

Effect of motherhood on pay – summary of results

June 2016 quarter



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Purpose and background

This report summarises our investigation into the effect of motherhood on women's pay in New Zealand. It is intended to guide future research in this area by measuring the difference in the gender pay gap between parents and non-parents of both sexes. In particular, we focus on the difference in the pay gap of mothers and fathers relative to women and men without children.

As the gender pay gap is a measure of a negative effect on women, we call the difference between the size of the pay gap for parents and the size of the pay gap for non-parents the 'motherhood penalty'.

Our analysis is an initial investigation that identified a need for further, more in-depth research.

In this study, a parent is defined as a person with a dependent child living in the same house. Due to the nature of the survey, we could not identify parents whose child was no longer living with them. Because we are looking at the gender pay gap between parents and non-parents, we are not comparing the difference in pay between women with children and women without children.

Feedback

We're keen to hear your feedback on the insights presented here (including how we presented the summary and technical information) and your suggestions for further work. Contact us at info@stats.govt.nz to send your feedback.

See [Effect of motherhood on pay – methodology and full results](#) for the methods used in this report.

Background to gender pay gap analysis

The difference in pay between men and women, known as the gender pay gap, has been observed for many years in New Zealand. Statistics NZ publishes statistics about income and the gender pay gap using information from the Household Labour Force Survey (HLFS). In these regularly published statistics, the gender pay gap is calculated as the percentage difference between the median pay for men and the median pay for women. Results show the gender pay gap in New Zealand has generally been decreasing since 1998 (see figure 1).

See [Measuring the gender pay gap](#) for more information.

Figure 1



Source: Statistics New Zealand

The gender pay gap is caused partly by men and women working in different occupations and industries, or by interrupted and changing working patterns due to parenthood. For example, parents (especially mothers) often take time out of the workforce or move to part-time work to care for their children.

The Ministry for Women has been investigating the underlying drivers of the gender pay gap. It indicated to Statistics NZ that the motherhood penalty has an ongoing effect on the gender pay gap and this was understudied in New Zealand. This prompted collaboration with Statistics NZ to investigate the motherhood penalty.

Background to this report

For our analysis we considered the contribution of parenthood on pay, particularly whether there is a difference between the gender pay gap for parents and the gender pay gap for non-parents. We call this difference the ‘motherhood penalty’.

This report presents the results from early investigations with HLFS data – using a type of regression model. The model allows comparisons between groups, such as parents/non-parents and full-time/part-time employees, while controlling for factors such as age.

Because we used different methods to calculate the gender pay gap in this study, the results cannot be compared with existing measures of the gender pay gap from the HLFS.

See [Effect of motherhood on pay – methodology and full results](#) for more detail about the methods we used and for the full results of this study.

Key results

Here are the key results about the gender pay gap for the June 2016 quarter.

Gender pay gap still exists in New Zealand

In the June 2016 quarter, our analysis showed female hourly earnings were \$22.40 on average, compared with \$25.24 for males. This equates to a gender pay gap of 11 percent, similar to the pay gap shown by the existing median measure (see figure 1).

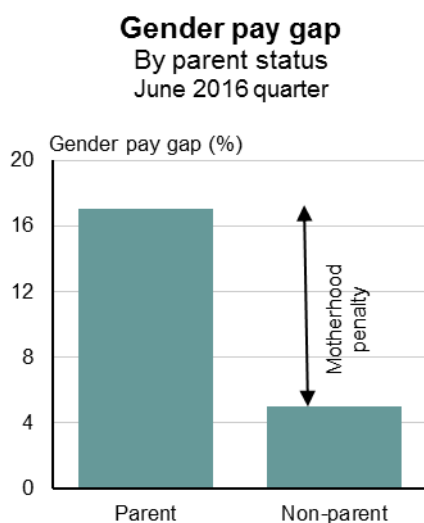
A significant ‘motherhood penalty’ exists

The comparisons we make between gender pay gaps of employed mothers and fathers (parents) and employed women and men without children (non-parents) let us assess if there is a motherhood penalty, and if it changes depending on full-time or part-time work.

In the June 2016 quarter:

- The gender pay gap between female and male parents (17 percent) was significantly larger than the gender pay gap between non-parents (5 percent), which puts the motherhood penalty at around 12 percentage points (figure 2).
- The motherhood penalty was greater for mothers working part time than for those working full time). However, the size of the motherhood penalty for part-time workers is more influenced by the very small gender pay gap for non-parents who work part time.

Figure 2



Note: Percentages are calculated using mean values with associated uncertainty (see Appendix of ‘Effect of motherhood on income – methodology and full results’).
Source: Statistics New Zealand

Because we used sample survey data in this analysis, some uncertainty is associated with the results (see [Effect of motherhood on pay – methodology and full results](#) for full details).

Information about the data

This report used HLFS pay (earnings) data for the June 2016 quarter.

This is a good source of data for assessing the motherhood penalty because the HLFS collects information about individual hourly pay from respondents. It also gathers other demographic and socio-economic characteristics such as age, sex, occupation, and qualifications.

However, the 'point-in-time' nature of the survey limits this report's conclusions.

Some limitations also arise from our definitions. In this analysis, we define a parent as a person with a dependent child living in the same house and who defines themselves as a parent in their family. A dependent child is a child under 15 years, or a child under 18 years who does not have full-time work. Therefore, we do not collect information on parents whose children have left home, or sole parents whose children are living with the other parent at the time of the survey.

See [Effect of motherhood on pay – methodology and full results](#) for more detailed information on the limitations of this report.

See [Household Labour Force Survey sources and methods: 2015](#) for more information about HLFS.