



Impact of education on income

Average earnings are 32% higher for those with a tertiary education compared to those with only upper secondary and post-secondary non-tertiary education

Indicator Description

Relative earnings by educational attainment.

Why This Is Important

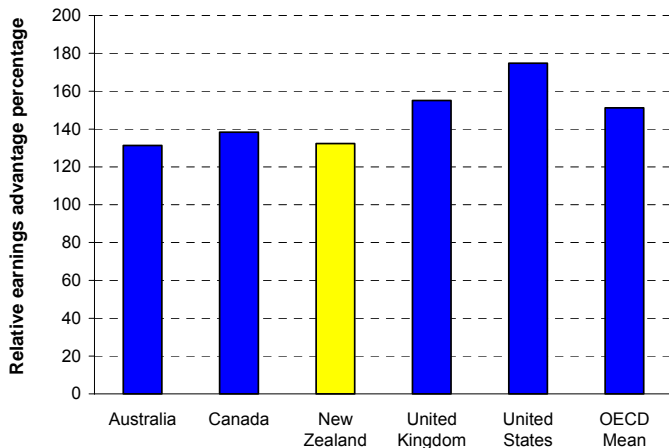
The success of an education system is manifested in, among other things, the success of individuals in finding sustainable employment as well as the level of wages that employers are willing to pay for the skills and knowledge that the individual brings to a job. There is a substantial body of evidence that shows that those with higher levels of education are more likely to participate in the labour market, face lower risks of unemployment, have greater access to further training and receive higher earnings on average.

These labour market advantages are an important outcome of education. They may even be the primary economic and social outcome, because earned income enables people to achieve a higher standard of living and many of the other individual and national outcomes associated with education may accrue either directly or indirectly from higher incomes.

How We Are Going

Relative earnings advantage endeavours to show how much more or less one group of society earns compared to another. This indicator shows the earning chances associated with extra education.

Relative earnings advantage for ages 25-64, tertiary over upper secondary and post-secondary non-tertiary education (2005)



Source: OECD Education at a Glance (2007)

1. Upper secondary and post-secondary non-tertiary education = 100.
2. Year of reference for Canada 2004.

In New Zealand, for 25 to 64 year-olds in paid employment, average earnings were 32% higher for those with any tertiary education compared with those with only upper secondary or post-secondary non-tertiary education. This differential is very similar to that for Australia, but considerably lower than the OECD average across 25 countries of 51%. Both the United States (75%) and the United Kingdom (55%) have very high premiums for tertiary education over these lower levels education.

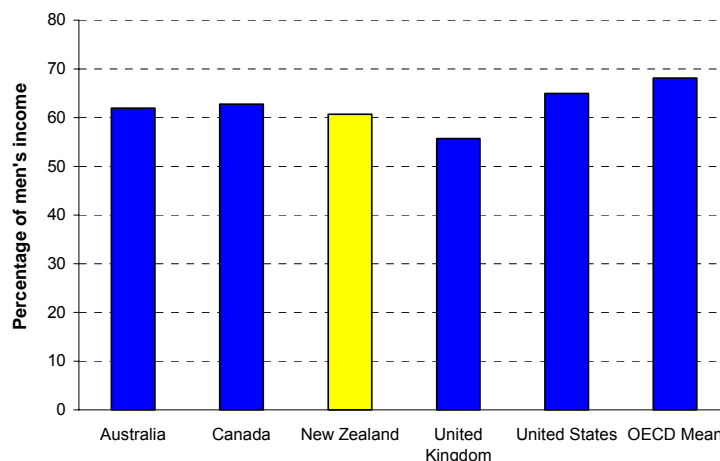
New Zealanders with a tertiary type-A education earn 44% more on average than those with only upper secondary or post-secondary non-tertiary education. This compares with the average of OECD countries of 62%. This differential is lower than in most other OECD countries, suggesting that there is less advantage, in terms of higher income, to having a higher level tertiary qualification in New Zealand compared with other OECD countries. However, these figures have not been adjusted for other factors that vary between countries, such as the age structure of those with different qualifications.

Earnings differentials are a measure of the premium paid for the likelihood of enhanced skills and/or higher productivity. They also reflect the financial incentives in a particular country for an individual to invest in further education. International variations in relative earnings reflect a number of factors, including wider changes in the labour market affecting the demand for skills (such as technological change) and rates of pay (such as minimum wage legislation), as well as the supply of skills from education, training and net migration. Earnings differentials may to some extent reflect differences in the supply of graduates or barriers in access to different levels of education.

In New Zealand, women still earn less than men, with a mean earnings differential of 61%. This differential is considerably less than the mean earnings differential across the OECD countries of 68%. However, the difference in mean earnings between women and men is only slightly less than Canada and Australia, and 5 percentile points higher than the United Kingdom.

The earnings differential between men and women with the same educational attainment remains substantial. This gap is reinforced by the frequency of part-time work for women.

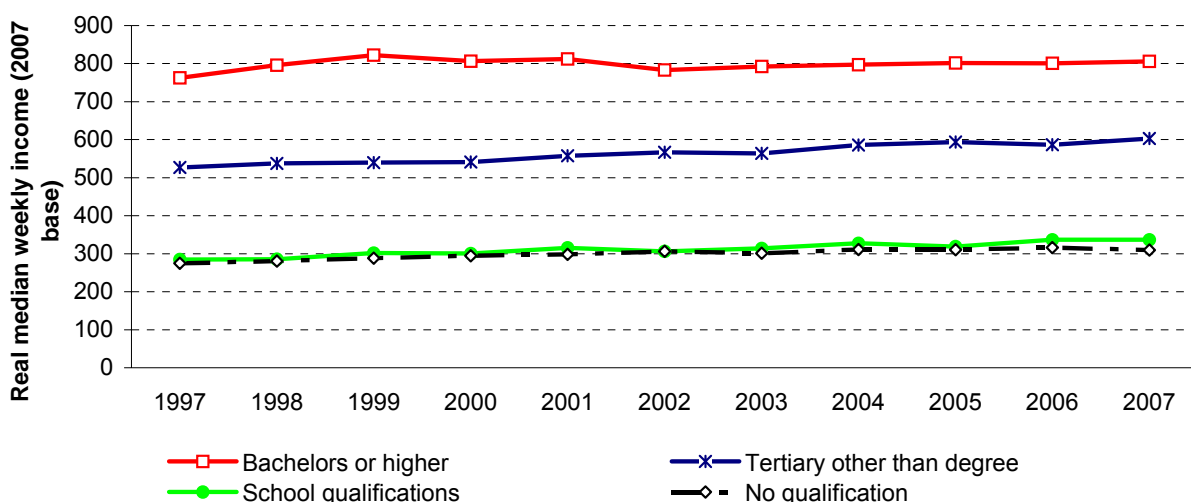
Average annual earnings for women as a percentage of men, ages 30-44 years-old (2005)



Source: OECD Education at a Glance (2007)

1. Year of reference for Canada 2004.

Real median weekly income by highest qualification for people aged 15 plus (2007 base)



Source: Statistics New Zealand, New Zealand Income Survey (1997-2007, June Quarter)

Some of the differences in earnings between men and women may be explained by gender differences in career and occupational choices, differences in the amount of time men and women spend in the labour force, demographic differences within age groups, and the relatively high incidence of part-time work among women.

An analysis of median incomes by highest qualification confirms that people with tertiary education earn more than those with other qualifications. In 2007, the median weekly income for those with tertiary degrees was \$806, approximately 2.4 times higher than those with school qualifications only. This compares with 1998, when unemployment was at its highest level in the last decade, where the median income for those with tertiary degrees was over 2.8 times higher than those with school qualifications only.

A New Zealand study (Maani, 2002) has shown that the returns from education are greater for Māori than non-Māori, despite lower educational attainment levels. This is primarily because Māori with no qualifications are relatively more disadvantaged with respect to non-Māori

in terms of income than are Māori with qualifications. As with women, the income disadvantage for Māori is partly associated with greater unemployment and a lower probability of working full-time. For Māori women, the income gap compared to non-Māori women narrows with higher levels of educational attainment. In 1996 there was no income gap for the small but increasing number of Māori women with postgraduate qualifications compared with NZ European women with such attainment.

Gibson (2000) found that Māori and Pasifika gained more from additional qualifications than non-Māori, non-Pasifika. However, the study could not reject the hypothesis that Māori and Pasifika workers get no return to accumulated year of education.

Another study by Maani (2000) bears out the general link between educational attainment and income levels which increased over the 1980s and 1990s. It showed that in 1996 Māori with no school qualifications were at a greater relative disadvantage than they were in 1986, with the income gap having narrowed at the tertiary education level, especially for women.

How To Find Out More

The increasing labour market demand world-wide for young people with upper secondary and tertiary education qualifications foreshadows an increasing risk of exclusion for those individuals with lower educational attainment. To obtain more information on lower educational achievement consider the indicator:

- School leavers with no qualifications.

Income is interrelated with unemployment rates. To obtain more information on unemployment and education consider the indicator:

- Unemployment rates by highest qualification.

References

- Gibson, J. (2000). "Sheepskin effects and the returns to education in New Zealand: Do they differ by ethnic groups?" *New Zealand Economic Papers*, December 01.
- Maani, S. (2000), *Secondary and tertiary educational attainment and income levels for Māori and non-Māori over time*. Wellington: The Treasury.
- Maani, S. (2002), *Education and Māori Relative Income Levels over time*. Wellington: The Treasury.
- Maloney, T. (2002a), *Ethnicity and Early Labour Market Experiences in the Christchurch Health and Development Study*. Wellington: The Treasury.
- OECD (2007). *Education at a Glance: OECD indicators 2007*. Paris: OECD.
- Statistics New Zealand (1997-2007). *New Zealand Income Survey (June Quarter)*. Wellington: Statistics New Zealand.