Short-term Employment Forecasts: 2017–2020

February 2018
Ministry of Business, Innovation and Employment (MBIE)
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Labour demand to increase by 153,000 by 2020

The Short-term Employment Forecast: 2017-20 presents employment forecasts1 for 2017 to 2020 (March years). The forecast informs the Ministry’s advice on immigration priorities, and is available for setting priority for tertiary education and industry training over the next 2-3 years.

The overall employment is forecast to grow by 2.1 per cent (or 52,500) in 2018, by 2.3 per cent (or 56,900) in 2019 and by 1.7 per cent (or 43,600) in 2020 — 153,000 more people employed over the next three years. These employment gains also reflect an ongoing employment shift towards the services sector, a continued growth in construction activity across the country and average net migration levels above long-term over the next 3 years.

The strength of employment growth varies across different sectors and regions. Business services (up 33,300) will make the largest contribution to overall employment growth, followed by construction and utilities (up 19,400) and health care and social assistance (up 15,500) sectors.

At the regional level, employment growth will be fastest in the Auckland and Waikato regions in the North Island, and rural regions in the South Island.

The overall employment growth forecasted here is similar to the May 2017 update, however, with peak employment growth on 2019 March year. Growth is also revised down in 2018 March year and up in the out year (2020 March year), reflecting strong demand-side effects — the Treasury expects economic growth to remain above three per cent over the short-term and to peak at 3.6 per cent in 2019. The positive economic outlook over the next three years is underpinned by population growth, increased government spending and favourable terms of trade.

Business services and construction will continue to drive employment in the short-term

Employment growth is forecast to be broad-based over the next three years. The largest increases will be in business services, construction and utilities, and health care & social assistance sectors (refer to Figure 1). These sectors will grow at a faster pace than the national average year-on-year growth (see Figure 2).

The business services sector will outpace the overall employment growth rate in the short-term. The sector accounts for over 20 per cent (or 33,300) of the total employment growth over the forecast period, driving demand for highly skilled workers particularly in urban regions like Auckland and Wellington.

Employment growth in the construction and utilities sector is forecast to continue to demand for more professionals, technicians and trade workers, and labourers across the country. By 2020, the sector is forecast to employ 19,400 more workers, boosting employment in the regions experiencing growth in residential investment. The Auckland region is anticipated to generate about 46 per cent of overall employment gains in the sector in the next three years.

The public services sector (public administration and safety, health care and social assistance and education and training) is forecast to make-up a quarter of the overall employment growth between 2017 and 2020. Increasing population, rising demand for childcare and

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1 All forecasts in this report are annual averages for March years. Consequently, annual changes are not point-to-point changes, which would compare a March quarter result with previous March quarter result. The year ending March forecasts are consistent with the Treasury’s GDP growth forecasts in the 2017 HYEFU released in mid-December 2017. The forecasts were updated in early-mid January using these forecasts and the MBIE model.
education for children, and care for the ageing population will support growth in this sector—particularly in urban regions, including in the Waikato and Bay of Plenty regions.

**Figure 1:** Business services are forecast to demand 33,000 more workers by 2020
(Employment growth by sector ('000), March years – ranked according to employment growth)

**Figure 2:** Employment is forecast to be broad-based but with strong boost from service and construction-related industries
(Annual employment growth (%), March years- ranked according to 2017-18 growth rate)
94,700 more workers in highly skilled occupations —mainly IT and construction-related

Highly skilled occupations (managers and professionals) are forecast to grow faster (2.9 per cent or 31,600 per year) than overall employment growth (2.0 per cent or 51,000 per year) over the next three years (see Figure 3). By 2020, the demand for highly skilled workers is forecast to increase by nearly 95,000. Within highly skilled occupations, the demand is anticipated to be strongest for business & system analysts and programmers; legal professionals; ICT managers; architects, planners and surveyors and; advertising, public relations and sales managers.

We forecast the demand for skilled workers to increase by over 5,000 (or 1.9 per cent) per year on average over the next three years. By 2020, employment in skilled occupations is anticipated to increase by 16,500 workers. Of the demand for skilled workers, growth will be fastest for glaziers, plasterers and tilers; electricians; plumbers; animal attendants, trainers and shearers and; fabrication engineering trade workers.

Figure 3: Demand is forecast to be strongest for highly skilled workers as employment in business services expands

(Average employment growth, levels ('000) and rate (%), 2017-20)

Source: MBIE, Short-term employment model
Note: Horizontal dashed line markets national average growth rate between 2017 and 2020.
Figure 3 also shows that employment in a number of occupations within broad skills groups is forecast to decline by 2020: farmers and farm managers (highly-skilled); printing trades workers (skilled); keyboard operators (semi-skilled); and stationary plant operators (elementary skilled).

**42,500 opportunities for lower-skilled workers by 2020**

Opportunities for lower-skilled workers will account for about 29 per cent of the overall employment growth by 2020. The demand for semi-skilled workers will increase by over 28,000. Amongst them, demand will be strongest for office and practise managers; prison and security officers and; contract, program and project administrators. An increase of about 14,000 jobs is expected for elementary skilled workers, mainly drivers, and construction and mining labourers.

**Employment grows in all regions — some rural regions to grow at a faster rate**

Employment is forecast to grow at a faster rate in Marlborough, Tasman, and West Coast regions, with all three regions summing up 6,600 more workers to the projected employment growth by 2020. In the North Island, Auckland and Waikato regions are expected to have the highest growth rates, with both regions creating about 83,300 employment opportunities by 2020.

Employment in the Auckland region will grow by 2.3 per cent (or 22, 100 workers per year) on average each year to 2020. Due to its size, the region is forecast to make up about 43 per cent of the national employment growth between 2017 and 2020, spread across a number of industries. Construction, hospitality and retail trade are forecast to increase employment in the region over the next three years.

**Figure 4: Growth by skill level is largely broad-based but rural regions are likely to compete with urban regions for skilled and highly-skilled worker**

(Annual average percentage change between 2017 and 2020)

Note: Vertical dashed line mark the national average growth rates by broad skill level.
Business services, retail trade and health care, and social assistance sectors are forecast to drive employment growth in the Canterbury region between 2017 and 2020. These sectors are likely to add nearly 11,000 more people to the region’s employment over the forecast period. Employment growth in the construction sector is anticipated to remain strong but has come off the peak since 2015. Overall, employment in the region will grow by 1.9 per cent (or 6,500 workers per year) on average, adding 19,400 workers to national employment by 2020.

Figure 4 shows that employment is forecast to grow for all skill levels and across all 16 regions. Auckland and Waikato regions are forecast to experience the strongest demand for workers in skilled and highly skilled occupations, but rural regions both in the South and North Islands are also likely to see growth in these occupations. For instance, employment for highly-skilled workers in Tasman, Marlborough and West Coast regions are forecast to exceed national growth for both skilled and highly-skilled workers. The demand for semi-skilled and elementary-skilled workers is also spread across a number of rural regions. Northland, Taranaki and Waikato regions are forecast to benefit from the expanded activities in the construction, retail trade and hospitality sectors, with higher than national growth in semi-skilled and elementary skilled occupations over the next three years.

Overall, five out of the 16 regions (2 in the North Island and 3 in the South Island) are forecast to grow faster than the national rate over the forecast period.

Figure 5: Rural regions in the South Island to grow fastest over the next three years (Annual average percentage changes, 2017-20)
Unemployment rate falls to 4 per cent as employment growth exceeds labour supply growth

The effects of strong working age population and employment growth will be evident in the labour market. Strong labour force participation and net migration levels above long term average will sustain continued strength in labour supply, but with growth diminishing over time. Employment growth exceeding labour supply growth will result in unemployment rate trending down to 4 per cent in the short-term (see Table 1 and Figure 6). We are also likely to experience labour supply constraints and skills shortages over time with low unemployment.

Table 1: Forecast labour market indicators (%), March quarters

<table>
<thead>
<tr>
<th>Labour market indicators</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment rate</td>
<td>67.1</td>
<td>67.7</td>
<td>68.0</td>
<td>68.2</td>
</tr>
<tr>
<td>Labour force participation</td>
<td>70.6</td>
<td>71.0</td>
<td>71.1</td>
<td>71.2</td>
</tr>
<tr>
<td>Working-age population growth</td>
<td>0.7</td>
<td>0.4</td>
<td>0.4</td>
<td>0.3</td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>4.9</td>
<td>4.7</td>
<td>4.3</td>
<td>4.1</td>
</tr>
</tbody>
</table>

Source: MBIE, Macro-labour market model; The unemployment rate could decline well below 4 per cent if the labour force participation rate declines towards 70.0 over the short-term but this is less likely if the wage rates rise faster than in recent years.

With labour supply easing due to slowing net migration levels over time, the unemployment rate is forecast to fall to 4.1 per cent by March 2020 quarter. At the same year, employment and labour supply growth are expected to decline, with the latest showing a stronger decrease. The lower unemployment rates coincide with labour productivity improvements; and a weaker growth in labour supply than employment forecast for 2019 and 2020.

Figure 6: The unemployment rate is likely to approach low levels recorded before the 2008 GFC (Seasonally-adjusted, March quarters, actual and forecasts)

The next section presents the economic assumptions that underpin the employment and unemployment rate forecasts over the 2017 and 2020 period.
The global economic outlook is positive

The International Monetary Fund (IMF)\(^2\) projects a stronger global outlook for 2017-18, as economies in the euro area, emerging markets and developing countries pick up; and global manufacturing activity remains solid. The IMF projects global economic growth to rise from 3.1 per cent in 2016 to 3.6 to 3.7 per cent in 2018. The IMF also projects strong growth for New Zealand’s main trading partners in Asia, including China and Japan. The United States and United Kingdom are projected to have a softer growth in 2018.

**Domestic demand and trade will continue to boost economic growth**

Expectations of robust global demand for exports from New Zealand and stronger domestic activity are projected to support a positive outlook for the New Zealand economy. Treasury’s Half-year Economic and Fiscal Update (HYEFU) forecast economic growth to be modest at 2.7 per cent in 2018 year, but expected to pick up to 3.6 per cent in 2019, and ease to 3.1 per cent by 2020 (see Table 2). Consensus Forecasts also expect GDP growth to peak in 2019 at 3.2 per cent before declining to 3.0 per cent by 2020.\(^3\)

**Table 2: GDP, employment and productivity forecasts (2018 to 2020 March years)**

<table>
<thead>
<tr>
<th>Annual average percentage change</th>
<th>2017 (%)</th>
<th>2018 (%)</th>
<th>2019 (%)</th>
<th>2020 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP growth</td>
<td>3.1%</td>
<td>2.7%</td>
<td>3.6%</td>
<td>3.1%</td>
</tr>
<tr>
<td>Labour Productivity (MBIE)</td>
<td>-1.2%(^4)</td>
<td>0.6%</td>
<td>1.3%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Employment growth (MBIE)</td>
<td>4.3%</td>
<td>2.1%</td>
<td>2.3%</td>
<td>1.7%</td>
</tr>
</tbody>
</table>

Source: Treasury Half-Year Economic and Fiscal Update – December 2017; MBIE, Short-term employment model

Note: 1) The forecasts and estimates over the next three years presented above should be regarded as indicative.

2) All changes presented in the table are annual average percentage change (AAPC).

The services and construction sectors will continue to drive growth in the short-term, with activity broadening beyond main urban centres to rural regions as global dairy prices are expected to remain steady. Net migration above long-term average levels will boost household spending and construction activities. With robust employment demand, consumers and businesses will remain confident\(^5\), further increasing spending and economic activities. Continued contribution from tourism activity is also likely to drive economic growth in the short-term.

The average annual employment growth rate of 2.0 per cent over the 2017-20 period is below the pre-recession average growth rate of 2.8 per cent over the 2003-07 period. This, in part, is due to higher average labour productivity over the forecast period compared to the pre-recession period (see Table 1).

**Slower population growth and geopolitical tensions risk to economic growth**

The strength of the labour market in the short-term remains conditional on strong economic growth. The growth in domestic consumption and business investment along with the gains

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\(^2\) International Monetary Fund: World Economic Outlook Update, October 2017, World Economic Outlook, October 2017: Seeking Sustainable Growth

\(^3\) New Zealand Institute of Economic Research, Consensus Forecasts – December 2017.

\(^4\) The employment growth in 2017 was stronger than forecast GDP growth for the period, resulting in negative growth in labour productivity, as experienced in 2016. See Productivity Statistics: 1978–2016.

\(^5\) NZIER Consensus Forecasts - December 2017
from terms of trade could be weaker than anticipated and capacity constraints and cost pressures in the construction sector could moderate the growth of the national economy over the forecast period. The high net migration level of the past few years is anticipated to ease over the forecast period, resulting in slower population growth and this could weaken economic growth in the short-term.

Global risks continue to be skewed downwards — due to the strong NZ dollar, even after recent minor correction, likelihood of heightened geopolitical tensions and increased protectionism — these are likely to result in reduced trade and lower cross-border investment flows. These uncertainties surrounding policies of New Zealand’s main trading partners could hold back a stronger recovery across the global economy.

Appendix

Detailed employment forecasts available online

The short-term forecasting model draws on the latest macroeconomic forecasts
This report is published twice a year: usually by May and by November of each year, the latter delayed to incorporate the 2017 HYEFU forecasts. This timing is based on the publication of Treasury’s Economic and Fiscal Update and also Statistics New Zealand’s release of other underlying data used to refresh the Ministry’s short-term employment model (around February of each year).

The forecasts are indicative of the likely growth path in employment. The Ministry uses a short-term forecasting model that draws on the Treasury’s latest available GDP and macroeconomic forecasts, and productivity assumptions at the industry level. The model-based forecasts of industry level economic activity and productivity are used to derive regional employment forecasts by industry using recent changes in levels and shares of employment. The industry employment forecasts are then used to forecast employment growth for occupations and by skill levels by using the Census based occupational shares across industries. A top-down approach is used to forecast employment changes by regions.

The employment forecasts were updated and checked for consistency with the latest available GDP and Household Labour Force Survey results, and New Zealand Institute of Economic Research (NZIER)’s Consensus Forecasts.