Parliamentary Library

Research Request

20th May 2016

Statistics New Zealand’s annual *National Accounts (Income and Expenditure)* publication provides New Zealand’s gross domestic product figures for years ended 31 March using a production approach, income approach, and expenditure approach.[[1]](#footnote-1) Using the income approach, Statistics New Zealand measures the income received by the owners of the factors of production, i.e. the returns to the labour and capital employed (wages, salaries and profits).

The income approach of calculating gross domestic product includes the following components – compensation of employees, gross operating surplus, taxes on production and imports, less any subsidies received.

***Compensation of employees –*** represents the return for input of labour into the production process. It is the total remuneration, in cash or kind, payable by an enterprise to employees in return for work done. This includes salary and wage payments, whether in cash or in kind (e.g. fringe benefits) to employees. It also includes contributions paid on employees’ behalf to superannuation funds, private pension schemes, the Accident Compensation Corporation, and casualty and life insurance schemes.[[2]](#footnote-2)

The following table shows the components of GDP based on the income approach for years ended 31 March 2009 to 2015.

|  |
| --- |
| $millions |
| Year ended 31 March | Compensation of employees | Gross operating surplus | Taxes on production and imports | *Less* subsidies | Gross Domestic Product |
| 2009 | 85,104 | 82,434 | 23,119 | 1,039 | 189,618 |
| 2010 | 85,822 | 85,614 | 23,480 | 665 | 194,251 |
| 2011 | 88,831 | 89,806 | 25,949 | 1,152 | 203,434 |
| 2012 | 92,305 | 93,535 | 28,476 | 1,075 | 213,241 |
| 2013 | 94,901 | 94,737 | 29,308 | 951 | 217,995 |
| 2014 | 98,887 | 103,807 | 30,689 | 910 | 232,473 |
| 2015 | 104,425 | 105,425 | 32,184 | 847 | 241,187 |

Source: Statistics New Zealand. *National Accounts (Income and Expenditure): Year ended March 2015.* 20 November 2015. Table 1.1 Consolidated accounts of the nation.

The following table shows each component of the income approach as a proportion of total gross domestic product for years ended 31 March 2009 to 2015.

|  |
| --- |
| Proportion of total Gross Domestic Product |
| Year ended 31 March | Compensation of employees | Gross operating surplus | Taxes on production and imports | *Less* subsidies | Gross Domestic Product |
| 2009 | **44.9** | 43.5 | 12.2 | -0.5 | 100.0 |
| 2010 | 44.2 | 44.1 | 12.1 | -0.3 | 100.0 |
| 2011 | 43.7 | 44.1 | 12.8 | -0.6 | 100.0 |
| 2012 | 43.3 | 43.9 | 13.4 | -0.5 | 100.0 |
| 2013 | 43.5 | 43.5 | 13.4 | -0.4 | 100.0 |
| 2014 | 42.5 | 44.7 | 13.2 | -0.4 | 100.0 |
| 2015 | **43.3** | 43.7 | 13.3 | -0.4 | 100.0 |

Source: Statistics New Zealand. *National Accounts (Income and Expenditure): Year ended March 2015.* 20 November 2015. Table 1.1 Consolidated accounts of the nation.

**How much higher would employee compensation be in nominal terms, if it had stayed at the ratio which was reported for the year ended 31 March 2009? What is the cumulative difference?**

If the compensation of employees remained at 44.9 percent for years ended 31 March 2010 to 2015 (the same level as reported in the year ended 31 March 2009), then the amount of GDP assigned to this component is shown in the following table. The cumulative difference over the six year period is $19,451 million.

|  |  |  |  |
| --- | --- | --- | --- |
| Year ended 31 March | Compensation of employees - actual ($m) | Compensation of employees – assuming equivalent to 44.9% of GDP ($m) | Difference ($m) |
| 2009 | 85,104 | 85,104 | .. |
| 2010 | 85,822 | 87,183 | +1,361 |
| 2011 | 88,831 | 91,305 | +2,474 |
| 2012 | 92,305 | 95,706 | +3,401 |
| 2013 | 94,901 | 97,840 | +2,939 |
| 2014 | 98,887 | 104,338 | +5,451 |
| 2015 | 104,425 | 108,249 | +3,824 |
| Cumulative difference |  |  | **+19,451** |

Source: Statistics New Zealand. *National Accounts (Income and Expenditure): Year ended March 2015.* 20 November 2015. Table 1.1 Consolidated accounts of the nation; Parliamentary Library calculations.

**In the years ended March 2010 to 2015, how much additional income would each household have received, assuming that compensation of employees is equivalent to 44.9 percent of GDP? And how much was this shortfall per week in the year ended March 2015?**

The following table estimates the additional income per household per year if the compensation of employees remained at 44.9 percent of total gross domestic product for years ended March 2010 to 2015.

|  |  |  |  |
| --- | --- | --- | --- |
| Year ended 31 March | Number of households (000s) | Difference ($m) – from previous table | Estimated additional income per household ($) |
| 2010 | 1,432.3 | 1,361 | 950 |
| 2011 | 1,427.5 | 2,474 | 1,733 |
| 2012 | 1,439.0 | 3,401 | 2,363 |
| 2013 | 1,440.6 | 2,939 | 2,040 |
| 2014 | 1,449.1 | 5,451 | 3,762 |
| 2015 | 1,482.7 | 3,824 | **2,579** |
| Total  |  |  | **13,428** |

Sources: Statistics New Zealand, *New Zealand Income Survey.* NZ.Stat. Incomes. Household income by region.

Statistics New Zealand. *National Accounts (Income and Expenditure): Year ended March 2015.* 20 November 2015. Table 1.1 Consolidated accounts of the nation.

Parliamentary Library calculations.

The estimated additional weekly income per household would have been **$49.46** in the year ended 31 March 2015 had the compensation of employees remained at the same proportion of GDP as it was in the year ended 31 March 2009 (instead of falling to 43.3 percent of total GDP).

**What has been the share of GDP growth that has gone to the various components in the period between (i) the years ended March 2000 and 2009 compared with (ii) the years ended March 2009 and 2015?**

The following table shows the difference in income gross domestic product between (i) the year ended March 2000 and March 2009, and (ii) the year ended March 2009 and March 2015, by component. The proportion of the overall change in GDP associated with each component is then calculated.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Income GDP component | Difference in GDP between the year ended March 2000 and 2009 ($m) | Proportion of the growth in GDP over the period (%) | Difference in GDP between the year ended March 2009 and 2015 ($m) | Proportion of the growth in GDP over the period (%) |
| Compensation of employees | 39,287 | **51%** | 19,321 | **37%** |
| Gross operating surplus | 28,832 | 38% | 22,991 | 45% |
| Taxes on production and imports | 8,976 | 12% | 9,065 | 18% |
| *Less* subsidies | 706 | 1% | -192 | 0% |
| **Gross Domestic Product** | **76,389** | **100%** | **51,569** | **100%** |

Source: Parliamentary Library calculations from Statistics New Zealand’s *National Accounts (Income and Expenditure): Year ended March 2015.* Infoshare Database.

1. Statistics New Zealand. *Annual national accounts sources and methods.* November 2014. pp.11-12. <http://www.stats.govt.nz/browse_for_stats/economic_indicators/NationalAccounts/ann-nat-accts-sources-methods.aspx> [↑](#footnote-ref-1)
2. Ibid. p.17. [↑](#footnote-ref-2)