a smoother income transition for a couple once one qualifies for superannuation may reduce full-time employment in favour of part-time or bridge employment. Any increase in costs associated with this may be more than offset by potential savings from fewer people having financial dependence on social security.

There are ongoing debates about the long-term affordability of NZS. Should the level be reduced, or the age of eligibility be raised, this will create incentives for older people to remain in the workforce for longer. Moving superannuation to an income-tested or means-tested basis would have the opposite effect. Based on the results above, to the extent that older people remain in full-time employment or substitute part-time employment for full-time employment this will reduce the well-being of older people. This reduction in well-being should be considered as part of the trade-off in future policy decisions about changes to superannuation. Cost savings from reducing the level or delaying eligibility for NZS will be partially offset by reductions in well-being among older people. Making part-time employment a more feasible option for older people

would help to reduce the cost (in terms of well-being) of superannuation changes.

The New Zealand population is ageing rapidly, and larger numbers of people are reaching the age of eligibility for NZS. At this important point in their lives, many older New Zealanders choose to continue in full-time paid employment when a transition to part-time or bridge employment would increase their well-being. Others choose to move directly from full-time employment to permanent retirement, when a period of part-time or bridge employment would ease the transition to retirement and improve well-being. Finding a suitable mechanism to assist in these transitions will increase life satisfaction for older New Zealanders, and should be an important future policy goal for the New Zealand government.

<sup>1</sup> A higher rate may be paid where one partner does not qualify, but in that case the superannuation becomes income-tested.

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