Manufacturing fact sheet

MINISTRY OF BUSINESS, INNOVATION & EMPLOYMENT
HĪKINA WHAKATUTUKI

The sector in the lead up to COVID-19

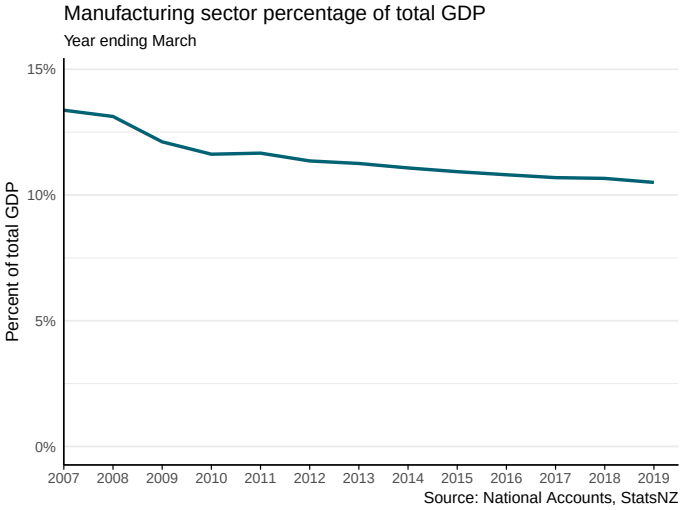
Sectoral GDP:
$24.3b
11% of national GDP
Year ended March 2020

Number of persons employed:
244,000
9% of all persons employed
March 2020 quarter

Value of exports:
$9.4b
March 2020 quarter
An increase of 8% since March 2019 quarter

Value of finished goods:
$11.6b
December 2019 quarter
An increase of 5% since Dec 2018

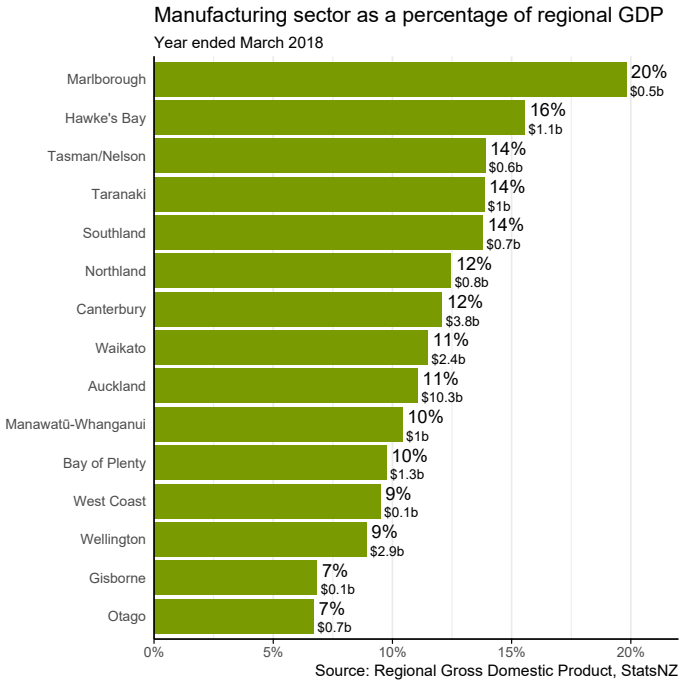
Manufacturing continues to maintain a strong position in the NZ economy

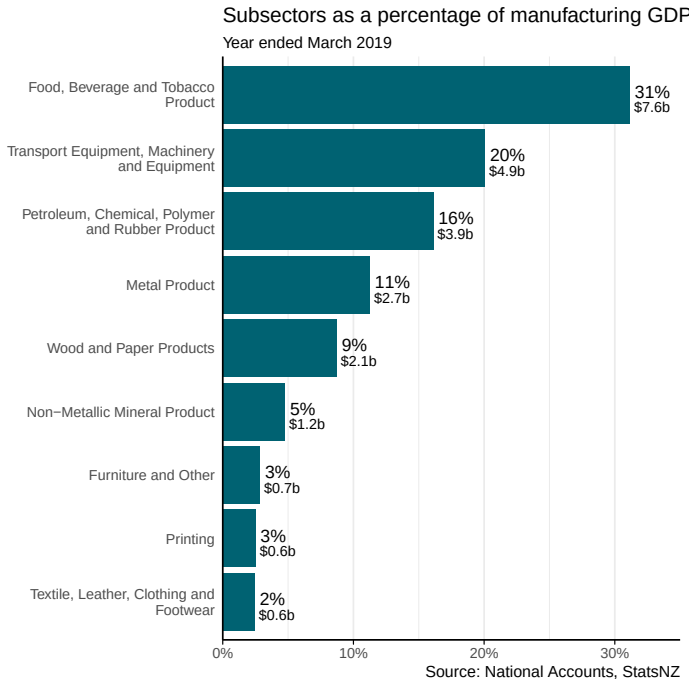


The manufacturing sector remains a significant contributor to the New Zealand economy. It has maintained a contribution to GDP of about 11 per cent since 2013.

This contribution to the country's GDP is comparable to the levels in the United States, Canada and Europe [1] . The reduction in share of total GDP reflects outsourcing from the sector and growth of services within the economy.

In March 2020, the largest contributor to sectoral GDP was food, beverage and tobacco products. The manufacturing sector is also an important sector in the regional economy. For example, the sector makes up a fifth of regional GDP in the Marlborough region.





[1] OECD (2020), Value added by activity (indicator). doi: 10.1787/a8b2bd2b-en (Accessed on 21 May 2020)

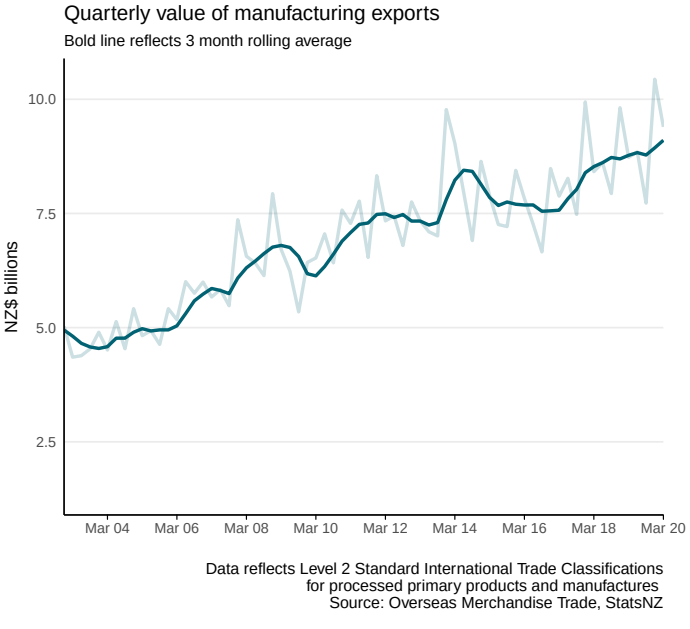
New Zealand exports high-value manufactured products

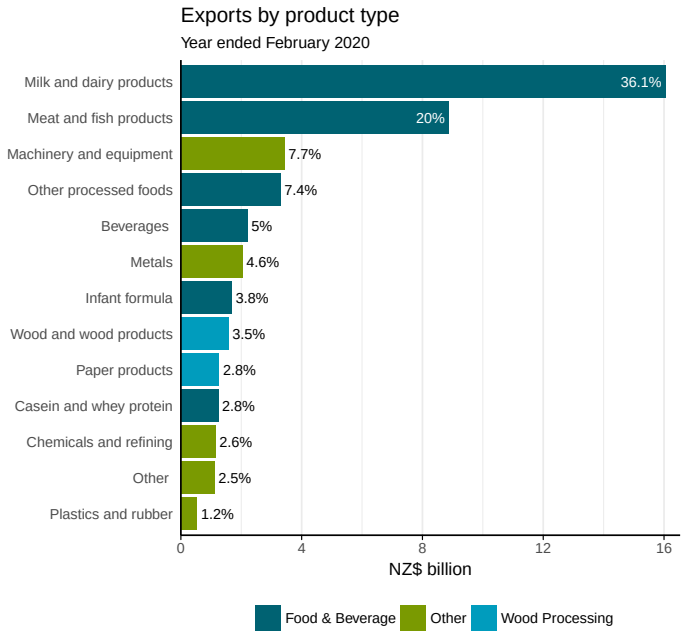
Over 60 per cent of New Zealand's total exports are accounted for by the manufacturing sector annually. The total exports by the sector are valued at $9.4 billion in the March 2020 quarter. Over 20 per cent of New Zealand's manufacturing exports in the year ending December 2019 were sent to China, and a further 16 per cent to Australia.

Top 5 export markets and products
Year ended December 2019

Market	Product type	Value ($, million)	Percent of total export for the product
China, People's Republic of	Milk powder, butter, and cheese	**5,260**	33%
	Meat and edible offal	**3,370**	42%
	Logs, wood, and wood articles	**2,930**	58%
Australia	Milk powder, butter, and cheese	**790**	5%
	Preparations of milk, cereals, flour, and starch	**690**	30%
	Precious metals, jewellery, and coins	**620**	90%
United States of America	Meat and edible offal	**1,460**	18%
	Wine	**600**	32%
	Milk powder, butter, and cheese	**570**	4%
European Union	Meat and edible offal	**1,420**	18%
	Wine	**650**	35%
	Optical, medical, and measuring equipment	**250**	25%
Japan	Aluminium and aluminium articles	**570**	48%
	Milk powder, butter, and cheese	**560**	4%
	Logs, wood, and wood articles	**370**	7%

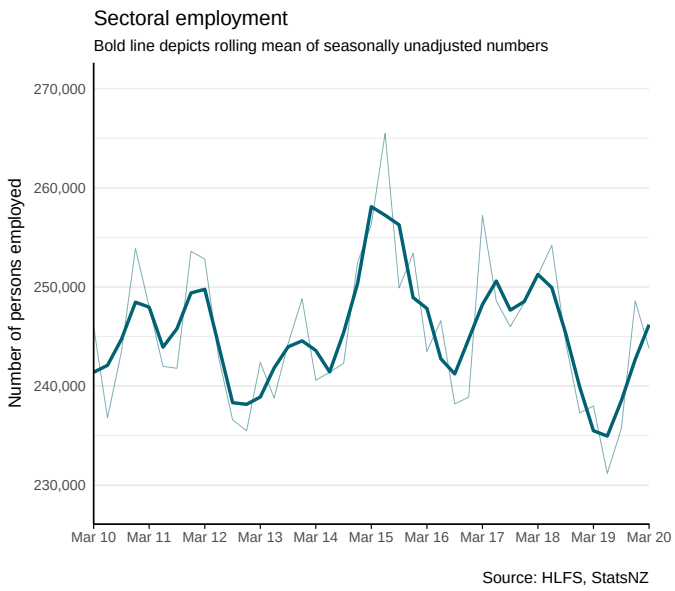
Source: Goods and Services Trades, StatsNZ

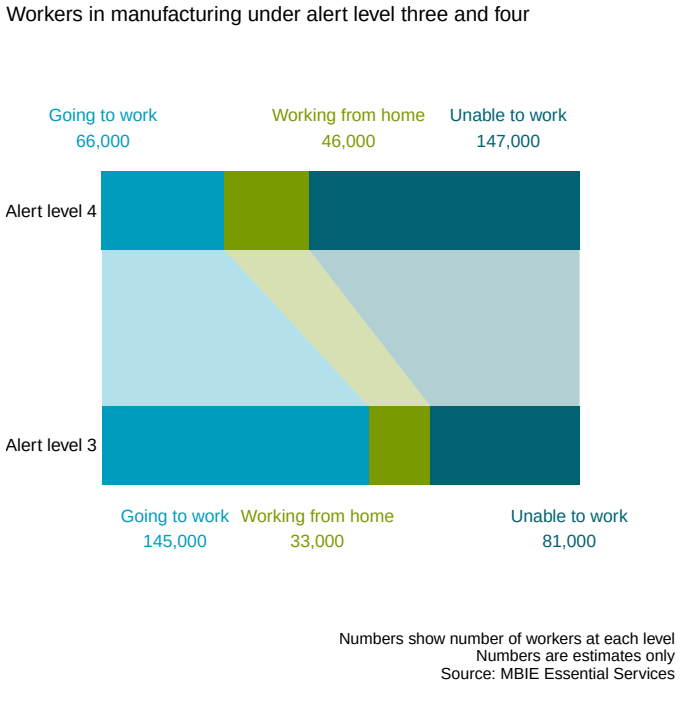




Note: Other processed foods includes honey, sugar, confectionary, chocolate
Source: Overseas Merchandise Trade, StatsNZ

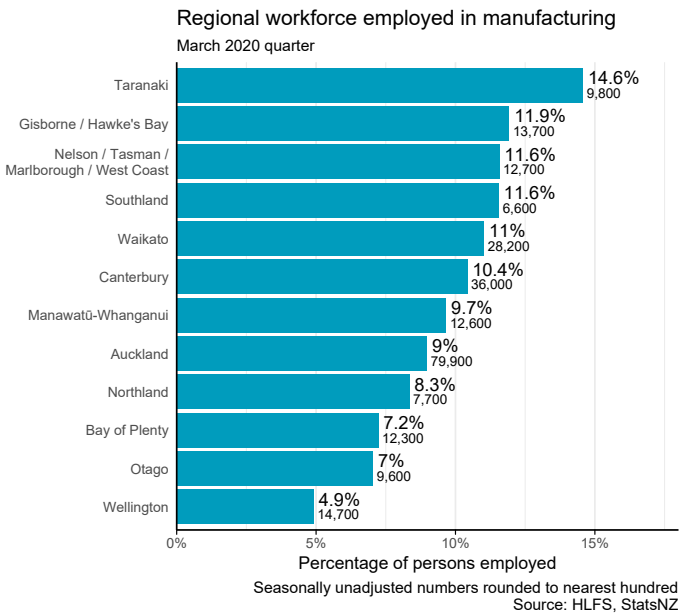
Manufacturing was an essential service through COVID-19 alert levels

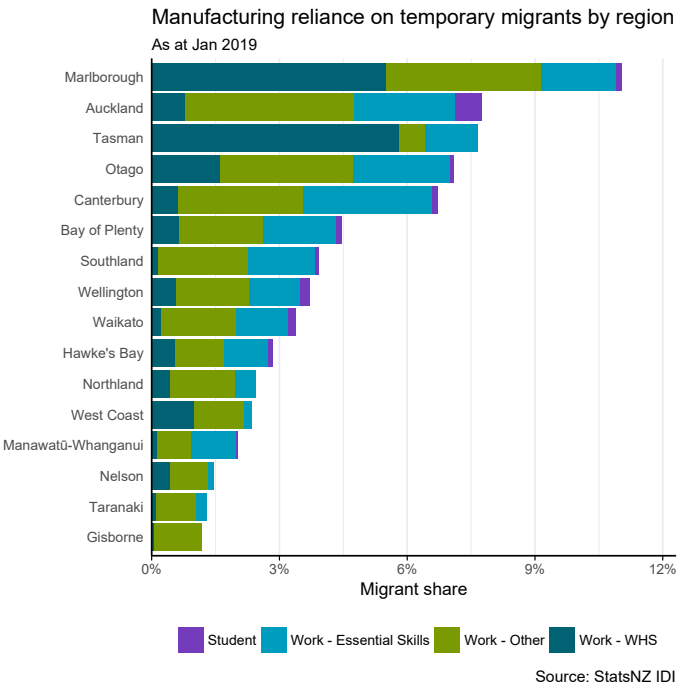




In the March 2020 quarter, 244,000 people were employed in the sector. Of this total, an estimated 76 per cent were able to work during alert level 4. Manufacturing sector employment is largest in food product manufacturing, employing 31 per cent of the sector's workforce. Manufacturing employment is highest in the Taranaki region, making up 14.6 per cent of the region's workforce.

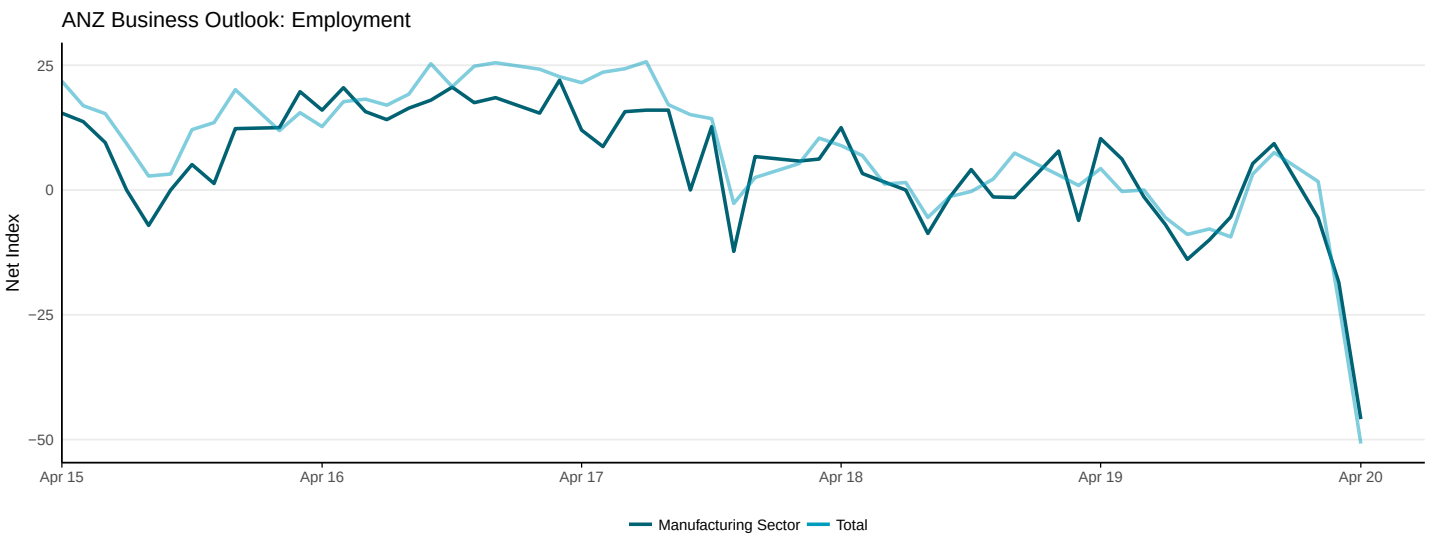
Employment in the sector has remained below its 2015 level over the past five years.



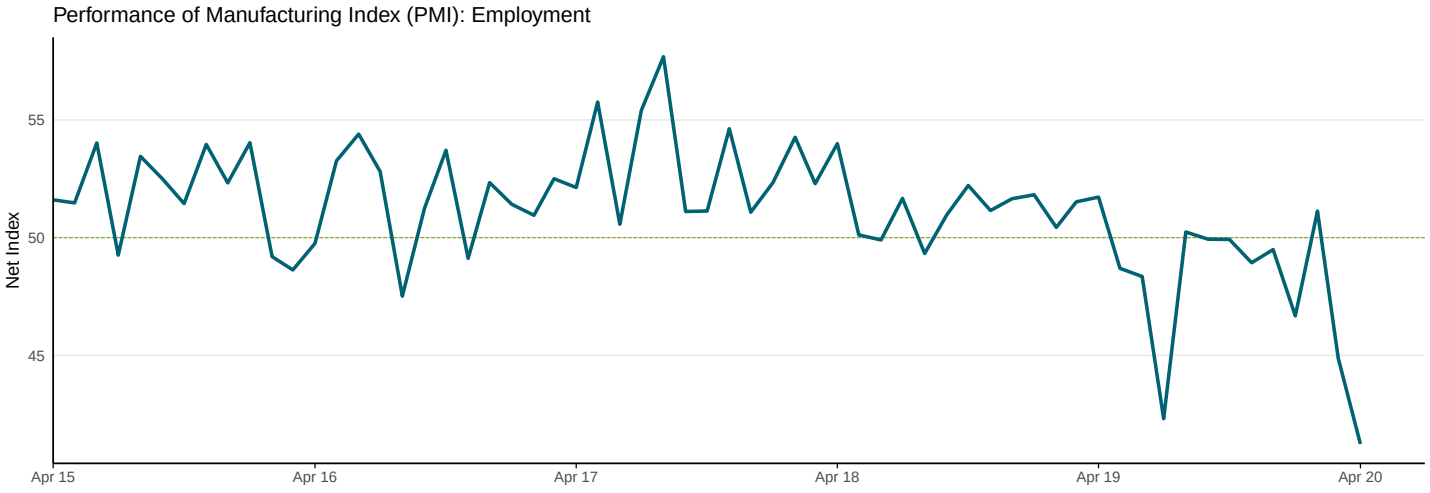


Six per cent of the manufacturing workforce is made up of temporary migrants. Marlborough has the highest proportion of migrant labour in the sector, with most coming from working holiday scheme (WHS) visa holders.

Employment is expected to decline in the coming months



Source: ANZ Research

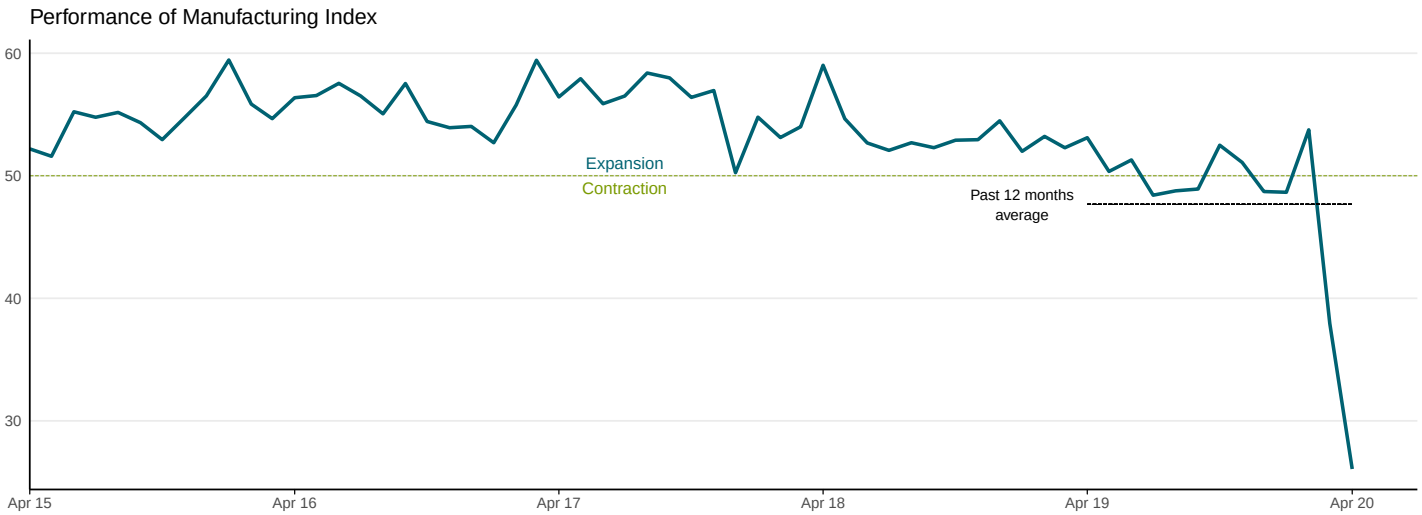


The March 2020 PMI was not run due to COVID−19 and as such March figures reflect an average of both the actual combined February and April 2020 values
Source: BusinessNZ, BNZ

The employment component of PMI fell below 50 points - the lowest it has been since December 2014 - and mirrors the weakness in manufacturing activity during COVID-19 Alert Levels 3 and 4. The sector being identified as a provider of essential service and goods during the lockdown has helped cushion the impact of COVID-19 on the sector's employment. However, businesses in the sector are anticipating job cuts as they expect to reduce investments and face higher costs in the coming 12 months.

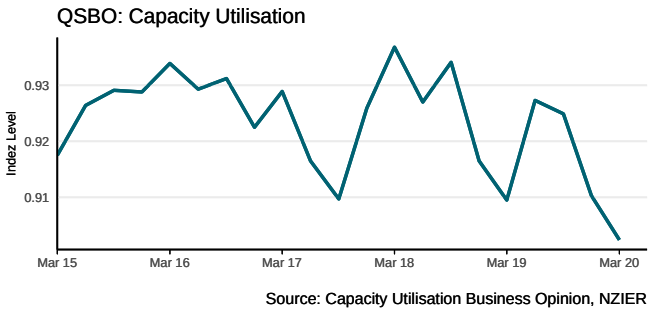
The manufacturing sector is performing well but has excess capacity

The figure below shows the seasonally adjusted Performance of Manufacturing Index (PMI). The index for April 2020 fell to 26.1 (below the 50 point neutral level), which indicates a significant contraction of 11.6 points from March. The current PMI is lower than the index recorded after the Global Financial Crisis in 2008.

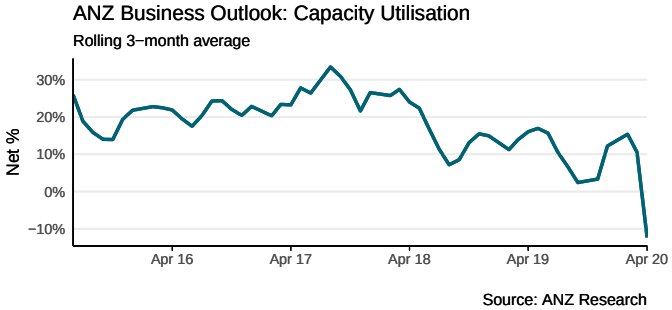


The March 2020 PMI was not run due to COVID−19 and as such March figures reflect an average of both the actual combined February and April 2020 values
Source: BusinessNZ, BNZ

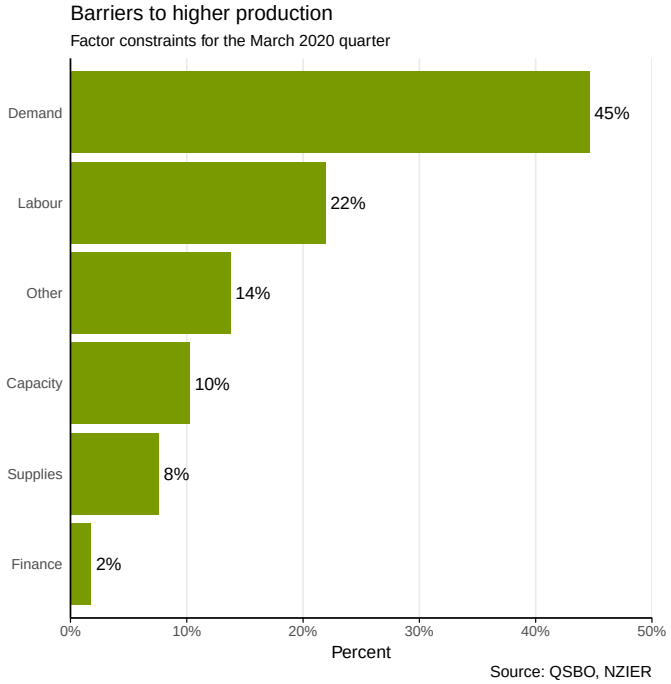
Capacity utilisation is a measure of the intensity with which businesses are using their plant and equipment. The NZIER and ANZ measures for capacity utilisation continue to decline. The March 2020 quarter NZIER rate (90 per cent) is comparable to the rate reported during the 2008/09 Global Financial Crisis, while the ANZ measure shows a worsening capacity utilisation.



Source: Capacity Utilisation Business Opinion, NZIER



Source: ANZ Research



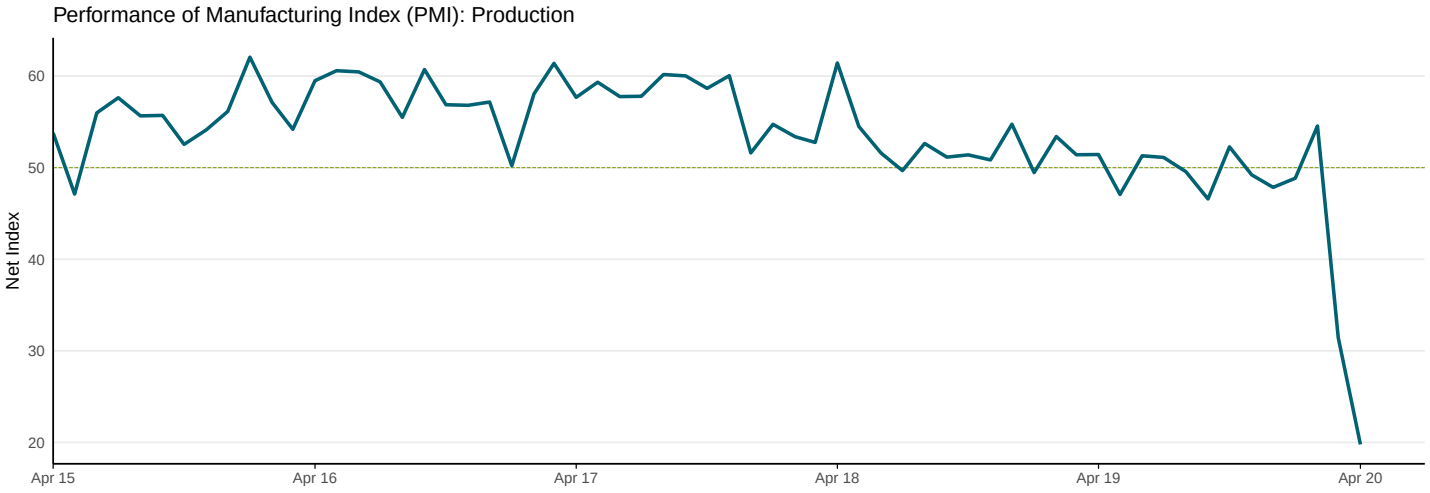
Source: QSBO, NZIER

The sector is concerned with a lack of demand. Quarterly Survey of Business Opinion (QSBO) respondents cited demand as the main factor limiting higher production, followed by labour and capacity constraints. In part, these factors explain a more pessimistic view of activity within the sector (a net 53 per cent in April 2020[2]).

[2] ANZ Business Outlook (2020)

Manufacturing activity is expected to decline

The March 2020 PMI was not run due to COVID−19 and as such March figures reflect an average of both the actual combined February and April 2020 values
Source: BusinessNZ, BNZ



The March 2020 PMI was not run due to COVID−19 and as such March figures reflect an average of both the actual combined February and April 2020 values
Source: BusinessNZ, BNZ

The fall in the manufacturing activity was expected following the spread of COVID-19 worldwide and lockdown of the entire country. The main drivers of lower manufacturing activity were contractions in production and in new orders. Both components fell by over 10 points from March 2020. The employment component of PMI was not nearly as weak as production and new orders. In part, this reflects the support given by the Government to the sector via the wage subsidy scheme.

The negative PMI readings that were observed across the sector, firm size and region[3], are indicative of the widespread economic impact of shutting down activities across the country to combat the transmission of COVID-19.

[3] BusinessNZ (2020), https://www.businessnz.org.nz/resources/surveys-and-statistics/pmi/2020/rock-bottom-pmi (Accessed on 22 May 2020)

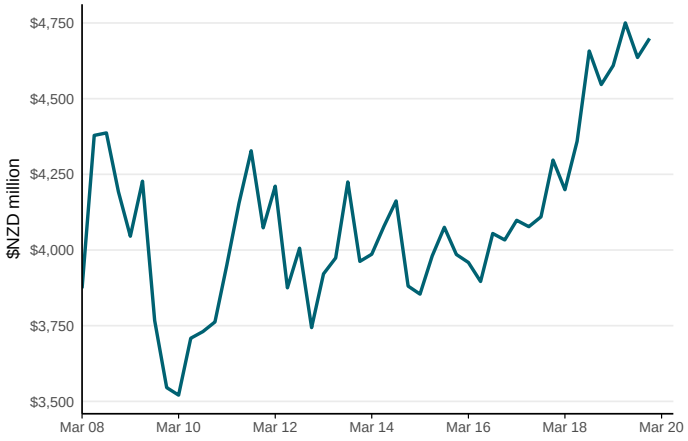
Inventory levels are trending up but are likely to be derailed by COVID-19

The trend in the sector's inventory levels for both raw materials and finished goods suggests that the manufacturing sector can meet increased demand in the future.

The stock of finished goods (not seasonally adjusted) for total manufacturing was 1.7 per cent higher in the December 2019 quarter compared with the December 2018 quarter. In current prices, the value of the stock of raw materials slightly increased from the previous year, but remained low compared to the growth seen in 2018.

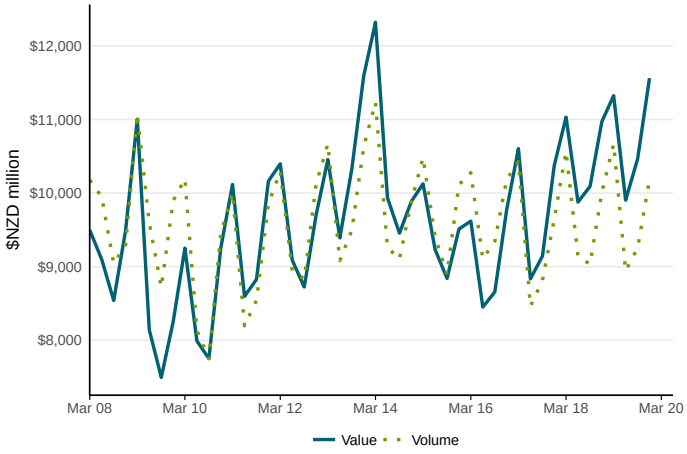
With weak domestic consumer confidence and slowing of the global economy, the sector is likely to see its supply of finished goods exceeding consumer demand, and its supply of raw materials affected by supply chain disruption. Many domestic manufacturing firms rely on parts imported from China.

Stocks of raw materials for use in production



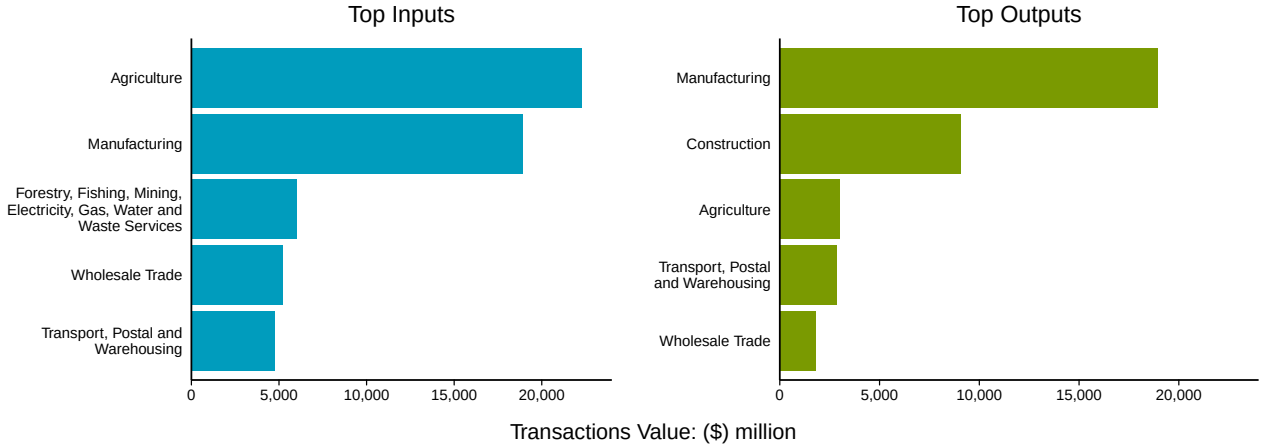
Source: Economic Survey of Manufacturing, StatsNZ

Stock of finished goods



Source: Economic Survey of Manufacturing, StatsNZ

Strong inter-industry dependence



Excludes: Imports, Exports, Final Consumption, Fixed Capital Formation
Source: Experimental Inter−Regional Input−Output Tables (2019), MBIE

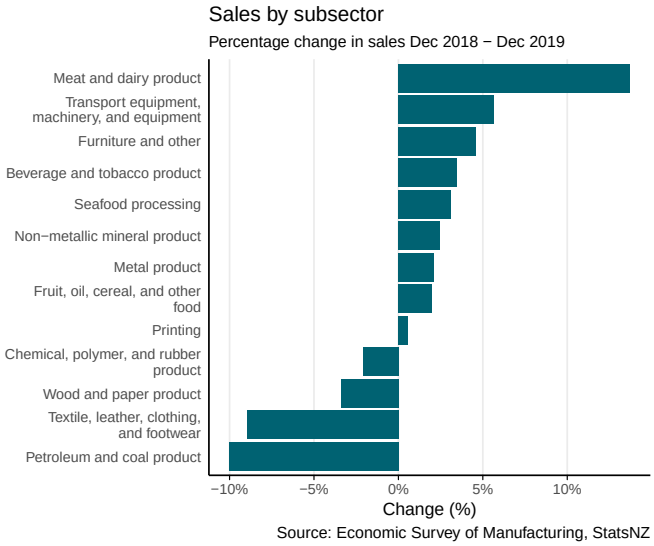
The sector's output is used by both domestic and international users. More than half of the manufacturing sector's meat and food products are exported[4]. Over 80 per cent of its milk and cream (solid or liquid form) products are also sold to overseas consumers.

Domestically, the construction sector is the most reliant to the output of the manufacturing sector. There is a strong interdependence between manufacturing and other sectors with the manufacturing sector most reliant on output from the primary sector; intermediate input from within the sector itself and for logistics from the transport, postal and warehousing sector.

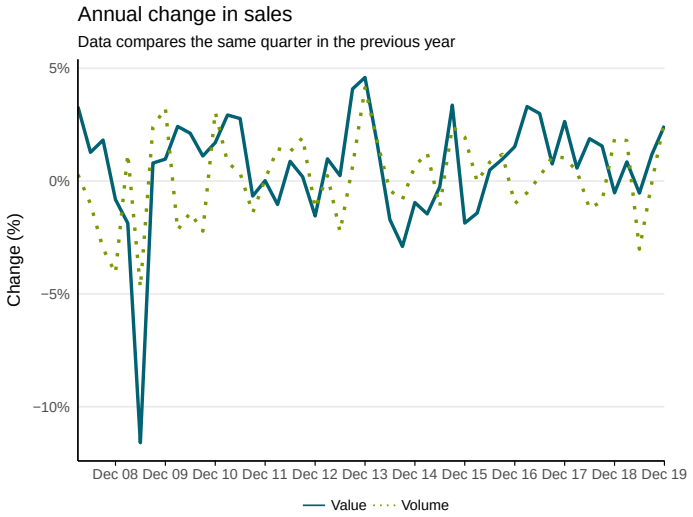
[4]StatsNZ (2013), https://www.stats.govt.nz/experimental/top-suppliers-and-users-of-products (Accessed on 22 May 2020)

Sales performance points to good market position pre-COVID-19

The value and volume of manufacturing sales rose in the December 2019 quarter, following five consecutive quarters of weak growth. The growth was mainly due to higher sales of meat and dairy products, and transport equipment, machinery and equipment.

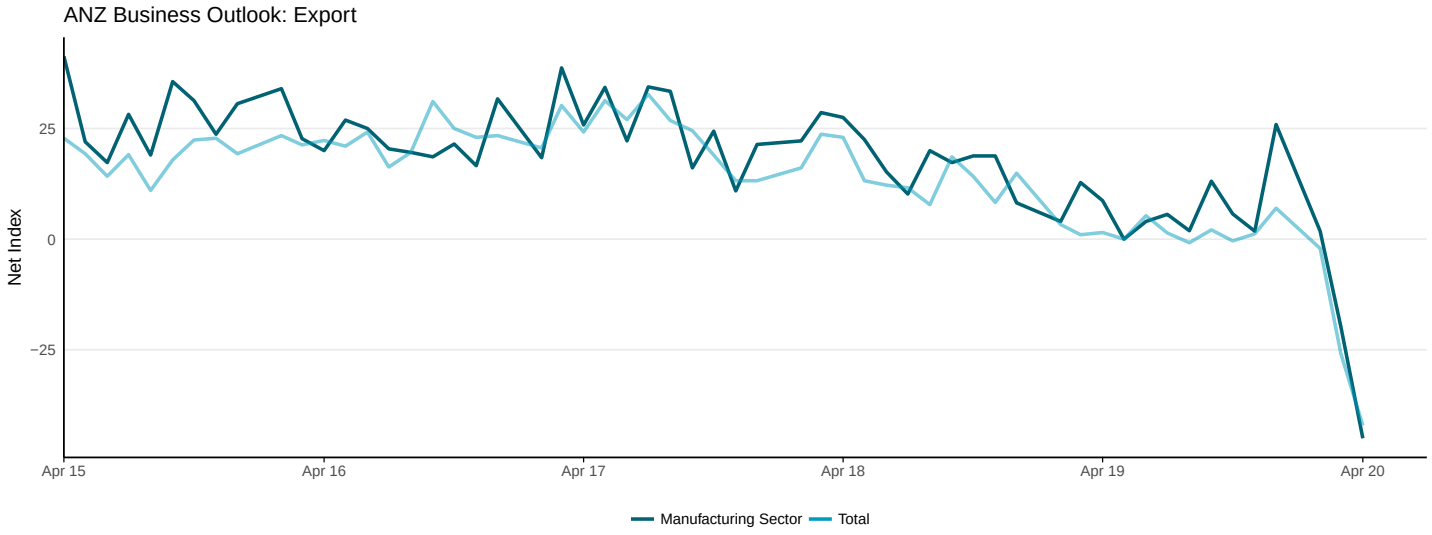


Source: Economic Survey of Manufacturing, StatsNZ



Source: Economic Survey of Manufacturing, StatsNZ

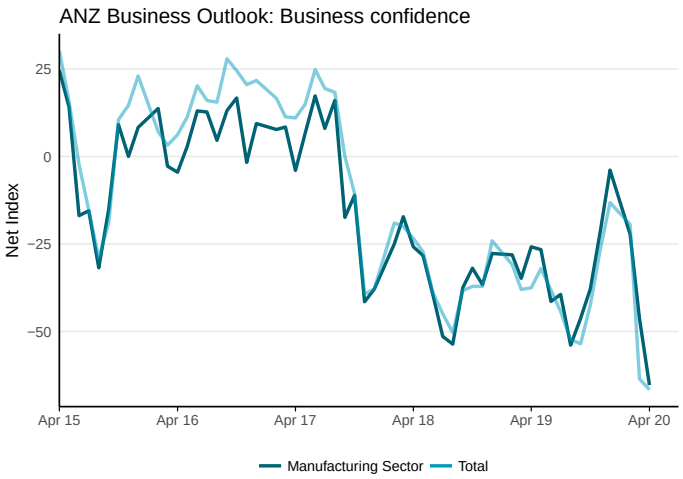
In current prices, the value of manufacturing sales rose 4.0 per cent ($1.1 billion) in the December 2019 quarter, compared to the same quarter in 2018. The percentage increase was two-percentage points higher than the sector's 5-year average growth. Constant dollar sales were up 1.3 per cent, indicating that a higher volume of products was sold in the December 2019 quarter compared to December 2018 quarter.



Source: ANZ Research

Manufacturing sales are likely to be affected by COVID-19; particularly the impact on global supply chains. Manufacturers are expecting lower export earnings in the coming months due to a weakened overall global economy.

Challenges ahead as business confidence falls



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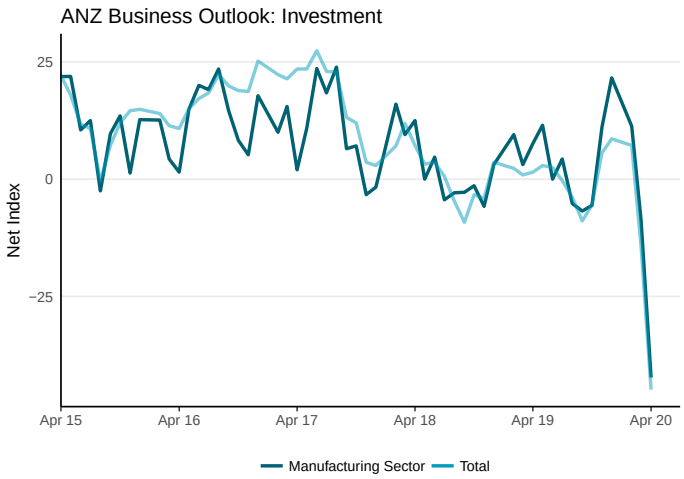

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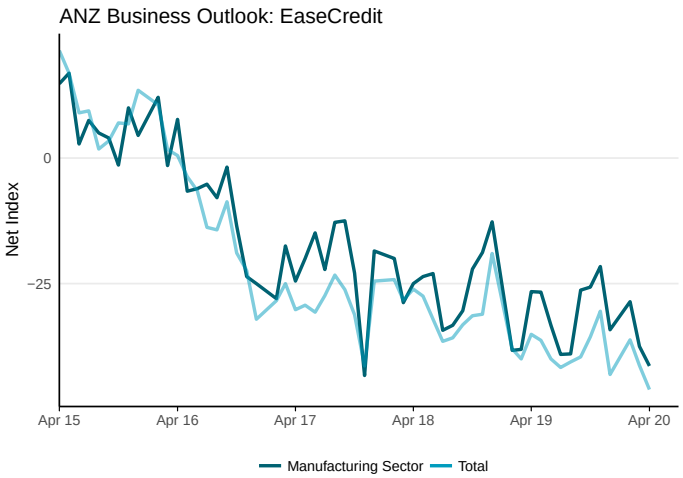

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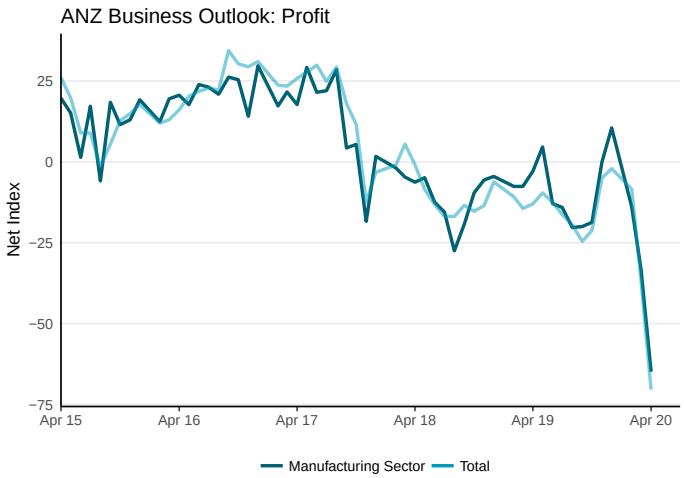

Source: ANZ Research

A net 65 per cent of manufacturers expect a deterioration in the economy. Weakness in manufacturing demand is a concern with a net 45 per cent of manufacturers expecting weaker export sales in the next quarter. Manufacturers are also expecting investments and profits to fall.

Despite the overall improvement in activity in the past year, the months ahead will be challenging for the sector. Lower economic activity and COVID-19 imposed safety measures will affect manufacturers.

Data sources and glossary

ANZ Business Outlook

The ANZ Business Outlook is a key leading barometer for the economy, relying on the input of New Zealand businesses. The information is collected from a monthly survey of businesses nationwide. The data provides a snapshot of business opinion regarding the future (next 12 months) state of the businesses and the overall economy.

ANZ Business Outlook is reported as a net index. This index is calculated by subtracting the percentage number of businesses that expect that the economic situation improves from the number that expect decline.

Economic Survey of Manufacturing (ESM)

The Economic Survey of Manufacturing is a StatsNZ survey designed to provide short-term economic indicators for the manufacturing sector produced by StatsNZ. In addition, the data is used to compile the manufacturing sector component of quarterly national accounts.

Quarterly Survey of Business Opinion (QSBO)

The New Zealand Institute of Economic Research (NZIER) has conducted its Quarterly Survey of Business Opinion since 1961. It is the longest-running business opinion survey in New Zealand. Each quarter they ask around 4,300 firms about whether business conditions will deteriorate, stay the same, or improve. The responses yield information about business trends much faster than official statistics and act as valuable leading indicators about the future state of the New Zealand economy.

Capacity Utilisation Business Opinion (CUBO)

CUBO is a useful indicator of the business cycle and inflation pressures. It is an index of capacity utilisation, measuring of the intensity with which firms are using their plant and equipment. CUBO is calculated from the responses of the manufacturing and building sectors to a question about the extent to which they could expand production without raising unit cost.

Household Labour Force Survey (HLFS)

The StatsNZ HLFS is a quarterly national survey of households and measures average levels of employment, unemployment, participation in the labour force. The purpose of the HLFS is to enable development and monitoring of labour market and social policy, support research, and to help inform on the quality of employment and the health and general well-being of New Zealand

MBIE Essential Services workforce estimates

MBIE's Essential services workforce estimates provide estimates of the workforce by industries and regions under NZ COVID-19 alert levels 3 and 4. The data used is based on Scenario 2 which is a mid-range estimate accounting for the expected reduction in worker demand due to such factors as lack of worker availability, reduced consumer demand, and the need to introduce new ways of working. The data sources for these estimates are:

- Essential Services List
- Business Demographic Statistics
- Detailed Regional Employment Estimates
- Linked Employed-Employee Data
- Household Labour Force Survey (including the Survey of Working Life component)

Performance of Manufacturing Index (PMI)

The BusinessNZ PMI is an indicator of economic health for the manufacturing sector. The purpose of the PMI is to provide information about current business conditions to company decision makers, analysts and purchasing managers. It is based on questionnaire responses that cover the following economic variables: production, employment, inventories, new orders and deliveries.

The PMI is a number from 0 to 100. A PMI above 50 represents an expansion when compared with the previous month. A PMI reading under 50 represents a contraction, and a reading at 50 indicates no change.

Labour Market Contributions (LMC)

Labour Market Contributions is extracted from the StatsNZ Integrated Data Infrastructure (IDI), and details the number of workers in each region and industry by visa. The data includes employed people only, excluding self-employed and anyone not paid via PAYE payroll. Data provided here is suppressed in some cases, and random rounded to base three in all cases. The data currently does not include recent beneficiary statuses.

The results in this paper are not official statistics. They have been created for research purposes from the IDI mananged by StatsNZ. The opinions, findings, recommendations, and conclusions expressed in the paper are those of the author(s), not StatsNZ. Access to the anonymised data used in this study was provided by StatsNZ in accordance with security and confidentiality provisions of the Statistics Act 1975. Only people authorised are allowed to see data about a particular person, household, business, or organisation. The results in this paper have been confidentialised to protect these groups from identification. Careful consideration has been given to the privacy, security, and confidentiality issues associated with using administrative data and survey data from the ISI. Further detail can be found in the privacy impact assessment for the IDI available from www.stats.govt.nz.

StatsNZ input-output tables

National input-output tables are taken from StatsNZ. The tables describe the structure of the New Zealand economy by showing the relationships between industries, the goods and services they produce, and who uses them. The charts use the 2013 Supply of products, Use of products, and Inter-industry transaction tables.

Standard International Trade Classification (SITC)

SITC is a statistical classification of the commodities entering external trade designed to provide the commodity aggregates needed for the purpose of economic analysis and to facilitate the international comparison of trade by commodity data.

Contact us

For futher information on the information contained in this factsheet, please email us:

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