Older PEOPLE IN WORK: Key Trends and Patterns 1991-2005

February 2007 Department of Labour

INTRODUCTION

This report examines broad changes that have occurred in the level and composition of employment for those aged 50 to 64 over the past 15 years, (1991 to 2005). It is based primarily on data from the Statistics New Zealand Household Labour Force Survey (HLFS). The report is divided into six parts and looks at trends that have occurred among the older workforce in the following areas:

- 1. labour force participation
- 2. unemployment rate
- 3. types of employment (hours worked, full-time versus part-time)
- 4. trends by industry and occupation
- 5. occupations with a high age profile
- 6. income from employment.

The study also outlines reasons and issues associated with these changes, and topics that could require further investigation.

Summary of main findings

- Since the beginning of the 1990s there has been extremely strong growth in the number of older people aged 50-64 in employment.
- This growth reflects not only an increase in the older population but also the strong upturn in the proportion of older people who are working (labour force participation rate).
- The labour force participation rate among older workers in New Zealand is noticeably higher than in most OECD countries.
- High labour force participation rates have been accompanied by very low and declining unemployment rates.
- The biggest participation rate increase over the past 15 years has occurred
 in the 60-64 years age band. This highlights the impact of the
 implementation of a higher age threshold for New Zealand Superannuation
 (between 1992 and 2002). However, a continuing increase in participation
 rates for this age group after raising the age threshold suggests other
 factors are involved.
- In all three age bands (50-54;55-59;60-64) the female participation rate grew faster than the male rate between 1991 and 2005.
- While participation rates have remained relatively steady for males aged 50-54, they grew strongly for males aged 55-64.
- Participation rates among older Pacific and Asian females are lower than for other population groups.
- There has been no increase in the proportion of older workers working part-time or in those who are self-employed, despite a commonly reported preference among older people for shorter hours and self-employment.
- Strong growth in the size of the older workforce has occurred across all major industries between 1997 and 2005. However, the strongest percentage growth has occurred in the following industry groups; accommodation, cafes & restaurants, government administration &

- defence, education, health & community services, cultural & recreation services and personal & other services.
- Employment of older workers has grown across all major occupational groups. The strongest percentage growth by occupation between 1997 and 2005 has been among the relatively highly skilled white collar professionals followed by service and sales workers.
- Older workers are over-represented in industries with a reducing workforce such as manufacturing and agriculture but under-represented in some faster growing industries such as construction and utilities.
- Since 1997, hourly pay rates for older wage and salary earners have remained at a level similar to or slightly above average pay rates, although they are not increasing as quickly as pay increases for younger aged workers. An increase in the amount of hours worked has also helped raise income levels for this age group.
- Older workers have made an important contribution to New Zealand's strongly performing labour market. However, the reasons for older workers staying in work or retiring are complex and still not well understood. More research is required in this area to better understand recent trends and whether these trends can be sustained.

Background

The number of older people in the workforce has increased dramatically in recent years and has contributed strongly to the growth in New Zealand's overall labour force. The number of older people (aged 50 plus) in work has more than doubled from 267,000 in June 1991 to 547,000 in June 2005, an increase of 280,000 people. Older people comprised over half of labour force growth in New Zealand over this period. This growth has therefore been a significant contributor to labour supply, and has helped alleviate skill and labour shortages in a very tight labour market in the past few years. In the future, the willingness and capacity of older people to maintain or further increase their participation will become increasingly important for the labour market and for New Zealand's economic prospects¹. It is therefore important to gain a better understanding of this topic.

The growth in the older workforce over the past few years has been called "the quiet revolution" (McGregor 2004) and has been beneficial in a variety of ways. This development has not only allowed firms to have ongoing access to the skills of experienced workers, but also offers older individuals important social and economic benefits. By extending their working lives, older workers have increased their opportunity to remain active, to save, and to maintain their living standards.

The drivers of this growth are complex. It is important to realise the growth is not simply due to the baby boomer population bulge reaching higher age groups – strong increases have also occurred in the proportion of older people engaged in the labour market (the labour force participation rate). Different attitudes towards paid work and careers among the baby boomer generation (particularly

¹ The percentage of the working age population aged 45 and over is expected to rise from around 55.9% in 2006 to 62.5% in 2021, according to Statistics New Zealand. National Labour Force Projections 2005 Series 5M

women) may also be a factor, especially given the well documented differences between baby boomers and earlier generations in New Zealand. Some other reasons behind this growth noted in various studies include:

- Raising the age of eligibility for New Zealand Superannuation from 60 to 65.²
- Banning compulsory retirement in 1999.
- Reduction in the superannuation surcharge on extra income earned in 1997 (for the 65 plus group only).
- The Human Rights Act 1993 which has made age-based discrimination illegal.
- Better health, and the recognition among older people (especially ageing baby boomers) of the benefits around keeping active.
- Technological change reducing the manual intensity of some work.
- On-going skill shortages increasing older workers bargaining power.

These factors are in some cases highly interrelated. There are both supply issues (more older people want to/need to keep working up to and beyond the old norms of "retirement age"), and demand issues (such as the growing need for employers to retain older workers in sectors affected by skill shortages).

In this study, the "older" workforce is defined as people in the workplace aged 50-64. They currently represent about a quarter of the total workforce.³ The age of 50 is used as a start-point for analysis as it is used in a number of studies of the older working age population by organisations such as the OECD. It is also a significant group to study as New Zealand stands out as having one of the biggest increases in labour force participation among those aged 50-64 (OECD 2005). The age 65 plus is not included in this study, for two main reasons; Firstly, it is not a group that is reliant on paid work (the participation rate at 65 falls very sharply as soon as superannuation income becomes available). Secondly, it is a well documented group already.

² Between 1992 and 2002 the age of eligibility was gradually raised from 60 to 65 years.

³ Those aged 50-64 comprise 24% of the total number employed as at September 2006.

REPORT FINDINGS: PART 1 LABOUR FORCE PARTICIPATION AMONG 50-64 YEAR-OLDS

The increase in the older workforce has been caused not only by growth in the volume of people aged 50-64, but by increases in their rate of labour market participation. ⁴ The labour force participation rate among those aged 50-64 in New Zealand rose to 77% by September 2005, compared with 57% in the same quarter in 1991, an increase of 20 percentage points. The proportion of New Zealand's older labour force in work now ranks among the highest in the OECD (see Figure 1).

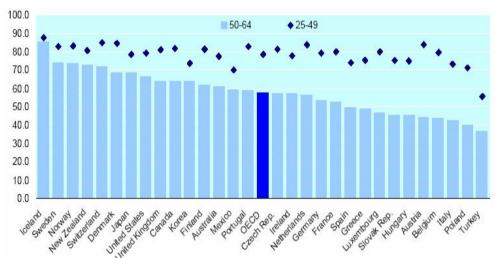


Figure 1: Percentage of the population employed 2004⁵

Source: OECD (2005) Ageing and Employment Policies: Synthesis Report

While New Zealand's participation rate for 25-49 year-olds is close to the OECD average (shown in the diamonds in the graph above), the participation rate of 50-64 year-olds is noticeably higher than most. Only Iceland, Sweden and Norway have higher participation rates in this age group. It is interesting to observe those countries with a similar per capita income (such as Spain and Greece) have much lower levels of labour market activity among their older workforce. Figure 1 also shows that the economy most strongly linked with ours, Australia, has a participation rate among 50-64 year-olds about 10 percentage points lower. This gap may widen further over time given the trend in Australia towards workers retiring earlier (noted in Alpass and Mortimer 2006).

The growth in participation rates among older men and women in New Zealand since the early 1990s has also exceeded most OECD countries. Indeed, many OECD countries have seen a decline in the proportion of older aged workers in the workforce since 1990, including some Scandinavian countries already mentioned

⁴ We can isolate the effect of participation rate growth on the size of the older workforce. If we compare the growth that has occurred with the growth if participation rates in 1990 still applied, it can be shown that about 46% of the growth in the older labour force from 1990-2005 is due to an increased participation rate.

⁵ Source OECD, [http://www.oecd.org/dataoecd/60/16/35466761.pdf].

who currently lead older labour force participation (OECD 2005). The magnitude and continuing increase in older labour force participation in New Zealand is therefore uncommon among developed countries.

Figure 2 presents the participation rate changes for broad age groups over the period investigated. The dotted lines show the most current participation rates. Overall, this graph demonstrates the increase in the participation rate that has occurred among older age groups, in contrast to a decline in some younger age groups. Combined with an increase in absolute size of the older age groups, this participation change has contributed strongly to the increasing utilisation of older workers in the New Zealand workforce.

Increased rates of participation have occurred for females in all age groups over 40, and for males among all age groups over 55. The strong increase in participation rate among the 55-59 and 60-64 years age groups is in contrast to the slight decline that occurred among most younger age groups. This reflects an increasing involvement in tertiary education, which has lowered the participation rate for males and females under 25. This also accentuates the effect of a smaller volume of persons in younger age groups relative to higher volumes in the older age groups.

An example of the shift that has occurred since 1991 is that a greater proportion of 55-59 year-olds are now working than 20-24 year-olds of both genders. This is due to a rise in participation in the older age group and a fall in the rate for the younger age group, as discussed above.

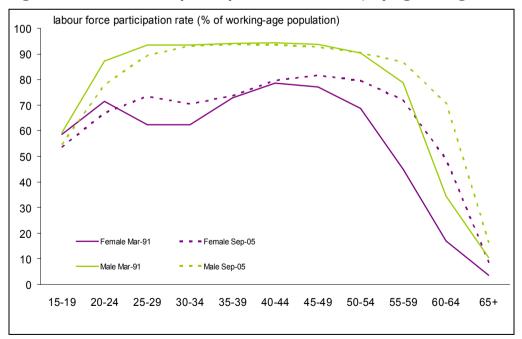


Figure 2: Labour force participation 1991-2005, by age and gender

Source: HLFS

Figure 3 shows the trend in the New Zealand participation rate for 50-64 yearolds from March 1991 to September 2005. Over this period, both male and female older workers have had above-average growth in their labour force participation rate. Older female participation rates have risen dramatically from about 45% in 1991 to about 70% by 2005. For older males, the participation rate rise has been less pronounced, from about 70% to 84% by 2005. It should be noted that for older males this is still below where it was in the early 1970s, as noted in the OECD synthesis report (2006). The rate for 50-64 year old males moved ahead of the overall rate for all age groups in about 1995, while females in this age group began to exceed the average about five years later. As at September 2005, 50-64 year old male and female participation rates exceeded the national all male and female participation rates by 9.0 and 8.4 percentage points respectively - in stark contrast to the picture in the early 1990s.

Female 50-64 -Male 50-64 all Female ----all male 90 _FPR (% of working age popn) 80 70 60 50 40 30 Mar-99 Mar-93 Mar-97 Mar-03 Mar-05 Mar-91 Mar-95 Mar-01

Figure 3: Labour force participation rate changes by age and gender 1991-2005

Source: HLFS

Figure 4 shows that this growth in the labour force participation rate for older people has not been uniform across each 5-year age band. For example, the participation rate for males aged 50-54 has remained fairly constant over this entire period at a high level of around 90%. In contrast, a dramatic increase in participation rates for 60-64 year olds of both genders has occurred. From 1991 to 2005, males in this age group increased their participation rate from 35% to over 70%, and for females the rate rose substantially as well (although from a lower base) from about 18% to over 50%.

It is not coincidental that the first decade of this increase coincides with the phased raising of the age of eligibility for New Zealand Superannuation (from 60 to 65). This has created a greater economic necessity for many people to participate in order to maintain living standards. However since the phase-in was completed by 2001 the proportion of those aged 60-64 participating in the labour force continued to grow rapidly. For females, for example, the average participation rate in 2001 was 41.7% and this had increased to 50.1% four years later. For males over this four year period the increase rose from 63.9% to 71.1%. This suggests that factors other than changes to superannuation may be stimulating greater participation in this age group.

The growth in the 50-54 year old and 55-59 year old female participation rates has considerably exceeded that of males, and as a result the rates between the two genders have slowly begun to converge. The reasons for the stronger ongoing growth in female participation rates reflect a wide variety of factors (such as better qualifications, more work opportunities and the growth in female sole households).⁶ The participation rate "gap" between males and females has closed substantially for these two age groups, whereas the gap has remained at about the same level for 60-64 year olds over this period.

— Male 50-54 ----- Male 55-59 Male 60-64 female 50-54 — * female 55-59 — — female 60-64 100 90 LFPR (% of working age popn) 80 70 60 50 40 30 20 10 0 92 93 94 95 96 86 66 02 05 97 6 2 Mar Mar

Figure 4: Older people's Labour force participation rate changes by age and gender

Source: HLFS (four quarterly average trend)

So, for the 50-64 year age group overall;

- females have substantially increased their participation rate in all three age bands
- the strongest increase in participation over this period has occurred in the 60-64 years age group
- males aged 50-54 have not increased their participation rate since the early 1990s although they continue to have the highest participation rate.

Figure 5 looks at ethnicity, and shows increases in participation by broad ethnic group (note that "Other" comprises mainly Asian and Pacific peoples). Steady growth occurred among older Europeans throughout this period, whereas participation rates for both Maori and Other ethnic groups only began to pick up in the 1998/1999 period.

⁶ New Zealand has a relatively high proportion of sole parent families (29 percent in 2001), which is higher than the United Kingdom, Australia and Canada. 8 out of 10 sole parent families are headed by women. (NZ Social Report MSD).

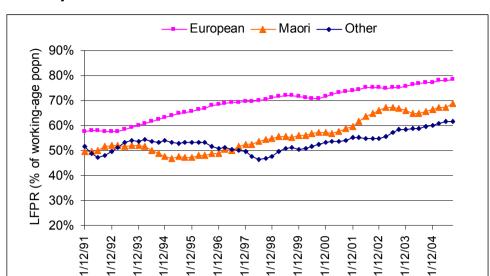


Figure 5: Older people's Labour force participation rate changes by ethnicity 1991-2005

Source: HLFS (four quarterly average trend)

The participation rate gap between older Maori and European, which widened in the 1990s has begun to close, however there is a continuing large gap between the older Other and older European ethnic groups. Numerically the pool of labour in the Other ethnic group aged 50-64 has grown more quickly than either European or Maori (from around 23,000 people in 1991 to 63,000 people in 2005), but this group remains significantly less engaged in the labour market.

To help further explain the ethnic variation in participation rates, Figure 6 looks at changes by both ethnicity and gender. There are very strong differences across these different groupings. Male Europeans have the highest participation rate, but the male Maori rate has begun to rise sharply and is not far behind. Substantial increases have occurred for all groups except the female Other ethnic group.

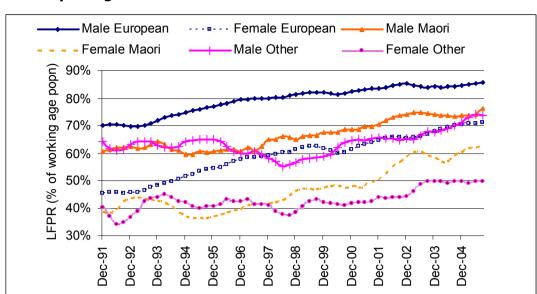


Figure 6: Older people's Labour force participation rate changes by ethnicity and gender

Source: HLFS (four quarterly average trend)

The strong growth in the female participation rate occurred for both Europeans and Maori, with the latter's rate rising from 39% to 62% in this period. Participation rates for older European, Maori and Other females were similar in 1991 but soon began to diverge and a significant gap now appears between their respective participation rates. It appears that Other females are a particularly slow growing and underutilised segment of the formal labour market with their labour force participation rate barely reaching 50% by 2005. Cultural differences could partly explain this, as suggested by a large gap between the participation rates between male and female in this group. An additional factor may be the large compositional change that has occurred in this group due to an influx of migrants from new source countries over the 1990s (including an increased inflow from non-English speaking countries). The potential for greater participation in this group needs to be explored further, which will also require understanding why participation is low and addressing any barriers.

PART 2: CHANGES IN THE UNEMPLOYMENT RATE AMONG 50-64 YEAR OLDS

The New Zealand unemployment rate for workers aged 50-64 has consistently been below the average unemployment rate for all ages over the 1991-2005 period. However, it needs to be kept in mind a lower unemployment rate for older workers relative to younger workers does not necessarily mean that older workers face a lower risk of job loss than younger workers. It may instead reflect that older workers are more likely to withdraw from the labour market altogether following job loss (OECD 2005).

Figure 7 shows the female and male unemployment rates compared to the all ages unemployment rates. The unemployment rate fall for 50-64 year olds has remained lower than the national average, and in September 2005 stood at 1.5% and 1.9% for females and males respectively, compared to a total rate of under 4%. Over this period, the overall unemployment rate has moved down towards the very low unemployment rate of the older population.

Female 50-64 -Male 50-64 ----- all Male — all Female 14 12 **Unemployment rate** 10 8 % 6 2 0 Mar-05 Var-93 Mar-95 Mar-99 Mar-03 Mar-91 Mar-97 Mar-01

Figure 7: Unemployment rates, by age and gender

Source: HLFS

PART 3: CHANGE IN CHARACTERISTICS AMONG EMPLOYED 50-64 YEAR OLDS

Section three explores some characteristics of the growth of the mature labour force, looking at whether growth has been more prevalent among higher educated workers and for those who are part-time or in self employment.

Firstly, education levels are investigated. Educational qualifications are an important influence on labour force participation. However, due to changes to coding in the HLFS and changes in the types of school qualifications over time, it has been necessary to categorise educational qualifications rather crudely between those who have post-school qualifications and those without. Figure 8 shows no appreciable difference in growth in employment of older workers with post-school qualifications compared to those without qualifications.

 Post-school guals No post-school quals 300,000 250,000 Number employed 200,000 150,000 100,000 50,000 0 Mar-05 Mar-92 Mar-93 Mar-91 Mar-94 Mar-95 Mar-96 Mar-97 Mar-98 Mar-99 Mar-00 Mar-02 Mar-04 Mar-01

Figure 8: Employment growth of older workers by educational qualifications 1991-2005

Source: HLFS

Secondly, hours worked are investigated. Figure 9 shows employment growth has been largely in full-time work (over 30 hours per week). The proportion of older persons working part-time has actually decreased slightly from 22% in 1991 to 19% in 2005. While there has been steady growth in females in part-time work, growth in females in full-time work has almost trebled over this period. By 2005 67% of older females were working full-time, up from 60% in 1991. The proportion of older males working full-time has also increased slightly.

The proportion of older persons working full-time is currently fairly similar to the overall proportion of full-time workers. So there is little sign that hours worked declines strongly at higher age groups. This is very interesting in relation to a commonly stated preference among older workers when surveyed who state that they would like to work more part-time and more flexible hours (see McPherson 2005). This raises questions about why older people tend to work the hours they do, and the opportunities available for people to obtain the hours they desire.

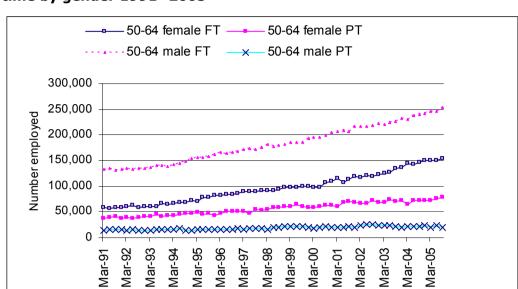


Figure 9: Employment growth of older workers, full-time versus parttime by gender 1991 -2005

Source: HLFS

Some literature suggests that along with part-time work the probability of self-employment increases with age, (and this is sometimes seen as the preferred option for older persons). However, Figure 10 shows that the growth in employment among older workers has been dominated by wage and salary workers. While there are a large number of white collar professionals and managers in this age group, it is clear that the bulk are not self-employed or employing others. The proportion of older workers who stated they are either self employed or employing others has actually decreased from 28% in 1991 to 26% in 2005 (annual September year averages). Over the same period the proportion of all workers either self employed or employing others also declined, from 20% to 18%. So while the decline in self employment among older workers is broadly in line with overall trends, it does not support the notion of a growing preference towards self-employment among older workers.

The apparent contradiction between the preferences among older workers for more part-time work and more self employment and the reality as shown in the HLFS results may need further investigation. It may only become common over 65.

Figure 10: Type of employment of older workers 1991-2005



Source: HLFS

PART 4: CHANGE IN EMPLOYMENT BY INDUSTRY AND OCCUPATION

This section examines trends in the employment of workers aged 50-64 by industry and occupation. Due to data limitations only a very broad aggregate analysis of occupations and industries using the HLFS has been carried out.

Broad Industry

Table 1 shows the number of older persons employed in 2005 and their growth between 1997 and 2005, compared with the whole working population.

Table 1: Older Workers compared with total employment by broad industry group⁷

	Workforce 50	0-64			Workforce al				
Broad Industry	Number employed 2005 (annual average) (000)	% share in 2005	97-05 change (000)	97-05 % change	Number employed 2005 (annual average) (000)	% share in 2005	97-05 change (000)	97-05 % change	Difference in percent share
Primary (Ag, hort,	46	9.4%	10	29.0	153	7.4%	-1	-0.7	2.0%
mining)									
Construction & Utilities	34	6.9%	10	39.0	168	8.1%	41	32.1	-1.2%
Manufacturing	71	14.3%	20	39.8	285	13.8%	-2	-0.7	0.5%
Transport, storage &	25	5.1%	6	29.3	120	5.8%	16	15.6	-0.7%
Comms									
Finance & Business	66	13.4%	27	68.3	295	14.3%	55	22.9	-0.9%
services									
Wholesale & Retail	71	14.3%	17	31.9	362	17.5%	50	16.1	-3.2%
trade									
Govt, Accom,	179	36.3%	76	73.4	679	32.9%	147	27.7	3.5%
Community services									
Total	493	100.0%	166	50.7	2065	100.0%	305	17.4	0.0%

Source: HLFS. Note the overall total exceeds the combined occupation and industry groups due to a residual group with no recorded occupation/industry.

⁷ Note that the SNZ 1-digit industry classifications have been aggregated further to allow for classification changes over time. In particular, a very large grouping called "government, accommodation and community services" was created due to some HLFS industry classification changes made over the 1991-2005 period. The ANZSIC 1-digit groups it includes are: accommodation, cafes & restaurants, government administration & defence, education, health, cultural & recreational services and personal and other services.

The largest employer of older workers among the seven broad industry groups identified is government, accommodation and community services (179,000 older persons employed in 2005). This is followed by wholesale & retail trade, and manufacturing, employing 71,000 each. These three groups combined employed 64.9% of all older workers.

The industries in which older workers were most over-represented were government, accommodation and community services (36.3% of older workers versus 32.9% of the total labour force) followed by primary (9.4% of older workers versus 7.4% of the total labour force). The industry in which older workers were most under-represented was wholesale and retail trade (14.3% of older workers versus 17.5% of the total labour force). The results for the primary industry probably reflect the high proportion of older people in farming-related occupations such as livestock farming, with farming-related work tending to feature strongly in many studies of older workers in New Zealand. For example, cattle farmers and deer farmers featured among the occupations with the oldest age profile in the 2001 census.

Industry Growth Trends

Table 1 also looks at growth rates for older workers compared with all workers between 1997 and 2005. Over this period the economic cycle moved from a recession towards a strong economic upturn.⁸ Between 1997 and 2005 the older workforce grew rapidly, with the number of older workers increasing by more than half (50.7%) compared with an overall increase in the size of the labour force of 17.1%. This has resulted in an increasing proportion of older workers in all major industries.

The industries experiencing the fastest growth in older workers were government, accommodation, and community services with employment growing by 73.4% between 1997 and 2005 compared with an increase of 27.7% of the whole population. Next fastest growing was finance and business services (68.3% against an overall increase of 22.9%). In the primary sector, the 50-64 year age group experienced a 29.0% increase in employment, in contrast to an actual fall in total employment in this industry of 0.7%.

Manufacturing employment among the 50-64 year age group grew strongly by nearly 40% despite a slight contraction in total employment in this industry over this period. This suggests that manufacturing along with agriculture is the fastest ageing industry, and it is also one of the most vulnerable in terms of sudden "employment shocks" such as mass layoffs. Given that older workers are at greater risk of long-term unemployment, their growing concentration in an industry like manufacturing with declining employment is therefore of concern.

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⁸ Note that 1997 was as far back as an existing comparable series of total employment by industry could be used for this study.

Broad occupations

Table 2: Older workers compared with total employment by broad occupation group

	Workforce 50	0-64			Workforce al				
Broad Occupation	Number employed 2005	% share in 2005	97-05 change (000)	97-05 % change	Number employed 2005	% share in 2005	97-05 change (000)	97-05 % change	Difference in percent share
	(annual average) (000)				(annual average) (000)				
Legislators/ Administrators	73	14.9%	26	55.7	252	12.2%	53	24.2	2.7%
& Managers									
Professionals	84	17.0%	41	95.8	314	15.2%	89	37.6	1.8%
Technicians & Associate	58	11.7%	17	43.1	245	11.8%	27	13.2	-0.2%
Professionals									
Clerks	58	11.7%	14	31.7	255	12.4%	14	3.4	-0.6%
Service & Sales Workers	58	11.8%	24	71.8	326	15.8%	71	31.1	-4.0%
Agriculture & Fishery Workers	46	9.3%	11	30.0	154	7.4%	4	1.7	1.9%
Trades Workers	40	8.2%	10	31.3	200	9.7%	28	15.1	-1.5%
Plant & Machine Operators &	47	9.4%	17	58.7	187	9.1%	29	20.1	0.4%
Assemblers									
Elementary Occupations	28	5.8%	5	21.9	130	6.3%	-7	-1.9	-0.5%
Total	493	100.0%	166	50.7	2065	100%	305	17.4	0.0%

Source: HLFS. Note the overall total exceeds the combined occupation and industry groups due to a residual group with no recorded occupation/industry.

Table 2 shows that the most common occupation groups for older workers were professionals followed by legislators, administrators and managers (together employing 31.9% of all older workers). The occupations in which older workers were most over-represented were legislators, administrators and managers (14.9% of older workers versus 12.2% of the total labour force) followed by agriculture and fishery workers (9.3% of older workers versus 7.4% of the total labour force) and professionals (17.0% versus 15.2%).

The occupation group where older workers were most under-represented was service and sales workers, (11.8% of older workers versus 15.8% of all workers). This group is a very large and varied grouping of occupations often associated with the retail and tourism sectors. Some examples from the 2001 census of the type of occupations in this group experiencing a low percentage of older workers include waiters and café workers.

There is also a relatively low proportion of persons aged 50-64 in the trades. This is perhaps surprising, given that severe skill shortages may be one of the reasons for the growth in the number of older workers. In 2005, the Department of Labour estimated that only 37% of trade vacancies were filled within ten weeks of advertising. Many occupations surveyed by the Department (such as plumbers and metal workers) showed evidence of an ageing workforce struggling to attract sufficient numbers of younger workers. Contrary to expectations, in elementary occupations where more physical work tends to be required, older workers were only slightly underrepresented (employing 5.8% of older workers versus 6.3% of the total labour force).

Overall, older workers appear well represented in the highly skilled occupations (managers and professionals). Generally they are slightly over-represented in the "white collar" jobs (defined as the first five occupation groups shown), but the difference is not large. This may reflect the increasing likelihood of those with qualifications remaining in employment, but also the efforts of sectors such as health which have been active in seeking to retain older aged workers.

Occupational growth trends

The occupations that have experienced the fastest growth over this period among older workers are professionals, followed by service and sales workers. Growth in older workers in these occupational groups was well above the growth experienced among older workers overall. The area that has seen the slowest growth has been elementary occupations, with only a 21.9% increase.

While there has been very strong growth among older workers in the "white collar" occupations it is notable that there has been considerable growth in three relatively slow growing occupational groups. These include elementary occupations, clerks, and agriculture and fisheries workers.

In summary, it is difficult to detect any large imbalance in the employment of older workers by industry and occupation at this very broad level. Older workers are well represented in the primary industry, which is well recognised and shown in other sources such as Census 2001. Many blue collar and service-oriented jobs

appear to employ a slightly lower proportion of older workers, which may not be surprising given the greater physical labour involved in these jobs. A more detailed look at occupations where there is an ageing workforce follows.

PART 5: WHICH OCCUPATIONS HAVE THE OLDEST AGE PROFILE?

The census can be used to identify some specific occupations that are ageing much faster than others. Figures 11 and 12 below show the occupations which had the highest age profile in 2001 and the occupations which have experienced the most growth in average age between the last two censuses (2001 and 1996). Note 2006 census data is not yet available for this analysis.

■ Average age in 2001 58 56 54 Age (Years) 52 50 48 46 Clerk of Works **Building Caretaker** Local Govt Legislator Sattle farmer/farm worker Deer farmer/farm worker Passenger Coach driver -odging Services Manager Metallurgist Other Livestock farmer **Boiler Attendant** Natchmaker and jeweller

Figure 11: The occupations with the highest average age in 2001

Source: 2001 Census

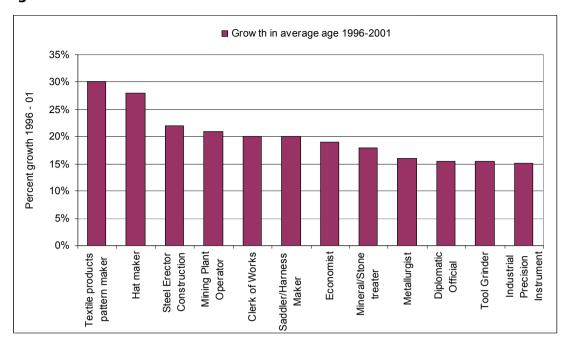


Figure 12: The occupations experiencing the highest growth in average age⁹

Source: 2001 Census

Figure 11 indicates those occupations which have the highest average age. Those with the highest are judges and local government legislators. It can be seen that three agricultural occupations feature on the list. Another, passenger coach driver, is a critical occupation in the tourism industry. While some of these occupations (such as judges) require extensive experience, others do not (such as coach drivers and caretakers).

Figure 12 presents occupations with a mature age profile (average age over 40) which have also experienced rapid growth in their average age between 1996 and 2001. A wide range of occupations appear on this list, but some specialised manufacturing-related occupations (such as textile pattern maker, tool grinder and precision instrument maker) are present. This appears consistent with the growth in the older workforce in the manufacturing industry observed earlier.

These occupations are only indicative of the jobs that employ many older workers; however they may make useful starting points for research into the older workforce. There are perhaps some features that make them attractive to this group (such as more flexible hours, self employment or other features). Given the growth in the older workforce the implications of having older workers more concentrated in some occupations will need to be examined more carefully in future. ¹⁰

⁹ Note that 2006 data is not available yet

¹⁰ When available, the 2006 census will enable updated occupational research to profile the occupations that have high age structures.

PART 6 INCOME FROM EMPLOYMENT FOR 50-64 YEAR OLDS

This section examines changes in the wage and salary levels of older workers. 11

Table 3 indicates that older people have enjoyed a considerable increase in income since June 1997. Over this period, each older age band experienced an increase in their average weekly wage similar to or above the level of increase of 3.7% per annum experienced for all age groups (20-64). However, the increase in the hourly wage in each older age band was slightly lower than for the whole population (3.2% versus 3.5%). This indicates that older wage and salary workers have boosted their weekly income partly by increasing the number of hours worked. This can also be observed with the increasing amount of older workers now working full-time (see figure 9). The difference between weekly and hourly income growth is most apparent in the 60-64 year age group, who experienced a weekly wage increase of 3.8% per annum, but an hourly wage rise of only 1.2%.

The average hourly pay rate for older persons in 2006 was \$21.02, only slightly higher than the rate for those aged 20-64. Since 1997, hourly pay rates for older people have remained at a level similar to or slightly above average pay rates. This plus an increase in the amount of hours worked has helped raise income levels for this age group.

The 1998 recession may have had a considerable impact on the wage levels of 60-64 year olds. In June 1997 their average hourly wage was \$17.93, but this fell sharply the following year and did not recover until six years later in June 2003. The only other age group to experience a similar pattern was the 25-29 years age group. A variety of compositional effects may also explain this long dip in hourly wage rates for the 60-64 years group; however it suggests they may be a vulnerable group in an economic downturn.

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¹¹Information about wages by age is collected in the New Zealand Income Survey and does not include self employed as this may affect the reliability of results. The analysis below only goes back as far as 1997, when the survey began. There is considerable volatility in some years for some age groups.

Table 3: Weekly and hourly earnings from wage and salary jobs

	Actual weekly earnings from all Wage and Salary jobs for Wage & Salary earners										
	Age group										
June Quarter	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	50-64	20-64
1997	\$412.12	\$538.62	\$601.41	\$605.23	\$606.56	\$642.25	\$606.71	\$573.40	\$517.93	\$580.97	\$568.21
1998	\$420.77	\$578.26	\$621.78	\$627.64	\$628.75	\$678.78	\$623.76	\$590.15	\$515.00	\$595.16	\$591.49
1999	\$431.32	\$579.38	\$657.18	\$631.76	\$646.82	\$692.54	\$647.75	\$630.68	\$563.22	\$628.80	\$611.41
2000	\$429.14	\$591.13	\$663.87	\$663.05	\$660.77	\$711.51	\$691.02	\$580.59	\$585.44	\$636.18	\$625.15
2001	\$460.14	\$617.24	\$697.61	\$701.56	\$684.28	\$737.90	\$706.78	\$618.46	\$538.10	\$646.15	\$650.80
2002	\$476.48	\$613.59	\$723.70	\$727.39	\$701.28	\$723.42	\$737.47	\$669.08	\$567.52	\$681.00	\$668.27
2003	\$468.73	\$638.85	\$712.65	\$773.17	\$756.83	\$770.68	\$764.88	\$686.40	\$639.70	\$713.55	\$694.61
2004	\$491.38	\$652.41	\$728.68	\$791.61	\$786.37	\$799.27	\$798.98	\$727.75	\$628.65	\$740.37	\$717.36
2005	\$521.98	\$687.17	\$805.90	\$813.05	\$827.93	\$869.01	\$798.65	\$797.14	\$782.16	\$794.83	\$766.21
2006	\$550.79	\$700.32	\$834.55	\$863.01	\$862.92	\$849.77	\$835.77	\$815.35	\$722.36	\$805.61	\$785.42
nominal growth 97-06 (ann avg)	3.3%	3.0%	3.7%	4.0%	4.0%	3.2%	3.6%	4.0%	3.8%	3.7%	3.7%

	Actual hourly earnings from all Wage and Salary jobs for Wage & Salary earners Age group										
June Quarter	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	50-64	20-64
1997	\$11.58	\$16.06	\$15.79	\$16.22	\$15.70	\$16.27	\$15.61	\$15.16	\$17.93	\$15.84	\$15.37
1998	\$11.58	\$14.69	\$16.18	\$16.55	\$16.52	\$17.00	\$16.24	\$16.10	\$14.75	\$15.95	\$15.49
1999	\$11.92	\$15.00	\$17.33	\$16.95	\$17.45	\$17.70	\$17.21	\$16.73	\$16.21	\$16.89	\$16.24
2000	\$12.56	\$15.43	\$20.17	\$26.53	\$19.90	\$26.84	\$25.16	\$15.99	\$16.94	\$20.70	\$20.40
2001	\$12.82	\$15.81	\$17.80	\$18.04	\$17.95	\$18.86	\$17.92	\$24.54	\$16.06	\$19.66	\$17.50
2002	\$13.66	\$15.90	\$18.81	\$21.78	\$25.81	\$18.85	\$19.39	\$18.29	\$16.93	\$18.53	\$19.16
2003	\$13.47	\$19.05	\$18.83	\$21.08	\$20.01	\$21.10	\$22.92	\$18.69	\$19.15	\$20.71	\$19.35
2004	\$13.79	\$17.13	\$19.18	\$21.32	\$21.61	\$20.86	\$20.08	\$18.93	\$18.29	\$19.33	\$19.11
2005	\$14.60	\$17.73	\$21.01	\$22.10	\$21.47	\$21.67	\$20.32	\$20.72	\$21.33	\$20.67	\$20.04
2006	\$15.64	\$18.58	\$22.08	\$23.24	\$22.86	\$22.55	\$21.44	\$21.10	\$19.95	\$21.02	\$20.91
nominal growth 97-06 (ann avg)	3.4%	1.6%	3.8%	4.1%	4.3%	3.7%	3.6%	3.7%	1.2%	3.2%	3.5%

Source: HLFS Income Supplement

APPENDIX 1: DATA SOURCES AND VARIABLES USED

This study uses extracts of data taken from the quarterly Household Labour Force Survey (HLFS) that cover the period March 1991 to September 2005, (the last quarter that the Department of Labour had detailed extracts available for use at the time of this study). This source was chosen because it offers a long-term data source and can reveal the turning points in what is often a very gradual change. There are limitations with this data source. In particular the classification of industry/ occupation data has changed over time and there is evidence that the reliability of occupational data in the HLFS is affected to some degree by non-sampling (e.g. coding) error (Spier 2006).¹²

The HLFS variables considered in this study included the following:

- ethnicity
- gender
- full-time/part-time employment status
- · hours usually worked
- industry classification
- occupation classification
- post-school qualification. (Yes or No).

Family code was also looked at but did not appear to be reliable. This dimension would be useful in order to better understand the family dynamics that may influence participation in an older aged population (especially females).

¹² Another source of data for older workers in New Zealand is the LEED data set. This is a complete census of employed New Zealanders and age is a variable that is reliably collected. It includes income and has a strong regional focus. In future, it will include self-employed persons.

APPENDIX 2: DEFINITIONS USED IN THIS STUDY

Note the following standard definitions are used in this paper:

- 1. *Participation rate* means proportion of the working-age population that is in the labour force.
- 2. *Employment* means in paid employment for more than one hour a week in the reference period.
- 3. *Unemployment rate* means the proportion of the labour force that is unemployed.
- 4. Ethnicity is self-perceived and people can belong to more than one ethnic group. In the HLFS, people with multiple responses to the ethnicity question are assigned to one ethnic group using this prioritisation: Maori; Pacific Peoples; Other ethnic groups; European.

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