

28 October 2004

INCOMES - JUNE 2004

Background

- 1 This report provides the highlights from the New Zealand Income Survey (NZIS) for the June 2004 quarter, which was released on 28 September 2004. The NZIS is an annual supplement to the Household Labour Force Survey. Unless specified, data are for all people aged 15 years & over and are not adjusted for seasonal patterns or inflation.

Executive Summary

- 2 Average hourly earnings grew solidly over the year to June 2004 as the median rose by 2.3 percent to \$15.34 and the mean rose 2.1 percent to \$18.24. The mean shares all earnings across all workers and the median is the middle worker's earnings (half earn more, half earn less). The median is less than the mean because a small proportion of workers have very high wages & salaries.
- 3 The gap between male and female earnings remained steady. Female median hourly earnings were 87.3 percent of male median hourly earnings, down marginally from 87.4 percent in 2003. There was a large fall in the gender pay gap for Maori in the past year, with Maori women earning 96.4 percent of what Maori men earn. There are many important differences in earnings by age, qualification, occupation and industry.
- 4 Average weekly income from all sources for all people rose by 2.6 percent to \$554 in the year to June 2004. Wellington no longer has the highest average weekly income of the 12 main regions, with the Auckland region now taking top spot at \$627 in 2004.

Table 1: Key Income Survey results

	June 03	June 04
Median hourly earnings	\$15.00	\$15.34
Average hourly earnings	\$17.86	\$18.24
Average weekly income	\$540	\$554

Source: Statistics New Zealand

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Background

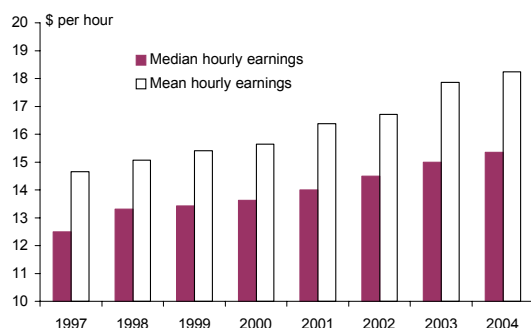
- 5 The New Zealand Income Survey (NZIS) collects data on people's pre-tax income from wages & salaries, self-employment, government transfers, and investments. The NZIS has been conducted in each June quarter since 1997 and is important because it is the main source of income information for different groups in society, is a survey of people not employers, and has a full coverage of industries. See Appendix for more details.
- 6 This report examines hourly earnings (wages & salaries) for those in paid employment and weekly income from all sources for all people (earnings are a part of income). This report focuses on the median measure of hourly earnings and uses the mean measure of weekly income.¹

Key points

Solid growth in average earnings during the year to June 2004

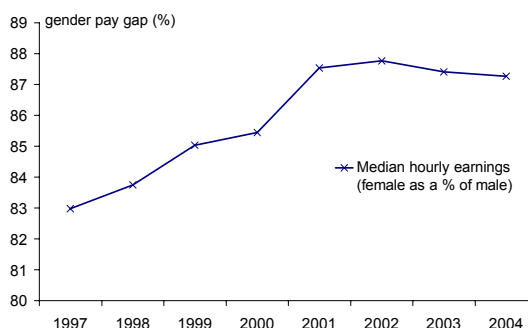
- 7 Average earnings rose solidly over the year to June 2004, although by less than in the year before (*Figure 1*). There are two measures of average hourly earnings:
- Median hourly earnings were \$15.34 at June 2004, up a moderate 2.3 percent in the year to June 2004 (although below 3.4 percent growth in the previous year).
 - Mean hourly earnings were up a moderate 2.1 percent to \$18.24 in the year to June 2004, well below growth of 6.9 percent in the year before.

Fig 1: Average hourly earnings



Source: Statistics New Zealand

Fig 2: Gender pay gap



Source: Statistics New Zealand, DoL calculations

Overall gender pay gap steadies in recent years, narrows for Maori

- 8 Over the year to June 2004, the rise in median hourly earnings for males (4.4 percent) was almost identical to the rise for females (4.3 percent). The gap between male and female median hourly earnings was thus fairly steady; female earnings of \$14.40 were 87.3 percent of male earnings of \$16.50 at June 2004, marginally down from 87.4 percent at June 2003 (*Figure 2*).

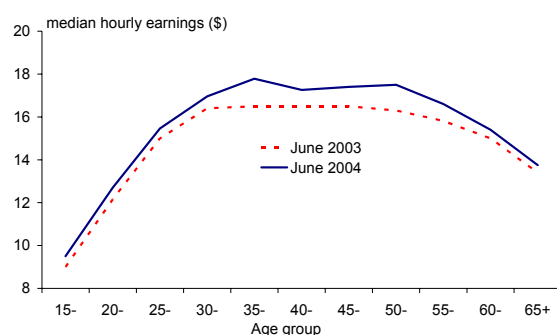
¹ Median is used for hourly earnings as it gives the middle person's earnings, with half of workers above and half of workers below, and so is not distorted by a small group with very high earnings (which results in the median being below the mean). The mean takes all incomes and shares them across all people; it is used for weekly incomes because of the emphasis put on the source of income and thus it is better to use the average because the different sources of income all add to the overall average.

- 9 While it has steadied recently, female median hourly earnings as a proportion of male earnings are up strongly from 83.0 percent at June 1997. The past seven years have seen wage growth for females (24 percent) outpace that for males (18 percent). Most of the decline in the gender pay gap has been attributed to more females achieving educational qualifications, thereby reducing the skill gap between males and females.
- 10 European/Pakeha had the highest median hourly earnings of the main ethnic groups at June 2004 (\$16.00), followed by 'Other' ethnicities (\$14.68), Maori (\$13.76) and Pacific Peoples (\$12.98). European/Pakeha had the highest annual growth in median hourly earnings – for the first time since the NZIS started – up 5.7 percent in the past year. In the past seven years, Maori had the highest earnings growth (26 percent since 1997).
- 11 The gender pay gap was fairly steady over the past year for all of the ethnic groups bar Maori. For Maori, female earnings were 96.4 percent of male earnings at June 2004, up sharply from 85.7 percent at June 2003. The largest gap was for European/Pakeha females, whose earnings were 87.1 percent of male earnings in 2004.

Middle aged workers enjoy highest earnings and highest growth over the past year

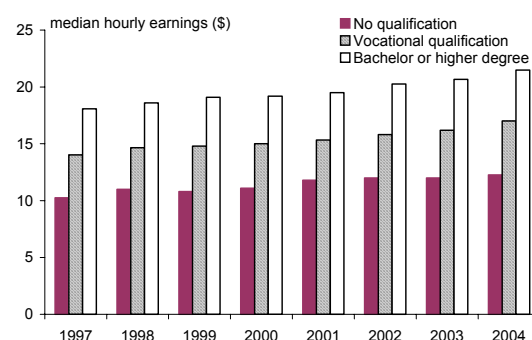
- 12 The highest median hourly earnings across age groups in 2004 was \$17.78 for 35-39 years olds due to a 7.8 percent rise from \$16.50 a year ago, the strongest growth of the 11 age groups. The older groups of 50-54, 45-49 and 40-44 years had the next highest median hourly earnings in 2004, but earnings then fell away steadily for the age groups of 55-59, 60-64 and lastly 65 years & over, whose main source of income tends to be New Zealand Superannuation (*Figure 3*).
- 13 The lowest median hourly earnings were for the youngest age groups: \$9.50 for 15-19 year olds and \$12.70 for 20-24 years. This helps explain the lower earnings of Pacific Peoples and Maori discussed above, given their younger age profiles (eg median age at 2001 was 21.0 for Pacific Peoples, 21.9 for Maori and 36.9 for European/ Pakeha).

Fig 3: Median hourly earnings by age



Source: Statistics New Zealand

Fig 4: Median hourly earnings by qualification



Source: Statistics New Zealand

Higher qualifications tend to imply higher earnings...

- 14 There continues to be a clear relationship between qualifications and earnings. Those with no qualifications had median hourly earnings (\$12.27) that were just 57 percent of those with a bachelor or higher degree (\$21.48, see *Figure 4*). Furthermore, the lowest growth in the past year was for those without qualifications, up 2.3 percent compared to 4.0 percent for those with bachelor or higher degrees. In between, those with vocational qualifications (\$17.00) enjoyed 5.0 percent growth in the past year.

...and higher skilled jobs enjoyed highest level and growth in earnings in 2003/04

- 15 Of the nine broad occupational groups, legislators, administrators & managers not only had the highest median hourly earnings in 2004 (\$22.65), they also enjoyed the highest growth over the past year (up 7.9 percent). The professionals group was almost as prosperous with earnings of \$21.48 and growth of 4.8 percent in the year to June 2004.
- 16 The other occupational groups lagged behind: technicians & associate professionals at \$17.80, trades workers at \$16.00, clerks at \$15.50, plant & machine operators & assemblers at \$14.48, agriculture & fishery workers at \$12.67, elementary workers at \$11.51 and service & sales workers at \$11.00.
- 17 Earnings across industries were more compressed than across occupations, ranging from \$19.17 for business & financial services, \$18.00 for education and \$17.40 for other services (eg cultural, recreation, personal, government & defence) to \$12.70 for agriculture, forestry & fishing and \$12.27 for wholesale/retail trade & hospitality.

Average weekly incomes are also worth looking at

- 18 Average weekly incomes² for all people rose 2.6 percent to \$554 over the year to June 2004. This is below the growth of at least 5 percent a year between 2000 and 2003. By labour force status, average weekly incomes ranged from \$757 for those in work to \$111 for unemployed people, with people out of the labour force at \$207 in 2004.
- 19 Of the 12 main regions, Auckland had the highest average weekly incomes in 2004 of \$627, above Wellington (the former number one) at \$585. The regions of Otago, Northland and Manawatu-Wanganui had the lowest average weekly income, reflecting factors such as low labour force participation rates and/or a less qualified population.
- 20 Other interesting results about average weekly incomes in the June 2004 quarter were:
- a income from work is the most important source. More than half of people (51.4 percent) earned wages & salaries and around one in eight (12.7 percent) earned income from self-employment in 2004, with both of these figures up from 2003.
 - b 28.5 percent of people had income from government transfers in the June 2004 quarter, down slightly from the year before. A large part of this is superannuation for those aged 65 years & over; for those younger than 65 years, 17.1 percent received government transfers in 2004, down from 22.3 percent in 1998.
 - c investment incomes fell to \$22 on average and were received by 28.6 percent of all people in 2004, down from \$29 and 31.8 percent respectively a year earlier.

Comments

Key differences in earnings remain

- 21 There are some key differences in median hourly earnings across ages, ethnic groups, qualifications, the types of jobs we do (ie occupations) and the industries we work in. Two important reasons for these differences are qualifications and seniority or work experience (proxied by age). Highly qualified workers and those in higher skilled occupations generally had the strongest growth in wages & salaries over the past year after already having the highest rates of pay in 2003.

² All weekly income figures presented here are means not medians as with most of the hourly figures. See footnote 1.

Overall wage growth has not been strong over the last year...

- 22 Overall recent wage growth has not been strong, with median and mean hourly earnings rising 2.3 and 2.1 percent respectively in the year to June 2004. These measures are both less than the 2.4 percent rise in consumer prices during the same period, which represents a slight fall in real wages and thus purchasing power. However, the Income Survey measures of wage growth are less than other measures of wage growth in the year to June 2004 such as the Quarterly Employment Survey (QES) and the Labour Cost Index (LCI) as in *Table 2*.

Table 2: Measures of wages and growth in wages & prices

Measure	Year to June 2004			Seven years to June 2004		
	2003	2004	% change (per year)	1997	2004	% change (per year)
NZIS (median)	15.00	15.34	2.3	12.50	15.34	3.0
NZIS (mean)	17.86	18.24	2.1	14.65	18.24	3.2
QES	19.42	20.28	4.4	16.51	20.28	3.0
LCI (unadjusted)	1083	1130	4.3	878	1130	3.7
Consumer prices	1098	1124	2.4	987	1124	1.9

Source: Income Survey, Quarterly Employment Survey, Labour Cost Index, Consumers Price Index, Statistics NZ

...though wage growth has been solid and real gains in wages have being made since 1997

- 23 Taking a longer term perspective, the two NZIS measures and the QES measure show very similar growth in wages in the last seven years as a whole of around 3 percent per annum (*Table 2*).³ With consumer prices rising at almost 2 percent a year, real wage growth has been moderate at 1 percent a year since 1997 on average. However, it is still surprising that wage growth has not tracked higher in the recent period. The sharp tightening in the labour market over the last two years has not pushed wage growth up as much as might have been expected. Even the 2 percent real wage growth implied by the QES and LCI in the year to September 2004 does not seem to be that vigorous considering the evidence of severe staff shortages in many occupations in this period.
- 24 There are a number of plausible explanations for why wage growth has not been higher: the shift from part-time to full-time work, which means people may be working more hours to lift their incomes and may have gained job security in the process (in lieu of higher hourly pay); modest gains in workforce productivity have not warranted strong real wage growth; lags involved in wage setting mean it could take time for wage pressures to result in higher wage growth; and the strongest job growth has been in lower paid occupations, which subdues overall average earnings. We believe each of these has played some part in suppressing NZIS measures of wage growth in 2004.

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³ The LCI measure differs but this reflects the way wage growth is measured. The unadjusted LCI shows greater wage growth than other measures because it is not suppressed by compositional changes (higher growth in lower paid jobs) and may pick up erroneous increases (it is an experimental series).

APPENDIX I: BACKGROUND

What is the New Zealand Income Survey?

- 1 The New Zealand Income Survey (NZIS) is conducted once a year as a supplement to the Household Labour Force Survey (HLFS) during the June quarter (April-June). The NZIS was first conducted in 1997 and provides information on earnings from wages & salaries, investment income, government transfers and other transfers (superannuation schemes and annuities). It also provides information on earnings across demographic groups (gender, age, ethnicity and education) as well as industry and occupation. The NZIS collects information from the working age population (15 years plus) and it has a sample size of around 28,000 people.

What is the difference between the NZIS and the LCI and QES?

- 2 The NZIS is a household survey and the LCI and QES are business surveys, collecting information on the cost of labour to the firm. The LCI, QES and NZIS produce data that are different: for example, average hourly earnings are based on *actual* hours worked in the QES and *usual* hours worked in the NZIS. In addition, average weekly earnings in the QES are calculated by dividing the total weekly wage bill (collected from firms) by the number of full-time equivalent employees⁴, while the NZIS collects information from people on their weekly earnings (people who work full-time and part-time). The QES also excludes some industries such as agriculture and fishing (one of the lowest paid industries in the NZIS, partly explaining why QES average hourly earnings are higher).
- 3 The LCI and QES are considered better measures of wage growth because they have longer and more frequent time series. The LCI does not include information on wage rates, only growth. Two measures of the LCI are available: adjusted, which removes pay rises for performance improvements and bonuses; and unadjusted, which does not remove these types of pay rises but keeps the LCI feature of having a fixed set of job positions (so does not suffer from compositional changes like the QES and NZIS).
- 4 The Census is another source of information on the earnings of individuals. However, unlike the NZIS, the Census only records people's income brackets rather than actual income, and does not separate out by source (wages & salaries, investment etc). The Census is also undertaken once every five years, while the NZIS is an annual survey. The benefit of the Census data is the detail available, including detailed occupational, industry and regional information on annual incomes.

Recent changes to the NZIS

- 5 In 2002, an additional set of questions was developed to collect information on interest and investment income. Prior to this the survey had only collected information on earnings from wages and salaries, government transfers and other transfers. Caution should then be taken in comparing income figures pre-2002 with those that occurred for 2002 and after.
- 6 In 2004, there was a rebase of HLFS data by Statistics New Zealand to reflect new methodologies and population estimates. This rebase also affected the NZIS; many historical income figures have been revised slightly so figures in this report may not exactly match those in earlier reports.

⁴ Full-time equivalent employment comprises full-time employees and half the number of part-time employees (assuming two part-time employees equate to one full-time employee).

APPENDIX II: NEW ZEALAND INCOME SURVEY – JUNE 2004

Median hourly earnings (\$ per hour)	Jun-03	Jun-04	% change
Sex			
Male	15.80	16.50	4.4
Female	13.81	14.40	4.3
Total	15.00	15.34	2.3
Age Group			
15-19 Years	9.00	9.50	5.6
20-24 Years	12.15	12.70	4.5
25-29 Years	15.00	15.46	3.1
30-34 Years	16.40	16.96	3.4
35-39 Years	16.50	17.78	7.8
40-44 Years	16.50	17.26	4.6
45-49 Years	16.50	17.40	5.5
50-54 Years	16.30	17.50	7.4
55-59 Years	15.81	16.60	5.0
60-64 Years	15.00	15.40	2.7
65 Years +	13.40	13.75	2.6
Ethnic Group			
European/Pakeha	15.14	16.00	5.7
Maori	13.33	13.76	3.2
Pacific Peoples	12.50	12.98	3.8
Other Ethnic Groups	15.00	14.68	-2.1
Highest Qualification			
No Qualification	12.00	12.27	2.3
School Certificate Qualification	12.94	13.50	4.3
Sixth Form Qualification	13.43	13.90	3.5
Higher School Qualification	12.00	13.00	8.3
Other School Qualification	12.50	13.29	6.3
Vocational or Trade Qualification	16.19	17.00	5.0
Bachelor or Higher Degree	20.66	21.48	4.0
Other Post-School Qualification	15.00	15.34	2.3
Main Job Occupation			
Legislators, Administrators & Managers	21.00	22.65	7.9
Professionals	20.50	21.48	4.8
Technicians & Associate Professionals	16.76	17.80	6.2
Clerks	15.00	15.50	3.3
Service & Sales Workers	10.80	11.00	1.9
Agriculture & Fisheries Workers	12.15	12.67	4.3
Trades Workers	16.00	16.00	0.0
Plant & Machine Operators & Assemblers	14.00	14.48	3.4
Elementary Occupations	11.30	11.51	1.9
Main Job Industry Group			
Agriculture, Forestry & Fishing	12.20	12.70	4.1
Manufacturing	15.40	16.00	3.9
Construction	15.50	16.00	3.2
Wholesale & Retail Trade etc	12.00	12.27	2.3
Transport, Storage & Communication	15.22	16.25	6.8
Business & Financial Services	18.00	19.17	6.5
Education	16.62	18.00	8.3
Health & Community Services	15.00	15.00	0.0
Other Services	16.19	17.40	7.5