



Non-wage labour cost indicators

Introduction to experimental series using administrative data



Crown copyright ©

This work is licensed under the [Creative Commons Attribution 3.0 New Zealand](#) licence. You are free to copy, distribute, and adapt the work, as long as you attribute the work to Statistics NZ and abide by the other licence terms. Please note you may not use any departmental or governmental emblem, logo, or coat of arms in any way that infringes any provision of the [Flags, Emblems, and Names Protection Act 1981](#). Use the wording 'Statistics New Zealand' in your attribution, not the Statistics NZ logo.

Disclaimer

This paper represents the views of the author. It does not necessarily represent the views of Statistics NZ and does not imply commitment by Statistics NZ to adopt any findings, methodologies, or recommendations. Any data analysis was carried out under the security and confidentiality provisions of the Statistics Act 1975.

Liability statement

While all care and diligence has been used in processing, analysing, and extracting data and information in this publication, Statistics New Zealand gives no warranty it is error free and will not be liable for any loss or damage suffered by the use directly, or indirectly, of the information in this publication.

Citation

Statistics New Zealand (2016). *Non-wage labour cost indicators: Introduction to experimental series using administrative data*. Retrieved from www.stats.govt.nz.

ISBN 978-0-908350-80-3 (online)

Published in November 2016 by

Statistics New Zealand
Tatauranga Aotearoa
Wellington, New Zealand

Contact

Statistics New Zealand Information Centre:
info@stats.govt.nz
Phone toll-free 0508 525 525
Phone international +64 4 931 4600

www.stats.govt.nz



Contents

Purpose.....	4
Your feedback requested.....	4
Background.....	4
Introduction to new series.....	4
Employer KiwiSaver contribution index	5
Employer superannuation contribution tax (ESCT) index	5
Fringe benefit taxable value index	5
Fringe benefit tax paid index.....	5
Average fringe benefit tax rate index	6
Data quality	6
Coverage.....	6
Reference period.....	6
Index calculation	6
Quality control	6
Methodology	6
Determining non-wage labour costs with administrative data	6
Superannuation.....	6
Fringe benefit	7
Future of the experimental series.....	7



Purpose

This paper introduces experimental non-wage labour cost indicators we have derived from administrative data sources. They provide a measure of employers' superannuation costs and fringe benefit costs. The indicators use administrative data sources from Inland Revenue (IR) and Statistics New Zealand Business Register employment data.

We are releasing the experimental indicators series so customers can provide feedback over a six-month period.

The release will allow our customers to determine whether the experimental indicators can help meet their needs.

Your feedback requested

We'd like to receive comments about the experimental indicators. Feedback collected over the next six months will be used to determine the future of the series. It could lead to improvements or additional information being released.

Go to [Experimental non-wage labour cost indicators – Innovation site](#) to give your feedback.

Background

In 2015, we consulted labour cost index (LCI) customers and stakeholders and sought public feedback so we could better understand the value they obtained from the non-wage components of the LCI. This was to ensure that the statistics we provide continue to remain relevant to customers.

The LCI for non-wage labour costs measured changes in the following non-wage costs to employers:

- annual leave and statutory holidays
- superannuation
- ACC employer premiums
- other non-wage costs (medical insurance, motor vehicles available for private use, and low-interest loans).

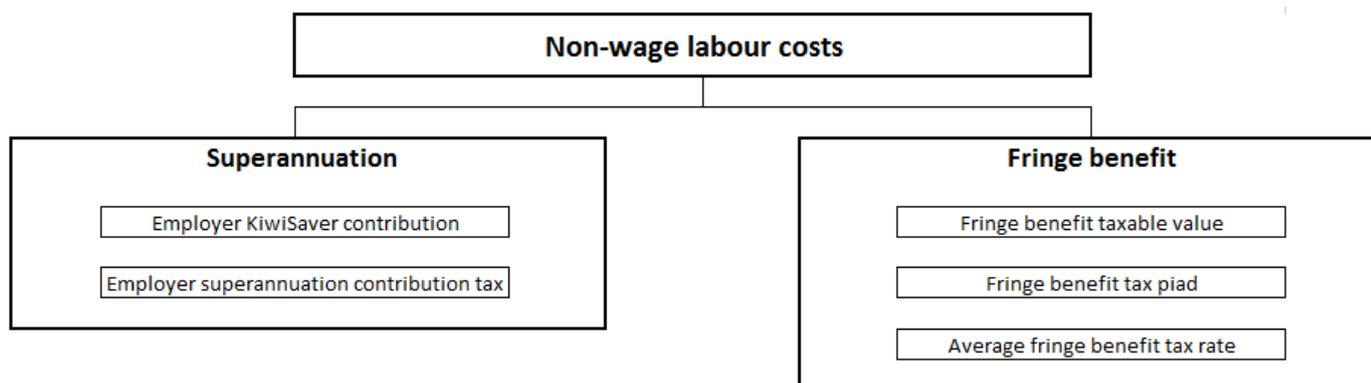
As a result of the consultation we decided to stop producing the LCI non-wage and all labour costs statistics, and to develop a set of non-wage labour cost indicators for superannuation and fringe benefit derived from administrative data sources.

See [Public consultation on proposal to discontinue labour cost index non-wage statistics](#) for details about the consultation.

We have continued to publish the LCI salary and wage rates each quarter. Their relevance will be maintained by reviewing the weights following the 2018 Census. See [Labour Market Statistics – information](#) releases for more information.

Introduction to new series

We have developed the following experimental non-wage labour cost indicators for superannuation and fringe benefit tax.



The indicators use administrative tax data from Inland Revenue (IR) and Statistics NZ Business Register employment data. The indicators are expressed as indexes and values.

Employer KiwiSaver contribution index

This index represents the movement in the total amount of KiwiSaver contribution employers pay per employee. Movement will be influenced by several factors, including employer KiwiSaver contributions, the rolling mean employment, salary and wage rates, and (indirectly) the number of KiwiSaver members.

The rolling mean employment is a 12-month moving average of the monthly employee-count figure recorded on the Statistics NZ Business Register. It includes all employees and will therefore include KiwiSaver members and non-KiwiSaver members.

Employer superannuation contribution tax (ESCT) index

This index represents the movement in the total amount of ESCT employers pay per employee. Movement will be influenced by a number of factors, including, employer superannuation contributions, ESCT rate, the rolling mean employment, salary and wage rates and the number of employees on a superannuation scheme (KiwiSaver and other schemes).

Employers pay ESCT on all types of superannuation schemes, not just Kiwisaver.

Fringe benefit taxable value index

The index represents the movement in total taxable value (excluding GST) of fringe benefits employers provide per employee (from employers that provide fringe benefits). Movements will be influenced by several factors, including the value of fringe benefits being provided and the rolling mean employment.

The rolling mean employment includes all employees, and will therefore include employees who receive fringe benefits, and those who do not.

Fringe benefit tax paid index

The index represents the movement in fringe benefit tax paid per employee (from employers that provide fringe benefits). Movements will be influenced by several factors, including fringe benefit tax rates, the taxable value of fringe benefits being provided, and the rolling mean employment.

The rolling mean employment includes all employees, and will therefore include employees who receive and do not receive fringe benefits.

Average fringe benefit tax rate index

The index represents the movement in the average fringe benefit tax rate calculated as the total tax paid divided by the total taxable value. Movements will be influenced by both the taxable value of fringe benefits and the tax paid.

Data quality

Coverage

We have used IR tax administrative data for superannuation and fringe benefit. The data includes all employers who have completed the employer deductions form (IR345) and fringe benefit tax returns (IR420, IR421, and IR422).

We have used the rolling mean employment recorded on the Statistics NZ Business Register. The Business Register (BR) includes all GST registered businesses.

We have also used industry and sector classification information.

Reference period

We have used IR tax administrative data collected for the year 1 July to 30 June.

We extracted the businesses' information, including industry sector and the rolling mean employment, recorded as at 30 June from the BR for those businesses that linked to the employers included in the IR tax administrative dataset.

The experimental series covers the year ended June 2012 to the year ended June 2016.

The indexes are expressed on a price reference period of the June 2012 quarter (=1000).

Index calculation

The indexes are calculated based on dollar value movements.

For example, if the fringe benefit tax paid was to fall from \$327 to \$322, the index would show a movement from 1000 to 987.

Quality control

The superannuation and fringe benefit indexes do not adjust for quality.

Methodology

Determining non-wage labour costs with administrative data

All indexes follow the same process. The tax administrative data is linked with BR data to determine the industry and sector each business belongs to. With this detail we can take the total non-wage labour cost for the industry, sector, or all industries and sectors combined and divide it by the total rolling mean employment, also found in the BR.

The only index that does not follow this exact process is the fringe benefit average tax rate index. This index takes the total fringe benefit tax paid and divides it by the total fringe benefit taxable value. It also includes a breakdown by industry, sector, and all industries and sectors combined.

Superannuation

For the superannuation indexes we have used the KiwiSaver contributions and ESCT contributions collected from the IR [employer deduction form \(IR345\)](#).

We linked this IR tax data to the BR data.

The BR captures businesses' industry and sector alongside the IRD number. With the employer's IRD number on the tax forms linked to the employer's IRD number on the BR data, we can determine which industry and sector the superannuation costs feed into. Both superannuation indexes are broken down into industry ([ANZSIC06](#)) and institutional sector ([SCIS](#)) classifications.

The tax form variables can be summed together to determine industry, sector, and all industry and sectors combined total KiwiSaver contribution and ESCT.

Next, we determined the per employee value of the superannuation costs. The business register contains the [rolling mean employment](#) numbers, allowing us to divide the contributions by the rolling mean employment to determine the per employee value.

$$\text{Employer KiwiSaver contribution per employee} = \frac{\text{Total KiwiSaver contribution}}{\text{Total rolling mean employment}}$$

$$\text{ESCT per employee} = \frac{\text{Total ESCT}}{\text{Total rolling mean employment}}$$

Fringe benefit

For fringe benefit, we have used data collected from the IR fringe benefit tax returns ([IR420](#), [IR421](#), and [IR422](#)). These are the quarterly and annual fringe benefit tax forms that employers are required to complete if they provide fringe benefits to their employees.

Following the same process as the superannuation calculations, we determined the total values for the industry, sector and all industry and sectors combined. We then divided these by the rolling mean employment to determine the per employee value.

$$\text{Fringe benefit taxable value per employee} = \frac{\text{Total fringe benefit taxable value (excl. GST)}}{\text{Total rolling mean employment}}$$

$$\text{Fringe benefit tax paid per employee} = \frac{\text{Total fringe benefit tax paid}}{\text{Total rolling mean employment}}$$

$$\text{Average fringe benefit tax rate} = \frac{\text{Total fringe benefit tax paid}}{\text{Total fringe benefit taxable value}}$$

We converted the values for each non-wage labour cost per employee into index numbers. The indexes can be found in the tables attached.

Future of the experimental series

Feedback collected over the six-month consultation period will help us determine the future of the series. It could lead to improvements or additional information being released, or to promoting the series to be an official statistic.