Income distribution in New Zealand\textsuperscript{1}

In February 1999 Statistics New Zealand published \textit{Incomes}, a report tracing changes in the distribution of New Zealanders’ incomes from 1982 to 1996, one of the most eventful periods in our economic history.

It found that the gap between high and low income households had grown significantly and that this increase in income inequality occurred at both personal and household levels.

The report gives a brief overview of changes in the New Zealand economy and discusses trends in personal and household income levels.

Analyses for the report focused on cash income. It is recognised that cash income is not the only measure of economic well-being and may not even be the most appropriate in all cases (eg it does not take into account asset holdings).

Chapters of the report cover the following topics:

- Economic and demographic background
- Personal market incomes
- From personal market income to disposable income
- Household market incomes, transfers and taxes
- Household disposable incomes
- Low income households
- International comparisons

The following article contains a brief summary of each chapter.

**Economic and demographic background**

- There have been significant changes to both the world economy and the New Zealand economy over the study years. In addition to deregulation of many sectors of the New Zealand economy, there was a significant decrease in personal marginal tax rates. At the same time, a Goods and Services Tax was introduced.
- In the post-war period, New Zealand Gross Domestic Product per capita has increased in real terms. Household income has closely tracked the increase in Gross Domestic Product per capita.
- Gross National Income as a proportion of the Gross Domestic Product has fallen since 1975.
- The proportion of Gross National Income that households are saving has fallen since 1992.
- Demographic and social changes suggest that income distribution within the household sector may have changed significantly over the last 15 years. Average household size has dropped and the age structure of the population has changed.
- Female labour force participation rates have increased since 1961, offsetting the decrease in male labour force participation rates. Labour force participation rates overall have increased. Many women, however, are employed part time.

**Personal market incomes**

- Unemployment rose and employment fell from 1986 to 1992. However, strong employment growth resumed from 1992 to 1996.
- Throughout this period, the long-established upwards trend in female workforce participation continued.
- Wages and salaries contributed approximately 80 percent of market income for the study years. Women’s wages and salaries rose steadily over the 1982-1991 period relative to men’s. But women’s average earnings and market income are still significantly lower than men’s.
- Wages and salaries, and market income fell for the Māori and “Other” ethnic groups relative to the European group. They also fell for those with no, or lower, educational qualifications.
- When analysed by age and sex, the largest drop in market income from 1982 to 1996 was

\textsuperscript{1} This article was prepared by John Scott, Senior Economic Statistician with the Social and Population Statistics Group of Statistics New Zealand.
experienced by the young, particularly young males.
- Wages and salaries, and market income overall became more unequally distributed. This increased inequality in wage and salary distribution was primarily driven by greater inequality in male wages and salaries. This changed largely between 1986 and 1991 and is at least partly caused by the fall in men’s employment over those years. In contrast, there was no marked change in the inequality of women’s wages and salaries.
- Overall, a significant change occurred in labour market conditions and in the distribution of personal market incomes in the later part of the 1980s. Despite improved labour market conditions between 1991 and 1996, the increased inequality in the distribution of personal market income did not change correspondingly.

From personal market income to disposable income
- The number of people receiving benefits and New Zealand Superannuation increased from 1982 to 1996. The largest increase was in the numbers on the unemployment benefit. The increase was concentrated in the period between 1986 and 1991.
- Numbers of people receiving benefits and New Zealand Superannuation fell in the 1991 to 1996 period.
- From 1986 to 1991 New Zealand Superannuation and benefit income became a greater proportion of gross income. This increase was particularly significant for the young, for Māori and “Other” ethnic groups, and for those with no formal qualifications.
- Women’s average gross income increased relative to men’s, to 54 percent of the average male gross income in 1996. Women’s average disposable income increased to 58 percent of men’s average disposable income in 1996.
- The European ethnic group was the one group to experience a significant increase in average disposable income between 1982 to 1996.
- The top disposable income decile’s share of disposable income has been increasing over time.
- Income inequality at a personal level increased between 1986 and 1991 for market, gross and disposable income and was steady between 1991 and 1996. These trends in income inequality are similar to the trends in inequality of wages and salaries.

Household market incomes, transfers and taxes
- The introduction of GST and associated decrease in personal tax rates mean that comparisons over the 1986-1991 period of pre-tax income are somewhat flawed. Having said this, average actual household market income fell in real terms between 1982 and 1996. Average actual market income fell by 7 percent from $43,500 to $40,300. Median household actual market incomes fell more sharply. Median market income fell by 17 percent from $39,600 to $32,800.
- The fall in average household market income occurred in both the 1982-1986, and 1986-1991 periods. The fall in median income was, however, very much concentrated in the later 1980s, from 1986 to 1991.
- There has been an increase in average household market incomes in the 1991-1996 period.
- In part, the fall in average household incomes is due to the fall in average household size as measured in the HES; from 3.0 people in 1982 to 2.7 in 1996.
- The distribution of actual market income at a household level became more unequal from 1986 to 1991, but was steady from 1982 to 1986 and 1991 to 1996.
- In 1982 and 1986, households from deciles 1-3 of household market income deciles gained more transfer income on average than they paid in tax. In 1991 and 1996, households in market income decile 4 also gained more on average in transfer income than they paid in tax.

Household disposable incomes
- There has been a statistically significant increase in income inequality as measured by the gini coefficient of equivalent household disposable income over the study years.
- The bulk of the increase in income inequality occurred between 1986 and 1991.
- This increase in income inequality is primarily due to those at the top of the income distribution becoming better off, while those in the middle of the distribution range became slightly worse off in terms of income.
- The trend in income inequality (measured by household equivalent disposable income), is similar to the trend in household actual market income noted in chapter 4.
• There has been a spreading out of household income around the median over time. The major movement has been an increase in those whose household income is more than 150 percent of the median, although there has also been an increase in the proportion of households with incomes of less than 80 percent of the median.

Low income households

• Various definitions of low-income households are identified. These include those in the bottom 20 percent (quintile) and those whose income is less than 60 percent of the median.

• The income of households in the bottom quintile, whether measured by average income or median income, fell by about 5 percent in real terms from 1982 to 1996. In relative terms, these households did not fall behind all households if the comparison is made in terms of median income. In terms of average income, however, they did fall behind - because average real household disposable income increased 3 percent over the period.

• The household types most concentrated in the bottom quintile are elderly people living alone, sole-parent households, and to a lesser extent elderly couples. (However, the use of the alternative equivalence scale assigns many elderly-couple households to higher quintiles.)

• The groups who are more concentrated in the bottom quintile include Māori (about 28 percent of all Māori in 1996) and children (about 26 percent in 1996). Females are also more concentrated towards the lower end of the household income distribution - with 21 percent in the bottom quintile, and 17 percent in the top quintile.

• New Zealand does not have an official poverty line. There are severe difficulties hindering the construction of an official poverty line - in terms of setting the level, the choice of equivalence scale, how to take account of geographical variation in living costs (particularly housing), how to handle short-term periods of low income, and how to adjust the measure over time. These difficulties are not only those of judgements about household needs, but are also methodological and measurement difficulties.

International comparisons

• It is difficult to compare income inequality across nations and results of such comparisons must be interpreted with care. Having said this, the increase in income inequality in New Zealand from 1982 to 1996 appears to have been as large as, or larger than, that in other countries for which similar data is available.

Major conclusions

The report identified that there was a significant increase in income inequality between 1982 and 1996. This increase occurred for both pre- and post-tax income at both personal and household levels.

For the same period, the report showed that income for those households at the bottom of the income distribution was steady, income for households in the middle of the distribution decreased slightly, and income for households at the top of the income distribution increased significantly.

The major change in income inequality occurred between 1986 and 1991. During this period there were large increases in the numbers of people reliant on government transfers for their income.

The largest contributor to the change in income distribution was a change in the distribution of wages and salaries. Changes in the taxation system had relatively little effect on income distribution over this period.

Incomes is available from Statistics New Zealand (call 0-4-495 4600) and at selected bookstores for $24.95. For further information contact John Scott 0-4 495 4600.