Special Report 9 April 2020

IBISWorld COVID-19 Economic Assessment

IBISWorld, a leading industry research house, has published an in-depth breakdown of the effect of the COVID-19 outbreak on every subdivision in Australia and New Zealand. This report, compiled by a team of senior industry analysts, classifies the level of disruption for each subdivision, and provides analysis relating to the key factors that will determine their performance over the remainder of 2019-20 and beyond.

The COVID-19 outbreak has worsened over the first quarter of 2020, which has had a significant and growing effect on international supply chains. Global imports from China were about 4% lower over the two months through February 2020, compared with the same time last year. Exports plummeted by 17.2% over the same period. Australia and New Zealand have significantly increased trade with China over the past decade. Consequently, both nations have experienced significant supply and demand disruptions.

The outbreak is anticipated to have a negative impact on the Australian and New Zealand economies, potentially leading to the lowest GDP growth in Australia since 1991-92. IBISWorld has evaluated the impact of COVID-19 on Australia and New Zealand at a subdivision level. While COVID-19 will have a negative effect on a variety of subdivisions, IBISWorld has classified the impact as low, moderate or high, depending on exposure to exports and imports, and the effects of business confidence and consumer sentiment.

COVID-19 is affecting these subdivisions through several different factors. These factors include demand for exports from key trading partners such as China and South Korea, port closures in some affected countries, global consumer demand, and supply chain disruptions caused by declines in manufacturing activity in countries such as China and South Korea. Australia and New Zealand have also endured secondary effects on consumer sentiment and business confidence. Demand for some Australian and New Zealand exports has been curtailed due to disruption across many global industries. Consumer spending and confidence overseas have been harmed by the outbreak, and quarantine restrictions are physically preventing economic activity and spending. Factory closures are curtailing demand for products imported from Australia. Additionally, Australia's reliance on imports from overseas manufacturers could potentially lead to shortages of products and parts across some subdivisions.

However, the COVID-19 outbreak has had some positive effects on the Australian and New Zealand economies. Demand has significantly increased for products supplied by operators across the food, beverage, sanitary and cleaning product supply chains, as consumers have been stockpiling supplies. Some industries that have been suffering direct negative effects may benefit from positive factors, positive offsets such as a rise in demand for repairs and maintenance services replacing new purchases.

The subdivisions most affected by the outbreak include Agriculture, Oil and Gas Extraction, Basic Material Wholesaling, Accommodation, and Air and Space Transport. China is now one the largest destinations for many goods exported from Australia and New Zealand, and represents a key source of demand for many industries. Reduced spending activity and port closures caused by the COVID-19 outbreak have reduced demand for exports. Travel restrictions have severely affected international airlines and hotels, with both drawing significant revenue from Chinese tourists. Almost 1.5 million and 500,000 Chinese tourists visit Australia and New Zealand, respectively, each year.

COVID-19 is expected to moderately affect subdivisions across the mining, manufacturing and retail sectors. These industries do not typically heavily rely on direct exports to China. However, supply chain disruptions caused by the economic dislocation in mainland China will negatively affect these subdivisions.

Generally speaking, COVID-19 has only had a light effect on service-related subdivisions. Few of these subdivisions are directly exposed to international factors, such as export and travel. Demand could fall slightly for other services, such as those provided by the Hairdressing and Beauty Services industry, due to health concerns.

For some subdivisions, the impact of COVID-19 will be mixed or undetermined. Building construction is expected to be largely unaffected by the outbreak. The Reserve Bank of Australia's decision to lower interest rates could stimulate demand for construction services. However, disruptions in labour supply, and equipment and materials supply chains would likely delay projects. Similarly, subdued manufacturing activity is anticipated to limit demand for iron ore and nickel. However, gold miners will likely benefit from rising gold prices as investors hedge against uncertainty in global equity markets.

While the effects of COVID-19 have been generally negative, some subdivisions are expected to benefit. The Grocery, Liquor and Tobacco Wholesaling subdivision is expected to see a significantly positive impact. Although the outbreak has constrained consumer sentiment, many individuals are stockpiling goods such as pre-packaged food, soft drink and long-life milk. Wholesalers of other goods, such as pharmaceutical products, hand sanitiser and toilet paper, have also benefited from higher consumer demand.

Contents

Australia

New Zealand

Code	Title	Australia Impact	New Zealand Impact
	Agriculture, Fishing and Forestry		
A01	Agriculture	High	High
A02	Aquaculture	Low	N/A
A03	Forestry and Logging	High	High
A04	Fishing, Hunting and Trapping	High	High
A05	Agricultural, Forestry and Fishing Support Services	Low	Moderate
	Mining		
B06	Coal Mining	High	High
B07	Oil and Gas Extraction	High	High
B08	Metal Ore Mining	Moderate	High
B09	Non-Metallic Mineral Mining and Quarrying	Moderate	Low
B10	Exploration and Other Mining Support Services	Moderate	Moderate
	Manufacturing		
C11	Food Product Manufacturing	High	High
C12	Beverage Manufacturing	High	Moderate
C13	Textile, Leather, Clothing and Footwear Manufacturing	High	High
C14	Wood Product Manufacturing	Moderate	High
C15	Pulp, Paper and Converted Paper Product Manufacturing	Moderate	Moderate
C16	Printing	Low	Moderate
C17	Petroleum and Coal Product Manufacturing	High	N/A
C18	Basic Chemical and Chemical Product Manufacturing	High	Low
C19	Polymer Product and Rubber Product Manufacturing	Moderate	Moderate
C20	Non-metallic Mineral Product Manufacturing	Moderate	N/A
C21	Primary Metal and Metal Product Manufacturing	Low	Moderate
C22	Fabricated Metal Product Manufacturing	Moderate	Moderate
C23	Transport Equipment Manufacturing	Moderate	High
C24	Machinery and Equipment Manufacturing	Moderate	Moderate
C25	Furniture and Other Manufacturing	Moderate	Moderate
	Electricity, Gas, Water and Waste Services		
D26	Electricity Supply	Moderate	Moderate
D27	Gas Supply	Low	Low
D28	Water Supply, Sewerage and Drainage Services	Low	Low
D29	Waste Collection, Treatment and Disposal Services	Moderate	Moderate
	Construction		
E30	Building Construction	Low	Low
E31	Heavy and Civil Engineering Construction	Low	Low
E32	Construction Services	Low	Low
	Wholesale Trade		
F33	Basic Material Wholesaling	High	Moderate
F34	Machinery and Equipment Wholesaling	Moderate	Moderate
F35	Motor Vehicle and Motor Vehicle Parts Wholesaling	Moderate	Moderate
F36	Grocery, Liquor and Tobacco Product Wholesaling	High	Moderate
F37	Other Goods Wholesaling	High	High
	Retail Trade		
G39	Motor Vehicle and Motor Vehicle Parts Retailing	Moderate	Moderate
G40	Fuel Retailing	Moderate	Moderate
G41	Food Retailing	Moderate	Moderate
G42	Other Store-Based Retailing	High	Moderate
	Accommodation and Food Services		
H44	Accommodation	High	High
H45	Food and Beverage Services	High	High

Code	Title	Australia Impact	New Zealand Impact
	Transport, Postal and Warehousing		
I46	Road Transport	High	High
I47	Rail Transport	High	Moderate
I48	Water Transport	High	High
I49	Air and Space Transport	High	High
I50	Other Transport	High	High
I51	Postal and Courier Pick-up and Delivery Services	Moderate	Moderate
I52	Transport Support Services	High	High
I53	Warehousing and Storage Services	Moderate	Moderate
	Information Media and Telecommunications		
J54	Publishing	Moderate	Moderate
J55	Motion Picture and Sound Recording Activities	High	High
J56	Broadcasting (Except Internet)	Low	Low
J57	Internet Publishing and Broadcasting	Low	Low
J58	Telecommunications Services	Low	Low
J59	Internet Service Providers, Web Search Portals and Data Processing Services	Moderate	Moderate
J60	Library and Other Information Services	Moderate	Moderate
	Financial and Insurance Services		
K62	Finance	Moderate	Moderate
K63	Insurance and Superannuation Funds	Low	Low
K64	Auxiliary Finance and Insurance Services	Low	Low
	Rental, Hiring and Real Estate Services		
L66	Rental and Hiring Services	High	Moderate
L67	Property Operators and Real Estate Services	High	High
	Professional, Scientific and Technical Services		
M69	Professional, Scientific and Technical Services	Low	Low
M70	Computer System Design Services	Low	Low
	Administrative and Support Services		
N72	Administrative Services	Low	Moderate
N73	Building cleaning, pest control and other support services	Moderate	Moderate
	Public Administration and Safety		
O76	Defence	Low	Low
O77	Public Order, Safety and Regulatory Services	Low	Low
	Education and Training		
P80	Preschool and School Education	Moderate	Moderate
P81	Tertiary Education	High	High
P82	Adult, Community and Other Education	Low	Low
	Health Care and Social Assistance		
Q84	Hospitals	Moderate	Moderate
Q85	Medical and Other Healthcare Services	Moderate	Moderate
Q86	Residential Care Services	High	High
Q87	Social Assistance Services	Moderate	Moderate
	Arts and Recreation Services		
R89	Heritage Activities	Moderate	High
R90	Creative and Performing Arts Activities	Moderate	Moderate
R91	Sports and Recreation Activities	High	High
R92	Gambling Activities	High	High
	Personal Services		
S94	Repair and Maintenance	Low	Low
S95	Personal and Other Services	Low	Moderate

Australia

Agriculture, Forestry and Fishing

A01 Agriculture: High

The COVID-19 outbreak is expected to significantly affect the Agriculture subdivision in Australia, due to the export-oriented nature of many industries and their downstream markets. Exports of table and dried grapes to China have grown rapidly over the past five years, with China now the Grape Growing industry's largest export market, accounting for 38.0% of all grape exports in 2019-20. As Australia is still in the middle of the grape harvest, it is difficult to determine how the COVID-19 outbreak will affect grape exports, although they will most likely decline. However, the Grape Growing industry is expected to derive approximately two-thirds of its revenue from selling wine grapes in 2019-20. In addition, wine exports to China have significantly driven demand for the Wine Production industry. As a result of the COVID-19 outbreak, wine exports to China have fallen by 90% over the two months through February 2020.

Sheep, beef and dairy cattle farmers have benefited from strong downstream demand for lamb, beef and dairy products. Over the first half of 2019-20, exports of beef and lamb to China surged from a high base following an outbreak of African swine fever that cut China's pig herd in half. However, demand for these products has fallen in recent months due to the COVID-19 outbreak. Furthermore, meat products exported to China were stranded in docks in February 2020, as local dock workers were in quarantine. However, activity in Chinese ports has since resumed and bottlenecks have started clearing. A substantial reduction in international flights has negatively affected agricultural exporters, as freight costs have risen significantly. In April 2020, the Federal Government announced a $110.0 million freight subsidy to reduce costs and support agricultural exports.

A02 Aquaculture: Low

The Aquaculture subdivision is expected to be only lightly affected by the COVID-19 outbreak. While seafood exports to China have been increasing, this has largely come from the Fishing industry, with industry exports accounting for less than 5% of all seafood exports by value. Furthermore, while China's share of imports is valued at 46.7%, total imports are only expected to account for 3.0% of domestic demand. The Aquaculture subdivision would be significantly affected by a deep and prolonged downturn in other seafood industries that have high export exposure to virus-affected countries.

A03 Forestry and Logging: High

The COVID-19 outbreak is expected to significantly affect the Forestry and Logging industry. Port closures in China and other ongoing disruption to supply chains halted demand for timber in China in February 2020, with shipments already in port unable to be unloaded as dock workers were placed in quarantine. Port activity has subsequently resumed, supporting industry exports. While Australia's timber exports only account for approximately 14% of industry revenue in the current year, China is the largest export market, accounting for nearly 90% of export revenue. Lower global economic activity is anticipated to reduce demand for timber, creating a global oversupply and negatively affecting the domestic price of timber.

A04 Fishing, Hunting and Trapping: High

The Fishing industry is the only industry included in this subdivision, and the COVID-19 outbreak has already had a substantial negative effect on industry revenue. China banned seafood imports in late January 2020, in response to the outbreak. Seafood exports account for over half of the Fishing industry's revenue. Approximately 45% of industry export revenue is generated from China, with a further 11% coming from Hong Kong. As a result, many operators have already started feeling the effects of the ban. Rock lobsters are the largest export item, with over 95% of the catch in Western Australia and South Australia usually destined for China and countries in the Asian region. In addition, 99% of Queensland's coral trout is exported to China.

A05 Agricultural, Forestry and Fishing Support Services: Low

Weaker global economic activity is expected to contribute to an oversupply of timber. As a result, logging and timber processing activity is anticipated to decline, limiting demand for forestry support services. Demand for other agricultural support services, such as shearing and cropping, will also depend on primary producing and growing activities. In the short term, the COVID-19 outbreak is forecast to have a minimal effect on cropping activity, as producers will likely proceed with harvesting crops as normal. Cropping activity would only be significantly affected if farmers reduce future plantings. A similar trend is anticipated for cotton ginning. Farms will still process current cotton crops in the short term, but may reduce future plantings. However, while China is a significant export market for the Cotton Ginning industry, China's share of industry exports was already declining due to other factors.

Mining

B06 Coal Mining: High

The COVID-19 outbreak is expected to significantly disrupt the Coal Mining subdivision. China is one of the largest export markets for Australian coal, where it is primarily used to produce steel. Quarantine measures in China and throughout the global economy are expected to disrupt supply chains, hindering manufacturing activity and lowering demand for steel. As a result, China is expected to demand less black coal from Australia in 2019-20, causing export prices to fall. China may also seek to increase reliance on its own coal production to stimulate its economy amid a downturn caused by COVID-19. Australian exporters have limited capacity to redirect sales to alternative markets, particularly given the ongoing shift towards renewable energy sources. Over the long term, a significant decline in oil prices associated with the COVID-19 outbreak may cause demand for coal to decline, as oil and coal are partial substitutes in energy generation. Despite the global economy being anticipated to recover as the effects of COVID-19 fade, oil prices may remain low for an extended period.

B07 Oil and Gas Extraction: High

The Oil and Gas Extraction subdivision is expected to be heavily affected by the COVID-19 outbreak. A slowdown in global economic activity is anticipated to reduce demand for natural gas. Australian natural gas producers are also at risk of Chinese buyers invoking force majeure clauses in their supply contracts. Force majeure clauses give buyers the ability to revoke their contractual obligation to purchase gas amid unforeseeable external circumstances, such as natural disasters. So far, China's biggest importer of liquefied natural gas, China National Offshore Oil Corp, has invoked force majeure to suspend contracts with at least three suppliers. None of these suppliers are Australian businesses. Chinese gas buyers may seek to avoid invoking force majeure, to maintain beneficial supply relationships with Australian producers.

Declining demand for oil from Chinese buyers has led to a breakdown in negotiations between OPEC and Russia. In early March, both Saudi Arabia and Russia announced plans to significantly increase oil output, amid declining demand due to COVID-19. Oil prices have since heavily declined, which is expected to significantly undermine the performance of major oil and gas extraction firms in Australia.

B08 Metal Ore Mining: Moderate

The Metal Ore Mining subdivision will have a mixed performance due to the effects of COVID-19. Producers of industrial commodities such as iron ore, copper, mineral sands and nickel will likely face subdued demand. The disruption of global supply chains is expected to exert downward pressure on manufacturing activity over the second half of 2019-20, lowering prices for these commodities. In contrast, precious metals producers will likely excel amid growing investor demand for safe-haven assets. The price of gold has risen to over $1,600 USD per ounce, its highest level since March 2013. This is expected to provide a major benefit to Australian gold miners. Lower oil prices will likely exert downward pressure on operating costs, assisting the viability of metal ore miners.

B09 Non-Metallic Mineral Mining and Quarrying: Moderate

The Non-Metallic Mineral Mining and Quarrying subdivision is expected to be moderately affected by COVID-19. Exports of some commodities, such as lithium, will likely be disrupted by the closure or reduced output of factories in China. However, other industries in this subdivision, such as the Gravel and Sand Quarrying industry, have a primarily domestic focus and are therefore less likely to be directly affected by international trade conditions. The Diamond and Gemstone Mining industry may benefit from investors seeking to move wealth from risky assets, such as stocks, to alternative stores of wealth, such as diamonds. The falling price of oil is expected to exert downward pressure on operating costs, assisting the viability of firms in this subdivision.

B10 Exploration and Other Mining Support Services: Moderate

COVID-19 is unlikely to have a major direct influence on mineral and petroleum exploration firms. However, fluctuations in the global prices of commodities such as oil, natural gas and iron ore are expected to significantly affect this subdivision. In the short term, a decline in commodity prices may discourage mining firms from investing in exploration. However, if firms assume that the impact of COVID-19 will be temporary and that commodity prices will improve in 2020-21, they are not likely to make significant changes to exploration activity. The Contract Mining Services industry may be hindered in the short term if large mining firms curtail output due to low prices.

A recent significant downturn in global oil prices is expected to significantly discourage new petroleum exploration expenditure, which may have a large impact on petroleum exploration firms. The extent of this damage depends on how long oil prices remain low, which will be determined by the output of foreign oil producers, such as Saudi Arabia and Russia.

Manufacturing

C11 Food Product Manufacturing: High

The COVID-19 outbreak has severely affected the Food Product Manufacturing subdivision in Australia, as a large proportion of the subdivision's products are exported to China. This subdivision is currently facing logistical challenges and sharp declines in demand from domestic and overseas markets. China's suspension of outbound tourism has also affected domestic demand for food products, including premium meat and seafood.

Since the COVID-19 outbreak, demand for food in China has changed significantly. Industries that rely heavily on exporting to food service sectors in China are at high risk, particularly if those food items are perishable and require quick distribution. Demand for food product manufacturers has fallen dramatically as retail outlets have closed and foot traffic at shopping malls has declined. However, this trend will not likely last over the long term. Demand from food service sectors is anticipated to rebound after COVID-19 has been contained.

Major food service chains, such as McDonald's, Yum China and Haidilao, have only recently begun to re-open after a shutdown period lasting two and a half months. These closures severely affected out-of-home food consumption, which heavily affected local firms that export seafood products, dairy products, tea and coffee products, flour and grain mill products, and premium beef and lamb to the food services sector in China. While demand from China's food services sector is not expected to return to normal immediately, it will eventually boost demand for Australian food manufacturers.

In late January, the Chinese Government temporarily banned seafood imports. Seafood processors that export fresh seafood to China have since been left with excess stock. Seafood processors that offload their excess stock domestically are projected to cause local seafood prices to decline in the short term. Prices received by the upstream Fishing and Aquaculture industries have fallen by one-third for seafood such as lobsters, scallops and prawns. As a result, the Federal Government has announced freight assistance package worth a $110.0 million dollars to help the seafood sector reopen export channels to China and other markets that have been affected by disruptions to global freight movements. Some passenger planes that are not in use are now being fully deployed as cargo planes.

At home consumption of meat, dairy and grain products increased in China due to government lockdowns. However, delays in supply chains and a shortage of workers in Chinese ports have affected Australian food product manufacturers. The meat products of Australia's largest meat processing cooperative, Northern Co-operative Meat Company, became stuck at Chinese ports waiting for dock workers to return to work. However, this situation had begun to improve by the middle of March, with ports ramping up their capacity again.

A weaker Australian dollar is helping industry players divert exports to alternate markets as conditions in the domestic market have been volatile. Meat processors that sell high-value meat cuts to the food-service sector have been hit hard by government measures restricting many restaurants' ability to operate. Producers are anticipated to sell redirected perishable food at discounted prices. However, consumer stockpiling initially resulted in higher prices for products such as minced meat, as processors struggled to keep up with demand. Food product manufacturers that have production facilities in China or import food products for further domestic processing could potentially face delays in their manufacturing processes.

C12 Beverage Manufacturing: High

The COVID-19 outbreak has substantially affected this subdivision in several ways. In positive terms, alcohol sales in Australia surged in March. Credit card data from Commonwealth Bank of Australia showed alcohol sales were 20.4% higher during the week to 20 March compared with the same period last year. This difference increased to 34.0% the following week.

However, beverage manufacturers have also endured negative effects related to the COVID-19 outbreak. Coca-Cola Amatil has withdrawn its earnings guidance for fiscal year 2020. While grocery sales have been strong, its on-the-go channel, which includes on-premise and event sales, will likely be significantly affected. This channel accounts for approximately 40% of the company's sales by volume. The supply of artificial sweeteners could potentially be disrupted, leading to reduced output by Coca-Cola Amatil and other soft drink manufacturers.

Wine producers are also taking a massive hit from COVID-19. In 2018-19, China was the largest consumer of Australian wine products, at an estimated 34.9% of export revenue. Events in China are being cancelled and postponed, limiting wine consumption. Wine sales are anticipated to continue falling over the short term while restrictions on group dining remain in place. However, wine is not perishable and wine manufacturers do not have any immediate need to redistribute their products. Domestic cellar door sales have also been severely affected by COVID-19, as the number of international tourists has declined significantly. Some operators are turning to virtual wine tasting events in an attempt to boost sales. Exports of wines to other international markets are expected to benefit from a weaker Australian dollar in 2019-20.

C13 Textile, Leather, Clothing and Footwear Manufacturing: High

COVID-19 is anticipated to significantly influence the Textile, Leather, Clothing and Footwear Manufacturing subdivision. This subdivision involves significant international trade and supply disruptions will likely have a substantial effect on the industry. For example, the Leather and Leather Substitute Product Manufacturing industry is heavily export-oriented, as many leather manufacturers outsource initial hides and skins to China for further processing. Tanned hides return to Australia in the form of uncut hides or manufactured products, such as jackets or shoes.

Constrained logistics, travel restrictions and a shortage of labour in China have made it difficult for tanneries to deliver goods. In addition, declining consumer demand has negatively influenced the Leather and Leather Substitute Product Manufacturing industry. COVID-19 has prevented people from travelling and shopping, weakening demand for leather products such as shoes and bags. In Australia, an absence of tourists buying luxury retail items has caused demand to fall for leather and leather substitute products.

Demand has been further affected as the COVID-19 outbreak has spread across Europe. Demand from Italy and Spain has collapsed as tanning operations have closed due to wider government shutdowns. As a result, leather prices have crashed and many Australian producers are faced with the prospect of dumping their unwanted supplies in landfill.

Similarly, a significant proportion of clothing and footwear products are imported from China, potentially affecting domestic supply. Larger manufacturers can potentially source clothing and footwear from other manufacturing nations such as Bangladesh, Vietnam and India. Despite supply disruptions, a decline in consumer sentiment following the COVID-19 outbreak and low wage growth over the past five years will likely have more severe long-term effects on the subdivision.

C14 Wood Product Manufacturing: Moderate

COVID-19 is projected to have a moderate effect on the Wood Product Manufacturing subdivision. While supply from China will be significantly disrupted over the short term, industries are likely to source wood products from other countries that export wood products, such as Malaysia and Indonesia. Wood products in the Australian market are therefore unlikely to face significant supply disruption. However, supply chain problems caused by COVID-19 are anticipated to have a more severe effect on log exporters, as warehouses and factories cannot start production. If factories remained closed, log exporters will be forced to reduce their harvesting rates. Reduced demand from China has also negatively affected wood chipping operations. However, local demand for this subdivision has been sustained by the Construction division in Australia, which continues to operate as an essential service.

C15 Pulp, Paper and Converted Paper Product Manufacturing: Moderate

China remains a major producer of products in this subdivision, including sanitary paper products, toilet paper and tissues. Supply chain disruptions could potentially lead to domestic supply disruption, as Australians stockpile household products in expectation of a pandemic. Supermarkets have reported difficulties in maintaining adequate supplies of toilet papers. This trend has resulted in supermarkets limiting customers to a certain amount of toilet paper per transaction to cope with the recent spike in demand. Local sanitary paper product manufacturer ABC Tissue Products reported a 15.0% increase in demand over the two weeks through 12 March 2020.

Manufacturers of paper and paperboard products that target food and beverage manufacturers have had mixed results. Firms that manufacture products used to package certain goods sold in supermarkets have benefited from consumer stockpiling behaviour. However, operators that focus on the food services sector have not been as fortunate. Reduced demand from cafes and other takeaway outlets has affected sales for these companies. As a result, Detmold Group is now pivoting production away from the industry and is instead manufacturing facemasks. Over the next twelve months, the company will produce 100 million surgical and respiratory masks for the national stockpile, and 45 million for the SA Government. The company will hire 160 new employees for these new operations.

C16 Printing (Including the Reproduction of recorded media): Low

COVID-19 is projected to have a minimal effect on the Printing industry. The subdivision conducts a low level of international trade, as transporting printed products across long distances is inefficient and costly due to the low per-unit value and high cumulative weight of large paper shipments. While Australia imports recorded media from China, supply chain disruptions are unlikely to affect domestic supply, as digital media sales have surpassed physical media sales since 2013.

C17 Petroleum and Coal Product Manufacturing: High

This subdivision is made up of the Petroleum Refining and Petroleum Fuel Manufacturing industry and Lubricants and Other Petroleum Product Manufacturing industry. The COVID-19 outbreak is expected to significantly affect revenue for this subdivision, largely due to falling demand for aviation fuel due to widespread travel restrictions. Additionally, many individuals are working from home and reducing other non-essential travel, which has constrained demand for automotive fuel. Falls in the world price of crude oil have exacerbated recent revenue declines. While many international refineries are based the

Asia-Pacific region, logistics disruptions related to COVID-19 will likely have a modest effect on this subdivision. Most domestic refined petroleum product imports are sourced from Singapore, Japan and South Korea.

C18 Basic Chemical and Chemical Product Manufacturing: High

COVID-19 is anticipated to heavily influence the Basic Chemical and Chemical Product Manufacturing subdivision. While some chemical manufacturers have benefited from lower crude oil prices, disruptions in the Chinese supply chain have affected many manufacturers. A considerable proportion of imports from this subdivision are derived from China.

China is the main manufacturer of both ready-made pesticides and the active ingredients that form the base of pesticide products formulated in Australia. A disruption in the Chinese supply chain could result in pesticide shortages, which could potentially affect the Agriculture subdivision when these firms start planting Australian winter crops.

The Pharmaceutical Product Manufacturing industry is export-oriented, with revenue derived from exports anticipated to total $5.5 billion in 2019-20. Of this figure, approximately half is derived from exports of non-prescription pharmaceuticals, such as vitamins and dietary supplements. The COVID-19 outbreak has increased demand for vitamins and dietary supplements in China. However, travel bans on Chinese tourists are anticipated to cause a temporary decline in demand from Chinese tourists stocking up on vitamins before returning to their home country. Pharmaceutical product manufacturers have also faced short-term volatility due to supply chain disruptions related to COVID-19, with difficulties exporting products to China. Domestically, fears of COVID-19 have prompted consumers to panic purchase over-the-counter medicines, such as paracetamol and cold medicine. Demand for pharmaceuticals manufacturing products is anticipated to rise over the short term, as both consumers and healthcare providers require medicine supplies. In recognition of the heightened strain on the industry, the ACCC has granted a conditional interim authorisation for the Biosimilar Medicines Association and Medicines Australia, and their members to work together to supply essential medicines during the pandemic.

Revenue for the Soap and Cleaning Compound Manufacturing industry is expected to increase substantially due to the outbreak. Both individuals and commercial cleaners have been purchasing higher volumes of soap and cleaning compounds in an attempt to slow the spread of COVID-19. Many supermarkets and pharmacies have sold out of hand sanitiser and household cleaning products. Demand for commercial cleaning services will likely remain high as businesses aim to ensure a healthy workplace for workers and customers.

C19 Polymer Product and Rubber Product Manufacturing: Moderate

The spread of COVID-19 is anticipated to have a moderate effect on the Polymer Product and Rubber Product Manufacturing subdivision, as these firms manufacture products for a range of markets, including manufacturers, wholesalers, retailers and construction companies. Demand has substantially increased for manufacturers of protective equipment, such as gloves. The Glove Company, a firm based in New South Wales, tripled its monthly sales in March. Some manufacturers import packaging supplies from China. The COVID-19 outbreak could potentially lead to a temporary shortage in packaging supplies, components and tools due to factory closures in China and other countries. However, as this subdivision relies on other markets, declining demand from other markets due to COVID-19 could cause demand to fall for this subdivision's products.

C20 Non-metallic Mineral Product Manufacturing: Moderate

COVID-19 is expected to moderately affect this subdivision. While the subdivision is exposed to moderate import penetration, manufacturers import from several different countries. While concrete product manufacturers import substantial volumes from China, industry operators have significant manufacturing capacities in neighbouring countries, such as Indonesia and Thailand, which could readily supply the Australian market. Reduced demand from the construction sector, caused by increasing economic uncertainty, poses the greatest risk for this subdivision. Cement and plaster product manufacturer Boral Ltd has withdrawn its 2020 financial year earnings guidance due to this uncertainty.

C21 Primary Metal and Metal Product Manufacturing: Low

This subdivision is expected to be minimally disrupted, with the impact of COVID-19 limited to reduced demand due to a slowdown in Asian manufacturing activity. Industries in this subdivision derive most production inputs domestically, and therefore have a lower risk of production disruption due to insufficient supply of inputs from overseas. This subdivision's output is used in a range of manufacturing applications. Depending on the severity of global supply chain disruption and demand contraction, demand for this subdivision's output could fall. For example, production of copper tubes, steel pipes, and steel could decline amid a recession in global manufacturing. Copper prices fell to a three year low in early March due to weaker demand. Similarly, demand and prices for nickel have also declined over March. Declines in the price of oil are expected to exert downward pressure on operating costs, assisting the viability of firms in this subdivision.

C22 Fabricated Metal Product Manufacturing: Moderate

This subdivision is expected to be moderately affected by COVID-19. This industry has a low reliance on inputs from importers, and is therefore well equipped to maintain production amid faltering economic activity outside Australia. In addition, industries in this subdivision typically face strong import competition from manufacturers in Asia. If COVID-19 were to curtail the output of Asian factories, some Australian producers may benefit from enhanced export opportunities as global markets seek out alternative suppliers. However, as the outbreak continues to affect the local economy, demand for the subdivision's products could fall. Furthermore, disruptions across the manufacturing sector due to COVID-19 would likely also lead to a slowdown in economic activity, hindering demand for fabricated metal products.

C23 Transport Equipment Manufacturing: Moderate

Transport equipment manufacturers are expected to be moderately affected by COVID-19. Manufacturers of transport equipment typically rely on a combination of both domestic and imported inputs for production. Supply chain disruptions in Asia are likely to hinder some manufacturers in this subsector, as supply of some production inputs becomes limited. In particular, specialised components may be difficult to source from alternative suppliers in the short term. Some manufacturers in this subdivision may benefit from weakened import competition, as foreign producers are hindered by quarantine measures. Demand for services have been affected by travel restrictions and other government measures limiting transport activity. When the impact of COVID-19 passes, some firms in this subdivision may seek to diversify their supply chains to multiple regions, in an effort to reduce exposure to future supply shocks.

C24 Machinery and Equipment Manufacturing: Moderate

This subdivision is expected to be disrupted by supply chain shocks, which are likely to have a moderate impact on revenue and profit. Many industries in this subdivision rely heavily on components manufactured in Asian economies. The closure of factories in China's Hubei province has already reduced the supply of electrical components, disrupting multiple supply chains in this subdivision. Should similar COVID-19 outbreaks occur in other Asian economies such as Vietnam, the supply disruption for manufacturers in this subdivision would be extensive and prolonged. Australian manufacturers in this subdivision would have a limited capacity to benefit from weakened import competition, as any outbreak that significantly reduced foreign manufacturing would almost certainly reduce local manufacturing activity as well. A reduction in the price of oil is expected to exert downward pressure on operating costs, assisting the viability of firms in this subdivision.

The COVID-19 outbreak is expected to have significant short-term and long-term effects on the Medical and Surgical Equipment Manufacturing industry. The industry heavily relies on imports, which account for nearly 80% of domestic demand. Global supply chain disruptions have occurred as many countries have scrambled for supplies, meaning that local manufacturers have had to step up their capabilities. Med-Con is the only Australian manufacturer of surgical face masks. The company has an annual production capacity of two million. They have now expanded their operations to produce 50 million masks over the next 12 months. Furthermore, ventilator manufacturer ResMed has announced plans to triple its production of ventilators.

C25 Furniture and Other Manufacturing: Moderate

This subdivision will likely be moderately disrupted by COVID-19. Most industries in this subdivision rely primarily on locally sourced inputs for production, reducing exposure associated with supply shocks in Asia. However, firms in this subdivision may be hindered by weakening consumer confidence, which could lead consumers to postpone large expenses, such as furniture, mattresses, or jewellery. Toy manufacturers will likely benefit from the outbreak, as families are stuck indoors for extended periods of time. Similarly, firms that manufacture sporting goods suitable for backyards, such as basketball hoops, may also benefit.

Electricity, Gas, Water and Waste Services

D26 Electricity Supply: Moderate

Falling thermal coal prices due to reduced demand from overseas manufacturers are expected to reduce the domestic electricity service price, contributing to a fall in revenue for electricity generators. This trend is expected to improve the competitiveness of the Fossil Fuel Electricity Generation industry, in comparison with alternative electricity generators, and slow Australia's transition towards renewable electricity. Declining purchase costs are expected to improve the profitability of the Fossil Fuel Electricity Generation industry. However, declines in the electricity service price are expected to contribute to declining revenue and profitability in Australia's other electricity generation industries. Chinese manufacturers feature heavily in the supply chain of many companies operating in the Wind and Other Electricity Generation industry and Solar Electricity Generation industry. Disruptions to these supply chains caused by the COVID-19 outbreak have the potential to reduce the ability of these companies to carry out planned capacity upgrades, or source parts necessary for maintenance.

D27 Gas Supply: Low

Chinese demand for natural gas is expected to decline as a result of the slowdown of the Chinese manufacturing sector, as a result of the COVID-19 virus outbreak. This trend is expected to result in an oversupply on the domestic market, contributing to a sharp drop in natural gas prices. The decline in natural gas prices is expected to result in lower revenue for industry operators. However, this trend is expected to be largely outweighed by the anticipated decline in industry purchase costs.

D28 Water Supply, Sewerage and Drainage Services: Low

The Water Supply, Sewerage and Drainage Services subdivision is expected to be mostly unaffected by the outbreak of the COVID-19 virus. The subdivision provides essential services that are not heavily exposed to trends in the overall economy. However, the expected decline in business confidence as a result of the virus outbreak might lead to a decline in private capital expenditure, and upgrade and expansion projects being cancelled.

D29 Waste Collection, Treatment and Disposal Services: Moderate

The outbreak of the COVID-19 virus is expected to result in a large increase in the amount of hazardous waste generated. Hospitals and other medical facilities are expected to require an increase in hazardous waste collection services, to properly dispose of contaminated personal protective equipment, and items such as bed linen. Companies operating in this subdivision are expected to benefit from higher revenue growth, despite facing increased regulation during the outbreak of the virus.

Construction

E30 Building Construction: Low

The spread of COVID-19 is anticipated to have a light effect on building construction industries. International trade is not applicable to building construction industries, as they exclusively operate domestically. However, building construction is highly labour-intensive, and relies heavily on contract labourers. Building construction firms also require equipment and materials. Firms may experience delays in completing projects if these supply chains or the labour supply is disrupted. Lower interest rates are anticipated to stimulate demand for some building construction. However, reduced foreign investment in projects may negatively affect the subdivision. Declining oil prices may lower operating costs for some firms, assisting business viability.

E31 Heavy and Civil Engineering Construction: Low

The COVID-19 outbreak is anticipated to have a light effect on heavy and civil engineering industries. Firms that primarily service resource developments are exposed to declining mining activity due to reduced demand from China for minerals such as iron. Many heavy and civil engineering projects depend on public funding. Consequently, the government refocusing public funds to prevent COVID-19 spreading further may negatively affect the industry. Heavy and civil engineering construction industries are labour-intensive and often use contract labourers. These firms also require equipment and machinery. Disruptions in the equipment supply chain or reduction in labour supply would negatively affect the subdivision. However, this may be partially offset by a decline in oil prices, which would reduce operating costs.

E32 Construction Services: Low

The spread of COVID-19 is anticipated to have a light effect on construction services. These services are not exposed to international trade, and focus entirely on the domestic market. Operators in these industries require materials such as nails, screws, adhesives, concrete, steel and timber, and equipment. In addition, these industries are highly labour-intensive. Any disruption in materials or labour supply has the potential to negatively affect the subdivision.

Wholesale Trade

F33 Basic Material Wholesaling: High

The COVID-19 outbreak is anticipated to have a high impact on the Basic Material Wholesaling subdivision. Foreign metal and mineral buyers represent 51.2% of the market for the Metal and Mineral Wholesaling industry, with a large proportion of these buyers being in China. Reduced construction activity limits demand for minerals such as iron, which is anticipated to have a significant negative effect on this industry.

Wholesalers of wool and cereal grains also rely heavily on demand from export markets. Wool wholesalers often act as trading agents, facilitating international trade. China receives approximately two-thirds of Australia's wool exports, which are then used in textile manufacturing. Declining manufacturing activity in China is anticipated to have a strong negative effect on the Wool Wholesaling industry.

Export markets account for approximately 56% of revenue for the Cereal Grain Wholesaling industry, with many wholesalers acting as exporters. However, adverse rainfall conditions over the past five years and the 2019-20 bushfire season have negatively affected the upstream Grain Growing industry, reducing exports over the period. China accounts for approximately 49% of Australian grain exports. Consequently, shipping and logistics delays could negatively affect demand for grain exports. On the other hand, domestic demand for essential food items has increased as consumers have stockpiled household necessities. This behaviour has driven demand for upstream production, and manufacturers of items such as pasta obtain inputs from grain wholesalers.

F34 Machinery and Equipment Wholesaling: Moderate

The COVID-19 outbreak is anticipated to moderately affect the Machinery and Equipment Wholesaling subdivision. Machinery and equipment wholesaling firms provide the mining sector with construction equipment, and mining and industrial machinery. Consequently, wholesalers of these products are exposed to declines in demand from mining industries that rely heavily on exports to China. Declining construction activity in China has reduced demand for minerals such as iron, which will likely have a negative effect on the Machinery and Equipment Wholesaling subdivision.

However, the containment effort is anticipated to boost demand for the Medical and Scientific Wholesaling industry. Scientific researchers studying the virus, and hospitals testing and treating patients require specific equipment and instruments. Consequently, rising requirements for specialised tools are anticipated to boost demand for this industry.

F35 Motor Vehicle and Motor Vehicle Parts Wholesaling: Moderate

The COVID-19 outbreak is anticipated to have a moderate effect on the Motor Vehicle and Motor Vehicle Parts Wholesaling subdivision. Passenger vehicles have not been manufactured in Australia since 2017. As a result, wholesalers purchase all passenger vehicles from overseas. Disruptions to manufacturing activities in major vehicle-producing countries such as Japan, South Korea, Germany and the United States would significantly inhibit wholesalers' ability to source vehicles.

Motor Vehicle New Parts Wholesaling firms source a significant proportion of products from the United States, China, Japan and Thailand. Reduced manufacturing activity and logistic delays in China are anticipated to negatively affect wholesalers' ability to source parts. A reduction in oil prices will likely lower petrol costs, which may encourage consumers and businesses to purchase motor vehicles.

F36 Grocery, Liquor and Tobacco Product Wholesaling: High

The COVID-19 outbreak is anticipated to highly affect the Grocery, Liquor and Tobacco Product Wholesaling subdivision. Consumers have been increasingly stocking up on non-perishable items including pasta, canned foods and other pre-packaged items. This behaviour has significantly increased demand for operators in the Soft Drink and Pre-Packaged Food Wholesaling industry. Major supermarkets Coles and Woolworths have reported empty shelves due to consumers stockpiling goods. Supermarkets are anticipated to increasingly rely on wholesalers to source highly sought-after products. The outbreak is anticipated to have less of an effect on wholesalers of perishable products that consumers do not view as essential for stockpiling, such as fresh produce, meat and seafood, and dairy products.

F37 Other Goods Wholesaling: High

The COVID-19 outbreak is anticipated to highly affect the Other Goods Wholesaling subdivision. Wholesalers of textile products, clothing, footwear, paper products, furniture and floor coverings, jewellery and watches, kitchen and diningware, and recreational goods source many of their products from overseas markets. In particular, of all Australian manufacturing industries, the Knitted Product Manufacturing industry exhibits the highest exposure to imports from China. Consequently, logistical delays and reduced manufacturing activity in China are anticipated to strongly inhibit wholesalers' ability to source low-cost goods.

Demand for Pharmaceuticals Wholesaling industry firms is anticipated to rise as consumers and healthcare providers require medicines. Healthcare providers are anticipated to increasingly demand medicines such as antivirals to treat patients, while consumers are anticipated to stock up on routine pharmaceuticals (such as cold medicine and ibuprofen) and preventative pharmaceuticals (such as vitamin C supplements).

Supermarkets have reported difficulties in maintaining adequate supplies of necessary items, such as toilet paper and hand sanitiser, due to consumer stockpiling activity. This trend has the potential to increase demand for the Paper Product Wholesaling industry and the Cosmetics and Toiletry Wholesaling industry if it continues.

Retail Trade

G39 Motor Vehicle and Motor Vehicle Parts Retailing: Moderate

COVID-19 is expected to have a moderate effect on Australia's Motor Vehicle and Motor Vehicle Parts Retailing subdivision. In value terms, China, United States of America and Germany make up over 50% of imported motor vehicle parts in Australia. The temporary closure of many motor vehicle and motor vehicle parts manufacturing facilities in China, United States of America and Germany, is anticipated to disrupt supply lines and potentially raise the price of aftermarket components. Furthermore, declines in consumer sentiment associated with the COVID-19 outbreak suggest that some consumers may delay major purchases, including cars and motorcycles, causing subdivision demand to fall slightly.

G40 Fuel Retailing: Moderate

The Fuel Retailing industry is the sole industry in this subdivision. As falling manufacturing activity and motor vehicle travel decreases demand for oil from China, petrol prices are expected to decline moderately in Australia. China accounts for approximately 13% of global oil consumption and global oil prices are therefore heavily affected by Chinese demand. Furthermore, a decline in global tourism activity has reduced oil consumption by airlines, and global oil prices have declined significantly over the first three months of 2020. However, several oil-producing countries, including Russia and Saudi Arabia, have started negotiations to curtail oil production to counterbalance weakened demand. Lessened oil supply to global markets is expected to moderate the overall decline in oil prices.

Prices in the Fuel Retailing industry are expected to report similar trends to those of global oil prices. Although petrol prices are projected to decline in the short-term, the severity of price falls will likely be moderated by decreasing oil production. Overall, falling petrol prices are expected to reduce industry revenue but have little effect on profit. Although over 55% of refined petroleum sold in Australia is imported, the impact on supply chains is anticipated to be light.

G41 Food Retailing: Moderate

The Food Retailing subdivision will likely be moderately affected by COVID-19, but report a minimal overall change in revenue. Weakened demand from China is expected to encourage meat and produce exporters (at the manufacturing level, such as the Meat Processing industry) to divert stock to the domestic market. Consequently, supply will likely increase for fresh food retailing industries. Although particular products may have limited availability, Australia produces approximately three times more food than it consumes. No immediate or ongoing food shortages are therefore anticipated. Australians stockpiling canned goods in anticipation of a severe pandemic is anticipated to boost short-term demand. Due to fears of shortages, retailers have also reported increased demand for products such as toilet paper, slightly boosting expenditure at supermarkets. Overall, fresh food prices are likely to decline modestly, unless retailers do not pass on lower costs to consumers.

G42 Other Store-Based Retailing: High

The Other Store-Based Retailing subdivision is expected to be highly affected by the COVID-19 outbreak. The Federal Government restricted all non-essential services and activities from 23 March 2020. As a result, many non-essential retail stores have closed due to these restrictions. Although some stores will still be able to operate though online retail channels, many smaller retail stores without online retail capabilities will be forced to temporarily cease trading. Employee numbers and wage costs are expected to fall, as many non-essential retailers lay off staff as stores are unable to open for a prolonged period.

However, the Federal Government has provided assistance to retail businesses affected by COVID-19. On 22 March 2020, the second stage of the stimulus package was announced, providing up to $100,000 to small and medium sized enterprises (SMEs) and not-for-profits that employ people with an annual wage of $20,000 or more. This factor is expected to boost cash flow for SME retailers, allowing businesses to pay fixed operating costs and retain staff during the downturn period. Additionally, on 30 March 2020, the Federal Government implemented the JobKeeper Payment Scheme, which aims to support staff retention for businesses affected by COVID-19. This scheme will provide fortnightly payments to significantly affected businesses of up to $1,500 per eligible employee for a maximum of six months. This payment is expected partially offset the drop in employee numbers from affected businesses in the Other Store-Based Retailing subdivision, as operators can keep paying employees while stores are temporarily closed.

Supply disruptions related to COVID-19 will likely have a moderate effect on the Other Store-Based Retailing subdivision, as only a small proportion of subdivision products are produced domestically. Supply from China is expected to be significantly disrupted in the short term for highly-exposed industries. For example, a significant proportion of electronics products sold in Australia are imported from China. Supply will therefore likely be affected for industries such as the Computer and Software Retailing industry, the Domestic Appliance Retailing industry and the Electrical and Lighting Stores industry. Other industries are generally more diversified regarding the origin of imported products. Despite supply disruptions, declining consumer sentiment following the COVID-19 outbreak is expected to most acutely affect sales of subdivision products. Declines in demand are anticipated to intensify the retail sector’s already bleak outlook for the remainder of 2019-20.

Accommodation and Food Services

H44 Accommodation: High

The Accommodation subdivision, as part of the wider tourism sector, has been significantly affected by the COVID-19 outbreak. The Federal Government’s ban on overseas visitors entering Australia from 20 March has removed a key market for industry operators. Only Australian citizens, residents and their immediate family members may enter Australia, and all arrivals are required to enter quarantine for 14 days following their arrival. This trend is expected to significantly reduce demand for industry services.

Demand from domestic tourism is also expected to decline sharply due to travel restrictions imposed on Australians. All states except New South Wales and Victoria have closed their borders to interstate travellers. Additionally, state governments across Australia have announced restrictions on all non-essential activities, such as visiting hotels. These restrictions are expected to result in a sharp decline in demand from domestic tourists, driving a further drop in industry revenue.

H45 Food and Beverage Services: High

The COVID-19 outbreak is expected to significantly affect operators in the Food and Beverage Services subdivision. On 23 March, the Federal Government announced the closure of restaurants, except for those offering takeaway services. This trend is expected to reduce demand for subdivision operators. However, demand for takeaway services is expected to rise, limiting declines in industry revenue. Falling demand and growth in takeaway services are expected to place subdivision profit margins under increasing pressure, particularly as takeaway service providers such as UberEats charge large commissions to restaurants for their services. Additionally, demand for Chinese restaurants based in Australia appears to have fallen, with some restaurants closing down their operations.

Transport, Postal and Warehousing

I46 Road Transport: High

Most non-bulk freight in Australia is transported by road. Operators in the Road Freight Transport industry generate significant revenue transporting products to and from export markets. China is Australia's largest trading partner, with international trade between the two countries worth an estimated $200 billion annually. A slowdown in international trade between China and Australia will have a significant impact on the Road Freight Transport industry. Other industries in the subdivision are less exposed to issues associated with the spread of the COVID-19 virus. Increased travel restrictions have caused demand to fall for road passenger transport operators.

I47 Rail Transport: High

Rail freight transport dominates the movement of Australia's non-bulk freight. Australia's largest export to China is iron ore, which represents a significant market in the Rail Freight Transport industry. The decline in the international trade caused by the COVID-19 outbreak is expected to result in a sharp fall in Australian commodity exports. The Rail Passenger Transport industry is expected to face a slowdown in demand from passengers, due to increased travel restrictions.

I48 Water Transport: High

All products imported and exported into the country are transported by land or sea. Transporting freight by sea is significantly more efficient than by air, ensuring most of Australia's international trade is carried by the Water Freight Transport industry. A slowdown in international trade between China and Australia is expected to reduce demand for the Water Freight Transport industry. The Water Passenger Transport industry is expected to struggle with declining passenger numbers as a result of the COVID-19 outbreak. Negative media coverage of passengers stranded on cruise ships and the speed at which the virus spread on these vessels is expected to significantly reduce demand for cruise travel.

I49 Air and Space Transport: High

The COVID-19 outbreak is expected to substantially reduce demand for air transport. On 23 March, the Federal Government implemented a ban on all non-Australian citizens or residents from entering the country. Additionally, all arrivals into Australia must enter forced quarantine for a period of two weeks. These restrictions have substantially reduced demand for air travel and led to Australia's airlines grounding most of their fleet. In late March, many Australian state governments closed their borders to interstate tourists, further reducing demand for air travel.

I50 Other Transport: High

The COVID-19 outbreak and associated travel bans are expected to reduce the number of tourists visiting Australia. The Scenic and Sightseeing Transport industry relies heavily on tourists for revenue. State and federal travel restrictions are expected to substantially reduce tourist numbers in 2020. Declines in tourism are expected to negatively affect industry revenue. Additionally, declines in oil and natural gas prices will have a negative effect on the Pipeline Transport industry.

I51 Postal and Courier Pick-up and Delivery Services: Moderate

Concerns regarding the COVID-19 outbreak are expected to have a negative impact on consumer sentiment and business confidence. A drop in consumer sentiment is expected to discourage Australian consumers from purchasing products online, reducing demand for subdivision services. Additionally, the slowdown in the Chinese manufacturing sector is expected to disrupt a number of supply chains across the Australian economy. Operators in the subdivision form a key component of many of these supply chains, and are exposed to slowdowns associated with the COVID-19 outbreak.

I52 Transport Support Services: High

The Transport Support Services subdivision provides several services to the wider transport sector. A slowdown in international trade is expected to reduce demand for freight transport services and consequently subdivision operators. The Transport Support Services subdivision is expected to decline in line with the forecast fall in international trade between Australian and its trading partners.

I53 Warehousing and Storage Services: Moderate

Slowing international trade between Australia and its trading partners is expected to disrupt supply chains across the economy. The Warehousing and Storage Services subdivision generates significant revenue providing storage services for products waiting for export, and imports awaiting customs clearance. Declines in international trade are expected to reduce the volume of imports and exports requiring storage. However, consumer sentiment is expected to fall, discouraging consumers from making discretionary purchases. Consequently, retailers will likely struggle to clear stock, boosting demand for subdivision services.

Information Media and Telecommunications

J54 Publishing (Except Internet and Music Publishing): Moderate

The COVID-19 outbreak is expected to have mixed effects on the Publishing subdivision. Demand for newspaper, magazine and book publishing is anticipated to decline as many consumers limit their spending on discretionary goods. However, book publishers may benefit from an initial spike in demand, as some consumers stock up on books in anticipation of potentially long-term isolation periods. Newspaper publishers have reported significant declines in advertising revenue due to the COVID-19 outbreak, with News Corp Australia announcing that it would close 60 regional newspapers as a result. Several other regional newspapers have also announced their closure due to similar declines in advertising revenue.

The Software Publishing industry is anticipated to be largely unaffected by COVID-19. Software developers can work remotely, removing the risk of spread from office collaboration. The largest industry risk comes from software purchases by downstream industries. Software has become a vital part of many industries across the economy, supporting demand for industry products. While orders for some software may decline, orders are expected to surge for software that can help businesses overcome disruption caused by the COVID-19 outbreak, such as software that enables easier remote working operations, counteracting any potential declines in demand.

J55 Motion Picture and Sound Recording Activities: High

The Motion Picture and Sound Recording Activities subdivision is anticipated to be heavily affected by the COVID-19 outbreak. Film and video production and distribution activity is anticipated to be delayed as continued production creates a high risk of spreading COVID-19. Production delays will likely lead to weaker demand for post-production services over the next few months, particularly for movies.

The Cinemas industry is anticipated to be the most affected in the subdivision, as stage 3 restrictions have forced cinemas across Australia to close. Consumer demand for subscription video-on-demand services, such as Netflix and Stan, is expected to rise as social gathering restrictions mean that individuals spend more time at home. Furthermore, major studios are expected to rework their release schedules for major movie titles over the next few months, potentially dampening demand for cinemas when they are permitted to reopen.

J56 Broadcasting (Except Internet): Low

The Broadcasting subdivision is expected to be lightly affected by COVID-19. Advertising revenue is anticipated to decline as businesses re-evaluate demand from consumers and the need to advertise over this period. However, advertising for other products, particularly health-related products such as hand sanitiser, will likely to increase. Additionally, more viewers are expected to tune in to broadcasts over the next few months, as restrictions implemented to curb the spread of COVID-19 encourage individuals to stay indoors.

J57 Internet Publishing and Broadcasting: Low

The COVID-19 outbreak is expected to have a mixed effect on the Internet Publishing and Broadcasting industry. Some industry segments, such as online property listings, are anticipated to be moderately disrupted, as the Federal Government has temporarily banned in-person property auctions and public inspections. However, other segments of the industry, such as subscription video-on-demand services, are anticipated to benefit from stronger demand, as greater restrictions on movement lead consumers to seek more home entertainment options.

J58 Telecommunications Services: Low

Telecommunications services are anticipated to be largely unaffected by COVID-19. Telecommunications networks rely far more heavily on technology, rather than labour. The greatest potential risk is a shortage of labour for repairs, which could render elements of a network inoperable. However, even in an extreme scenario, disruptions to telecommunication networks remain unlikely.

J59 Internet Service Providers, Web Search Portals and Data Processing Services: Moderate

Operators in the Internet Service Providers, Web Search Portals and Data Processing Services subdivision are anticipated to face mixed effects from COVID-19. Internet service providers and data processing services are expected to benefit from more individuals working from home, boosting demand for broadband and cloud storage services. However, the Data Storage Services industry may face challenges from COVID-19 if demand begins to rapidly increase, as the resources used to construct and operate data centres are largely sourced from overseas.

Internet service providers may also be negatively affected by the COVID-19 outbreak, as the National Broadband Network’s (NBN) pricing model for data charges based on total bandwidth used. A potential spike in the number of individuals working remotely could place additional strain on service providers’ networks, forcing them to pay overage charges to NBN and resulting in a net deficit despite greater demand.

J60 Library and Other Information Services: Moderate

The COVID-19 outbreak is expected to have mixed effects on the Library and Other Information Services subdivision. Although demand for libraries and public archives is anticipated to fall as restrictions on social gatherings cause these venues to close, this subdivision is largely publicly funded. Consequently, a short-term decline in demand is unlikely to have any long-term negative effects.

Financial and Insurance Services

K62 Finance: Moderate

While not directly affected in terms of trade and supply chain disruptions, the Finance subdivision is anticipated to be indirectly affected by movements in the financial markets and changes to the cash rate. The RBA's latest decision to make an emergency cash rate cut to 0.25% in March was largely due to the risk posed by the COVID-19 outbreak to both domestic and global economy growth. Several other central banks and governments abroad have also lowered interest rates and announced stimulus packages to protect their economies from the outbreak. These decisions to further ease monetary policy are anticipated to lower interest revenue earned by banks and other lenders as they pass on the rate cuts to borrowers. Furthermore, the profitability and net interest margins of lenders are likely to be squeezed.

Volatility in financial markets has also affected operators in the Financial Asset Investing industry. Sharemarkets both locally and abroad reached record highs before posting some of the largest declines in the last week of February since the global financial crisis. Many local companies releasing half year results downgraded their forecasts and warned of the impact to their earnings, especially those with high exposure to Chinese demand. Investors have rushed towards safer assets like bonds and this trend is expected to weigh on the returns of operators over the current year.

K63 Insurance and Superannuation Funds: Low

Insurers are likely to face more enquiries regarding trip cancellations and business interruptions, although claims paid out to COVID-19 related events are unlikely to be significant. Many insurers classed the COVID-19 outbreak as a known event at the end of January, so insurance taken up after those dates are unlikely to cover COVID-19 related claims. Furthermore, exclusions apply to many standard travel insurance policies where the insurer does not provide cover for pandemic, epidemic and virus outbreaks. Similarly, business interruption policies may not provide cover for claims related to COVID-19. These claims are often made for property damage and physical loss with exclusions for diseases and viruses. The outbreak is not expected to have a substantial impact on life insurers and reinsurers unless the situation escalates significantly. However, investment returns are a key component and driver of revenue for insurers. Insurers will likely see declines in investment returns over the current year due to fluctuations in the equity markets.

Despite the significant volatility in financial markets, the Superannuation industry is likely to be relatively unaffected compared with other financial and insurance services operators. The focus on long-term performance by superannuation funds given the objective of retirement planning is anticipated to help operators withstand the fluctuations in sharemarkets. However, superannuation funds are likely to take a hit to investment returns over the current year.

K64 Auxiliary Finance and Insurance Services: Low

The Auxiliary Finance and Insurance Services subdivision is anticipated to be mostly unaffected by the COVID-19 outbreak. Operators in this subdivision are not expected to be directly affected by the virus, and demand and activity for auxiliary finance and insurance services will likely remain otherwise unchanged. Current forecasts will likely remain as the industry is largely serviced-based and does not face major supply chain disruptions.

Rental, Hiring and Real Estate Services

L66 Rental and Hiring Services (Except Real Estate): High

COVID-19 is projected to significantly affect the Passenger Car Rental and Hiring industry. Inbound international travellers are a significant market for car hire companies. Sharp declines in global tourism and travel restrictions are expected to cause demand for automobile rental services to fall significantly. Other industries in the subdivision are forecast to be affected by the closure of non-essential services and a general slowdown in economic activity.

L67 Property Operators and Real Estate Services: High

Australia’s property management subdivision is expected to be heavily affected by COVID-19. Social distancing measures and the general slowdown in economic activity have weighed on revenue for many retail and commercial businesses, making it difficult for some firms to meet their rental obligations. Several major retailers have signalled their intention to not pay rent on premises for the duration of store closures. A prolonged slowdown in retail activity may threaten the viability of some retailers, affecting retail property operators. Both commercial and residential real estate transaction volumes are anticipated to fall as a result of COVID-19.

Professional, Scientific and Technical Services

M69 Professional, Scientific and Technical Services: Low

Most industries in the Professional, Scientific and Technical Services subdivision will likely only be lightly affected by the COVID-19 outbreak. Companies operating in the subdivision have imposed travel restrictions to mitigate the risk of employees being exposed to COVID-19. Travel restrictions are expected to decrease business activity from the subdivision’s international clients and customers. Operators in the Architectural Services industry and the Engineering Consulting industry are expected to contend with reduced foreign investment, particularly from Chinese investors, as a result of the COVID-19. This may limit future expansion of larger projects that require foreign investment.

The Management Consulting industry and the Scientific Research Services industry are expected to be moderately affected by COVID-19. Businesses exposed to international markets, particularly in their supply chains, are expected to need advice on mitigating costs associated with COVID-19, boosting demand for management consulting firms. In particular, businesses with global supply-chains are likely to demand management consulting services. Demand for scientific research services is also expected to increase, particularly in medical and biological research sectors, as firms try to create a vaccine for COVID-19. In addition, both public and private funding on scientific research relating to COVID-19 is expected to increase. In February 2020, the Morrison Government fast tracked $2.0 million in funding for developing a vaccine for COVID-19.

M70 Computer System Design Services: Low

The COVID-19 outbreak is expected to only lightly affect the Computer System Design Services subdivision. The subdivision is services based, with IT consultants being able to work remotely if the COVID-19 outbreak worsens. However, companies that focus on computer design and hardware could be moderately affected. The majority of computer parts, components and hardware are manufactured in China, which could affect supply chains for computer design services. In addition, many of the Chinese manufacturers have shut down production due to COVID-19, constraining the supply of computer parts and equipment in Australia. Demand for future software development projects is forecast to decline slightly due to the uncertainty of downstream computer product supply constraints. In February 2020, Apple Inc. announced temporary supply constraints on iPhones due to its manufacturing facilities in China shutting down. iPhones are used by many Computer System Design Services subdivision's end consumers, with a shortage potentially limiting short-term demand for application and software development.

Administrative and Support Services

N72 Administrative Services: Low

Although most of the industries in the Administrative Services subdivision are anticipated to be only lightly affected by the COVID-19 outbreak, the Travel Agency and Tour Arrangement Services industry is expected to be highly affected. Travel agencies are expected to be significantly affected as the Federal Government has closed the borders to international arrivals and banned Australians from international travel. In addition, the government has discouraged all non-essential domestic travel, with all states except New South Wales and Victoria closing their borders to non-residents. In February 2019, Flight Centre Travel Group Ltd stated that COVID-19 was affecting travel patterns, particularly to Asian countries, making it difficult for the company to achieve its 2020 revenue target. As a result, most travel agencies are anticipated to record substantial declines in revenue and profit over the second half of 2019-20. Travel restrictions already enforced by many businesses have limited corporate travel bookings, further reducing revenue and margins for travel agencies.

Demand for tour arrangement services is expected to decline significantly due to COVID-19, as operators heavily depend on international tourists. Bans on international travel to Australia will likely cause many tour arrangement operators to suspend or end operations. In addition, international tourists are anticipated to delay future travel due to uncertainty regarding when global restrictions on international travel will be lifted. As a result, a sharp fall in demand is anticipated to reduce profitability and revenue for tour arrangement service operators in 2019-20.

N73 Building Cleaning, Pest Control and Other Support Services: Low

The COVID-19 outbreak is expected to moderately affect the Building Cleaning, Pest Control and Other Support Services subdivision. Demand for building cleaning, pest control, gardening and packaging services is anticipated to be moderately affected by COVID-19, as businesses and consumers reduce their spending and postpone scheduled services. Subdivision operators are expected to be minimally exposed to supply chain disruptions. However, players in the Building Cleaning Services industry could potentially face supply constraints relating to hand-sanitiser products that are used in building toilet facilities. In February 2020, retailers Coles, Woolworths and Chemist Warehouse reported a sudden increase in demand for hand sanitiser following heightened news coverage of the COVID-19 outbreak in

China. This short-term supply constraint is expected to reduce the availability of hand sanitiser and other related products, increasing operating costs for building cleaning services companies. However, demand for building cleaning services is anticipated to fall, as companies increasingly adopt remote working models to combat the spread of COVID-19, reducing the need for frequent cleaning.

Public Administration and Safety

O76 Defence: Low

The impact of COVID-19 on the Australian Defence industry has so far been minor. However, in the event of a significant disruption to the economy as a result of the disease, the effect on the Defence industry would be substantial. Australian Defence Force resources could be required to assist in quarantine measures, to transport medical supplies, and to assist police and firefighting efforts. Military operations could also be directly affected if COVID-19 spread through defence personnel. Australian participation in multi-lateral military exercises may be reduced in an effort to contain the spread of COVID-19.

O77 Public Order, Safety and Regulatory Services: Low

This subdivision has so far been minimally disrupted by COVID-19. However, certain industries in this sector may be at a higher risk of disruption. The Correctional and Detention Services industry may be at a high risk of COVID-19 exposure, given the close proximity of inmates within jails. Police and firefighting services may be called upon to assist in quarantine maintenance, or to deliver first aid in alternative health emergencies if health resources are pre-occupied with COVID-19.

Education and Training

P80 Preschool and School Education: Moderate

Preschool and school education establishments will likely be moderately affected by the COVID-19 outbreak. However, fears regarding the spread of the virus have encouraged many parents to keep their children at home, reducing the demand for preschool services. Despite this factor, the Federal Government has announced free childcare for children of all essential workers.

While international students account for smaller shares of the student population in this subdivision compared with higher education, bans on travellers arriving from any part of mainland China or Iran are making it difficult for students from these countries to attend Australian schools. However, the Australian Government announced on 22 February 2020 that it has offered limited exemptions from the travel ban for Year 11 and 12 students that remain in China. These students must hold a current visa, have not travelled through the Hubei Province, are not currently unwell and must self-isolate at home for 14 days before attending school. In addition to restricting Chinese students from attending Australian schools, the outbreak of COVID-19 has also put many establishments on alert. Most schools have cancelled international trips to minimise the chance that students will contract the virus. In comparison, the Italian Government shut down all schools in the country for two weeks in early March 2020. While COVID-19 has not spread widely in Australia compared with Italy, domestic schools may also be forced to close if the outbreak continues.

Domestic schools are anticipated to reopen after term break. However, the reopening of schools differs in each state. While most schools will likely reopen, schools in some states and territories, such as the

Australian Capital Territory, are transitioning to online learning from Term 2 onwards. The High School Certificate (HSC) exam is anticipated to continue, with university enrolment for semester 2 2020 and semester 1 2021 to remain in place. Most high schools are moving courses online to facilitate students undertaking the HSC exam.

P81 Tertiary Education: High

The Tertiary Education subdivision has been highly affected by the COVID-19 outbreak. On 20 March 2020, the Federal Government put a travel ban on all non-citizens and non-residents. Non-residents with student visas who are not in Australia will be unable to enter the country until the travel ban has been lifted.

Previously, the government placed travel bans on visitors from mainland China until they spent 14 days outside of China in another location. This ban put pressure on Australia’s higher education sector as the 2020 academic year started. When the ban was initially implemented, almost 100,000 international students were restricted from entering the country. China is a key source of international students and revenue for domestic universities. From the estimated 950,000 international student enrolments in 2019, over one-quarter of students came from China. As international students account for 24.8% of the $34.0 billion in revenue for the University and Other Higher Education industry, the downturn in Chinese student numbers will significantly constrain the finances of several domestic universities.

Some international students that are currently in Australia are facing financial difficulties as many temporarily lost employment due to the COVID-19 outbreak. While the Federal Government has indicated assistance will not be provided to international students, some universities are working on ways to support students facing hardship during this period. As international students are a key source of income for many domestic universities, many have made arrangements to allow students to study remotely. As a result, most domestic universities have quickly ramped up their online learning capabilities to reduce pressure on Chinese students still in mainland China.

P82 Adult, Community and Other Education: Low

COVID-19 is anticipated to have a modest effect on the Adult, Community and Other Education subdivision. These establishments primarily service the domestic market and do not have large numbers of international students. However, providers of English language intensive courses for overseas students have faced lower demand from Chinese students due to the travel ban.

Health Care and Social Assistance

Q84 Hospitals: Moderate

The Hospitals subdivision is expected to be moderately affected at this stage by COVID-19. The largest challenges facing the Hospitals subdivision in this early stage of COVID-19 in Australia are potential supply shortages, particularly for basic medical supplies such as surgical masks and hand sanitiser. The mass buying of these goods by the general public, combined with disruption in the supply chain of these goods from China over the past three months, has resulted in a run on inventory in many stores and warehouses. Hospitals have delayed elective surgeries and prioritised COVID-19 patients, particularly those experiencing severe symptoms, in an effort to control the outbreak and lower the risk for all patients.

The Federal Government has assisted this subdivision during this initial outbreak period in an attempt to provide enough support and infrastructure if cases begin to significantly rise. On 11 March 2020, the Federal Government announced a $2.4 billion health package, which is expected to support primary health services, including hospitals. This funding will allow hospitals to increase internal capacities for the expected increase in demand for industry services. On 31 March 2020, the Federal Government also announced a partnership with the private health sector to secure 30,000 hospital beds and 105,000 staff to help combat the COVID-19 outbreak.

Q85 Medical and Other Healthcare Services: Moderate

The Medical and Other Healthcare Services subdivision is expected to face a number of challenges from COVID-19. A shortage of basic medical supplies will likely disrupt the General Practice Medical Services industry, as GPs will struggle to supply basic medical services without sufficient protection for both themselves and patients. Other industries in the subdivision are also expected to face challenges related to COVID-19, as many patients will likely delay unnecessary medical appointments. This subdivision also includes allied and secondary healthcare services, such as physiotherapists, which are not being supported by the $2.4 billion health package. Due to expected slow demand, rising medical equipment costs and minimal government support, this subdivision's profit margins are expected to fall in the current year.

Q86 Residential Care Services: High

The Residential Care Services subdivision is expected to face heavy disruption related to COVID-19. Aged care residential facilities are particularly vulnerable to potential COVID-19 outbreaks, and staff will be expected to respond accordingly to minimise risk for themselves and residents. Shortages of preventative medical supplies, such as face masks and hand sanitiser, would negatively affect these facilities, as preventative measures are more difficult to implement without access to these basic supplies. On 11 March 2020, the Federal Government announced a health package valued at $2.4 billion, which is expected to provide support to primary health services, including aged care facilities.

Q87 Social Assistance Services: Moderate

The Social Assistance Services subdivision is expected to be moderately disrupted by the effects of COVID-19. The Child Care Services industry may face challenges, as potential outbreaks may require facilities to temporarily close. However, these facilities may instead face a surge in demand if schools are shut in response to COVID-19, without a corresponding response from business. Demand for personal welfare services may also rise, as workers, particularly self-employed or contract workers, may accrue debt during mandated isolation periods. On 6 April 2020, the Federal Government implemented the Early Childhood Education and Care Relief Package. This package aims to support families and the Child Care Services industry. Until the end of 2019-20, the Federal Government will provide weekly payments directly to early childhood education and care services instead of the Child Care Subsidy. This relief package is expected to help retain employees and keep early childhood operators open during this period. Furthermore, families will not be charged fees for early childhood education services during this period. This package is expected to support growth in demand and help retain staff despite the current challenging operating conditions.

Arts and Recreation Services

R89 Heritage Activities: Moderate

COVID-19 outbreak is anticipated to have a moderate effect on the Heritage Activities subdivision. The subdivision is anticipated to record lower visitor numbers to locations due to reduced travel both domestically and abroad. Local visitors make up the main markets for most industries in the subdivision. However, public gatherings are currently prohibited. This subdivision tends to depend on government funding and is therefore less vulnerable to revenue declines compared with subdivisions that depend heavily on consumer spending.

R90 Creative and Performing Arts Activities: Moderate

The COVID-19 outbreak is expected to affect operators in the Creative and Performing Arts Activities subdivision. Subdivision operators are anticipated to face more cancellations or rescheduling of performance and concert dates, especially from international artists and acts, should the outbreak escalate. The subdivision also sources a proportion of revenue from international travellers, which may be affected by travel restrictions, but this share is anticipated to be small. Possible cancellations and postponements are expected to constrain demand for the subdivision and could mean lost revenue and significant costs for operators.

R91 Sports and Recreation Activities: High

The majority of the Sports and Recreation Activities subdivision is expected to be significantly affected by the COVID-19 outbreak. The Sports and Recreation Facilities Operation and the Sports Administrative Services industries are expected to contend with mandatory cancellations of all public events.

R92 Gambling Activities: High

Certain segments of the Gambling Activities subdivision are expected to be heavily affected. The Casinos industry is likely to face significant revenue declines, as casinos are required to close due to social distancing requirements. The major players in the industry have already recorded declines and faced challenging conditions in its VIP programs for the first half of 2019-20, although Star Entertainment Group recorded an increase in VIP turnover for the period. Both domestic and international visitation is anticipated to decline over the remainder of 2019-20, due to the potential for further travel restrictions. The remainder of the subdivision is unlikely to be affected as services are provided domestically, with a large proportion of services delivered through digital channels.

Personal Services

S94 Repair and Maintenance: Low

Operators in the repair and maintenance subdivision service the domestic market, so demand is not expected to be directly affected by COVID-19. In fact, the uncertainty surrounding the virus and its affect is likely to deter businesses investing in new capital. Consequently, demand for services from industries such as the Heavy Machinery Repair and Maintenance industry and the Motor Vehicle Engine and Parts Repair and Maintenance industry may increase.

A negative impact of the COVID-19 outbreak on the subdivision is likely to be a shortage of machine parts and tools used by operators, as the subdivision relies on imports from China. On a value basis, 31.8% of power automation and other electrical equipment imports are sourced from China.

Furthermore, 30.1% of imported machine tools and parts originate from China. Parts and tools shortages could pose a problem if factories remain closed or cannot operate at full capacity.

S95 Personal and Other Services: Low

The Personal and Other Services subdivision is expected to be largely unaffected by COVID-19. Industries in the subdivision are service based and domestically oriented. Therefore, they do not rely on China for inputs to the same extent as industries in other subdivisions, which would minimise supply-chain interruptions. However, one of the first confirmed cases of infection in Australia was from a beautician in Queensland. Due to the close-contact nature of these services, this may reduce demand.

On 23 March 2020, the Federal Government announced the temporary shutdown of non-essential activities and business. This is expected to affect some industries in this subdivision, such as the Hairdressing and Beauty Services industry. This temporary shutdown and restrictions on business operations are expected to constrain revenue. As a result, non-essential businesses affected by these regulations are expected to reduce employee number to minimise operating costs. However, the Federal Government has provided some relief for business operators in this subdivision that have been significantly affected by COVID-19. On 22 March 2020, the Federal Government provided a stimulus package to SMEs and not-for-profit businesses. The package is aimed at providing additional cash flows to affected businesses so that they can pay fixed operating costs and retain staff. Businesses can receive up to $100,000 in government support. Additionally, on 30 March 2020, the Federal Government implemented the JobKeeper Payment Scheme, in an effort to help businesses, such as hairdressers, retain staff while business operations have slowed or been temporarily closed.

New Zealand

Agriculture, Forestry and Fishing

A01 Agriculture: High

COVID-19 is expected to have a significant effect on agricultural producers in New Zealand. Operators in agriculture industries rely significantly on sales in export markets for their revenue. Furthermore, 30% of New Zealand's agricultural exports are bound for China. Both fruit and vegetable growers and livestock farmers, whose meat and dairy products are sold by downstream processors, are heavily exposed to Chinese trade. Exports of kiwifruit account for most revenue earned by kiwifruit and berry growers. The largest national export market for the Kiwifruit and Berry Growing industry is China, accounting for approximately 23% of total exports. While the first shipments of New Zealand kiwifruit are not due in China until April, logistical issues following port closures and other supply chain disruptions may still affect growers.

The COVID-19 outbreak is anticipated to have a greater effect on livestock farmers. New Zealand exports significant quantities of meat, particularly sheep meat, and dairy products to China. Lamb and mutton exports and export prices grew strongly during 2019 following an outbreak of African swine fever in China, which led to the destruction of over half of the country's pig herd. Despite a significant drop in demand from China, the value of sheep meat and beef exported from New Zealand remained largely unchanged in February 2020 compared with the previous year, as exports increased to North America, Japan, Taiwan and the United Kingdom. Dairy producers will also likely see a short-term drop in export sales due to port closures and a fall in global economic activity as the COVID-19 outbreak causes shutdowns in many countries. These industries may benefit in the long term, as demand for high-quality food and beverages is forecast to increase. New Zealand agricultural produce has a strong global reputation, which will continue to benefit local producers.

A03 Forestry and Logging: High

The Forestry and Logging industry is expected to be substantially affected by the COVID-19 outbreak. New Zealand is one of the world's largest forestry and logging product producers, with local businesses relying significantly on exports. Exports account for over half of industry revenue, with exports to China making up over 70% of total exports. Many logs and other timber products that have already been shipped to China have been held up in ports, and shipments from the key port of Gisborne have been cancelled until further notice. Industry production has also ceased temporarily, as industry businesses were deemed non-essential and were therefore closed for New Zealand's four-week shutdown. These closures will have a significant effect on industry revenue and profitability in the current year.

A04 Fishing and Aquaculture: High

The Fishing and Aquaculture subdivision heavily relies on exports. Almost 40% of combined revenue from fishing and aquaculture operators derives from exports, and approximately 64% of export revenue comes from China. As a result of the COVID-19 outbreak, China has imposed a ban on seafood imports. Consequently, exports of seafood fell by $40 million over the first two months of 2020, to $30 million, compared with the same time last year. An oversupply of rock lobsters, which account for over 90% of the value of exports to China, has reduced prices in the domestic market due to high supply. This trend will likely place further pressure on industry operators.

A05 Agricultural, Forestry and Fishing Support Services: Moderate

The Agricultural, Forestry and Fishing Support Services subdivision consists largely of shearing, cropping and other livestock support services. The COVID-19 outbreak is expected to have a moderate effect on these operators. With China accounting for approximately half of New Zealand's wool clip, shearing services are anticipated to be most affected by the outbreak, although demand has been slowing in recent years, as trends have shifted away from heavy wool products. The virus is less likely to affect cropping services, at least in the short term, as vegetable and grain crop exports to China are minimal, and as apple and kiwifruit growers remain optimistic about their export prospects. Cropping services will only likely be significantly affected if future planting is reduced, although this is unlikely at this stage.

Mining

B06 Coal Mining: High

Coal mining in New Zealand will likely be disrupted by a slowdown in economic activity caused by COVID-19. China was expected to account for 17.3% of New Zealand coal exports in 2019-20. This proportion is now expected to be significantly lower, following a downturn in Chinese manufacturing activity. As demand for coal falls, an oversupply of the commodity is expected to cause export prices to decline, reducing revenue for coal miners in New Zealand. China may seek to replace coal imports from New Zealand with its own domestically sourced coal, in an effort to stimulate their economy and recover from the downturn associated with COVID-19. Coal miners in New Zealand have a limited capacity to redirect exports to alternative markets, given the declining use of coal as many global economies shift towards clean renewable energy. In New Zealand, coal is primarily used to generate electricity. A slowdown in manufacturing in New Zealand due to the COVID-19 outbreak could result in lower electricity consumption, further dampening demand for coal. If oil prices remain low for an extended period, some coal users may switch to cheaper oil substitutes, leading to a further decline in demand.

B07 Oil and Gas Extraction: High

Oil and gas extraction firms in New Zealand are highly exposed to risks associated with the COVID-19 outbreak. In 2019-20, exports are expected to account for 20.4% of revenue in this subdivision. Almost all of these exports are shipped to Australia and Singapore, with only a small share shipped to South Korea. Producers in this subdivision remain exposed to the risk of a downturn in global prices for oil and gas. Lower demand for these commodities will likely exert downward pressure on prices throughout global markets. Pre-existing difficult conditions for firms in this subdivision make a downturn more likely, as New Zealand is rapidly transitioning towards a 100% renewable energy target by 2035. The availability of alternative electricity generation options in New Zealand, such as hydro and geothermal power, has limited growth for this subdivision.

A recent significant downturn in global oil prices is expected to place strain on oil producers in New Zealand, especially those with debt obligations. A major collapse in prices will likely lead to significantly lower revenue and profit margins, potentially leading to the exit of many firms. The outlook for oil prices beyond the COVID-19 epidemic depends on oil production volumes for foreign producers such as Saudi Arabia.

B08 Metal Ore Mining: High

This subdivision includes the Iron Ore Mining industry and the Gold Ore Mining industry. COVID-19 will likely have a significant effect on iron ore miners, as virtually all exports from the industry go to China and Japan. Exports were expected to account for 38.2% of revenue in the Iron Ore Mining industry in 2019-20, but this proportion is now anticipated to be lower. Manufacturing activity in China is expected to slow and depress demand for iron ore, contributing to a significant decline in revenue derived from exports. Reduced production from Chinese steel mills represents a major threat for iron ore producers in New Zealand.

In contrast, firms in the Gold Ore Mining industry will likely benefit from the effects of COVID-19. Increasing investor fears associated with the disease have increased demand for precious metals such as gold, silver and palladium. Growth in the price of gold will likely support New Zealand miners in 2019-20, although it is unclear how long gold prices will remain at elevated levels. The global price of gold reached $1,600 USD per ounce in March 2020, its highest level since March 2013. Declines in the price of oil price are expected to exert downward pressure on operating costs, assisting the viability of some metal ore miners.

B09 Non-Metallic Mineral Mining and Quarrying: Low

This subdivision includes the Gravel and Sand Quarrying industry. This industry has a low exposure to international trade, with exports only expected to account for 1.4% of revenue in 2019-20. Imports of gravel and sand are negligible. As this industry has a domestic focus, it only has indirect exposure to economic downturns overseas. Weakening economic activity in New Zealand may hinder this industry. Weakening business confidence in New Zealand in response to the COVID-19 outbreak may cause an associated downturn in manufacturing and construction activity. This downturn would likely lower demand for gravel and sand. Fiscal stimulus measures may assist this industry through funding for construction projects. Lower global oil prices are expected to exert downward pressure on operating costs, assisting the viability of non-metallic mineral miners.

B10 Exploration and Other Mining Support Services: Moderate

This subdivision includes the Mining Support Services industry in New Zealand. COVID-19 is expected to moderately disrupt this industry, but declining oil prices will have a more serious impact. The industry has struggled due to low prices and difficult operating conditions over the past five years. As a result, most firms in the industry have already pared back mining support services to only vital operations, which are unlikely to be cancelled even if commodity prices decline. Firms in this subdivision typically make decisions based on long time horizons, and are unlikely to significantly shift expenditure in response to transitory demand shocks.

A significant decline in the price of oil is expected to cause petroleum exploration activity to collapse, leading to many firms exiting the subdivision. The extent of this collapse depends on how long oil prices remain subdued, which depends on oil output volumes from foreign producers.

Manufacturing

C11 Food Product Manufacturing: High

COVID-19 is anticipated to have a heavy impact on the Food Product Manufacturing subdivision. International trade plays a key role in this subdivision. Supply chain disruptions in China have made it difficult for perishable food to be exported to the country. Additionally, overall demand for food consumption in China has significantly changed since the COVID-19 outbreak. The closure of major food service chains, such as Yum China and McDonald's, for two and half months significantly reduced consumption of meat, seafood and dairy products. Many meat products, such as lamb and mutton, remained on wharves and in cold storage facilities in China as port and dock workers entered quarantine. Industries that heavily rely on selling to the food service sector in China have been affected by short-term disruptions to demand. Firms that export seafood to China have been particularly affected. Many seafood markets have been closed, and New Zealand seafood shipments have been cancelled. In addition, prices for premium seafood products have been affected. However, as restaurants are beginning to open again and ports are ramping up to full capacity, demand will likely increase.

At-home consumption of meat and dairy products in China has increased substantially. Furthermore, consumers in China have increased their online shopping, looking for high quality and healthy produce. This trend will likely benefit New Zealand dairy and meat product producers, due to their clean, green reputation. Producers that have struggled with lower demand are anticipated to redirect perishable food to alternative markets where demand is strong, albeit at a discounted price. This trend has likely put downward pressure on prices over the short to medium term. Food product manufacturers that have production facilities in China, or that import food products for further domestic processing, may face delays in the manufacturing process.

C12 Beverage Manufacturing: Moderate

COVID-19 is expected to have a moderate impact on the Beverage Manufacturing subdivision. Most beverage manufacturers are not anticipated to be affected by overseas COVID-19 outbreaks, as they rely on domestic consumption. However, wine producers have seen a decline in wine consumption due to the closure of food service establishments. On-premises consumption of wine in China is expected to fall in the short term, while restrictions on group dining remain in place. Unlike their Australian counterparts, New Zealand wine producers have limited exposure to the Chinese wine market. However, China's suspension of outbound tourism could affect domestic sales of wine. Alcohol sales have grown significantly in New Zealand over the last month, both instore and online. Online sales have been strong since the country entered lockdown in the last week of March, and some businesses have had to suspend delivery services to restock.

C13 Textile, Leather, Clothing and Footwear Manufacturing: High

The Wool Scouring industry is the main industry in this subdivision. COVID-19 is anticipated to have a heavy impact on the Wool Scouring industry, as China is the industry's largest single export market. Industry operators are expected to face supply chain disruptions related to COVID-19. Downstream retailers in New Zealand have reported a slowdown in sales and orders, with reduced foot traffic at shopping malls prior to the government-imposed lockdown. Additionally, constrained logistics, labour shortages due to travel restrictions, and factory closures will likely create disruptions in the supply chain for delivery of goods. On 27 March, Cavalier Wool Corporation announced that it had closed all its New Zealand facilities in compliance with the lockdown orders. Only employees that can work from home are able to continue working. Wool auctions will also not go ahead during the month-long lockdown.

C14 Wood Product Manufacturing: High

COVID-19 is projected to have a high impact on the Wood Product Manufacturing subdivision. The subdivision is exposed to a high level of trade with China. Logistic disruptions could have a more severe effect on log exporters, as warehouses and factories would be unable to start production. As manufacturing has temporarily stopped in China, demand for wood products has declined. Additionally, Chinese ports have been unable to handle imports due to a shortage of labour. This factor could lead to a slowdown in exports to China in the short term, which in turn could reduce harvesting activity in the short to medium term. Furthermore, timber mills have not been deemed an essential business by the New Zealand Government, severely limiting supply.

C15 Pulp, Paper and Converted Paper Product Manufacturing: Moderate

This subdivision is expected to be moderately affected by COVID-19. Chinese demand for New Zealand's pulp and high-quality paper has grown over the past five years. Manufacturers could face COVID-19 related supply chain disruptions, as manufacturing has temporarily stopped in China. A shortage of labour resulting from the travel ban could lead to a slowdown in exports of this subdivision’s products to China in the short term. Manufacturers of food product packaging for supermarkets will likely benefit from consumer stockpiling behaviour. However, manufacturers supplying cafes and other food-service establishments will likely face significantly reduced demand.

C16 Printing: Moderate

The Printing industry is the only industry in this subdivision. International trade in this subdivision is low, as printing firms mostly service the domestic market, and transporting printed products overseas is inefficient and costly. Competition from digital media is likely to have a greater effect on the Printing industry. Furthermore, the month-long lockdown has hastened the exit of magazine publisher Bauer Media from New Zealand. As the publisher of a number of well-known magazine titles, an inability to find a buyer could severely affect revenue for printers of these magazines.

C18 Basic Chemical and Chemical Product Manufacturing: Low

The Basic Chemical and Chemical Product Manufacturing subdivision is anticipated to be lightly affected by COVID-19. This subdivision is made up of the Synthetic Resin and Synthetic Rubber Manufacturing industry, and the Veterinary Pharmaceutical and Medicinal Product Manufacturing industry. While both industries exhibit a moderate to high level of international trade, both industries have limited exposure to the Chinese market. Manufacturers that do export to China will likely face logistical challenges.

C19 Polymer Product and Rubber Product Manufacturing: Moderate

The spread of COVID-19 is anticipated to have a moderate effect on polymer product and rubber product manufacturing industries, as this subdivision manufactures products for a range of markets, including manufacturers, wholesalers, retailers and construction companies. Revenue is anticipated to significantly rise for manufacturers in this subdivision that focus on protective equipment such as gloves. Many individuals have begun wearing gloves on trips to the shops in an effort to protect themselves from the virus. Manufacturers that import products or parts from China could face short-term disruptions in supply due to logistics challenges in China. Additionally, factory closures in China may lead to a temporary shortage in packaging supplies. However, as this subdivision relies on other markets, a decline in demand from other markets due to COVID-19 could decrease demand for this subdivision's products.

C21 Primary Metal and Metal Product Manufacturing: Moderate

This subdivision includes the Non-Ferrous Metal Product Manufacturing industry in New Zealand, which is expected to be moderately affected by COVID-19. Prior to the outbreak, China was expected to account for 14.2% of export revenue in this industry. Exports were expected to account for 17.7% of industry revenue. Exports to China are now expected to be lower in 2019-20, as a downturn in Chinese manufacturing activity reduces demand for production inputs. The industry also derives a significant share of export revenue from South Korea, which is also struggling with the outbreak. Uncertainty in the local economy could also constrain demand for subdivision products.

C22 Fabricated Metal Product Manufacturing: Moderate

COVID-19 is expected to have a moderate impact on this subdivision. Industries in this subdivision do not typically rely on inputs supplied from overseas and are therefore well placed to continue operating despite a downturn in manufacturing across several foreign economies. Supply inputs from Australia will also likely remain available, further supporting this industry's performance. Industries in the subdivision typically face strong import competition from Asian economies. COVID-19 may present an opportunity for local firms to recapture market share from imports. However, the impact of COVID-19 is expected to be transitory and unlikely to support firms in this subdivision over the long term. A downturn in domestic construction would place substantial pressure on the industry. Activity in the construction sector will likely be somewhat suppressed due to potential weakness across the economy in the near future.

C23 Transport Equipment Manufacturing: High

Transport equipment manufacturers in New Zealand are expected to be significantly affected by COVID-19. Some aircraft manufacturers may have a higher exposure to risk, as New Zealand exports light aircraft to China. Exports of these aircraft may decline due to a slowdown in the Chinese economy. Furthermore, demand in New Zealand and export destinations is expected to be significantly reduced, with air transport services affected by travel restrictions. Shipbuilders, boatbuilders and motor vehicle manufacturers may suffer from supply chain disruptions, as many of these firms secure key components and parts from manufacturers in China, Japan and South Korea. As the effects of COVID-19 fade, some players in this subdivision may seek to expand their supply chains to other regions in an attempt to limit risks associated with future supply disruptions.

C24 Machinery and Equipment Manufacturing: Moderate

Machinery and equipment producers will likely be moderately affected by COVID-19, due to the globalised nature of their supply chains. Most firms in this subdivision source key components from offshore suppliers, exposing local firms to the risk of supply disruption. Even if the spread of COVID-19 is controlled in New Zealand, a downturn in other Asian economies will hinder firms in this subdivision. The closure of factories in China's Hubei province, which is a major producer of electrical components, is anticipated to affect a range of supply chains in this subdivision. Firms in New Zealand are limited in their ability to secure supply from alternative countries, particularly as these firms would be competing against larger global firms seeking the same production inputs. Although these firms may benefit from weaker import competition due to the influence of COVID-19, this benefit is expected to only be temporary and will likely be outweighed by the negative effects of supply chain disruption.

Medical and surgical equipment manufacturer Fisher & Paykel Healthcare has seen a surge in global demand for its respiratory humidifiers and ventilation devices. To meet demand, they have ramped up production schedules at their manufacturing plants in New Zealand and Mexico. Additionally, the depreciating New Zealand dollar has boosted the company's profit margins.

C25 Furniture and Other Manufacturing: Moderate

COVID-19 is unlikely to directly disrupt furniture manufacturing in New Zealand to a significant extent. Firms in this subdivision primarily source production inputs from local suppliers, reducing the risk associated with supply disruptions. However, these firms remain exposed to demand shocks, which could arise if consumer sentiment and business confidence were to decline. The products offered by this subdivision tend to be expensive and discretionary purchases, which are likely to be postponed in the current environment, as consumers begin to save money due to fears of an economic downturn. Fiscal and monetary stimulus measures may partially alleviate demand shocks, although demand for furniture and other goods is expected to be subdued as consumers focus on goods deemed more necessary.

Electricity, Gas, Water and Waste Services

D26 Electricity Supply: Moderate

The expected decline in international demand for oil and coal is expected to result in a global oversupply of these commodities, reducing the world prices of crude oil and black coal. As these commodities are heavily used as fuel for electricity generation, the wholesale price of electricity is expected to fall. These trends are forecast to improve the competitiveness of the Fossil Fuel Electricity Generation industry against renewable electricity generation industries. Additionally, Chinese manufacturers supply a significant proportion of materials used in the Geothermal, Wind and Other Electricity Generation industry. A slowdown in Chinese manufacturing is expected to disrupt the supply chains of industry operators, slowing down renewable electricity generation.

D27 Gas Supply: Low

A slowdown in the Chinese manufacturing sector due to the outbreak of the COVID-19 is forecast to reduce global demand for natural gas, prompting the world price of natural gas to fall. This fall is expected to reduce revenue generated by division operators. However, the decline in gas prices is also expected to reduce subdivision purchase costs, and contribute to a rise in profitability.

D28 Water Supply, Sewerage and Drainage Services: Low

The Water Supply, Sewerage and Drainage Services subdivision is expected to remain mostly unaffected by the COVID-19 outbreak. Operators in the subdivision provide essential services to New Zealand consumers, demand for which is largely immune to economic downturns. The decline in business confidence expected as a result of the virus outbreak is forecast to reduce private capital expenditure, and encourage subdivision operators to delay expansion projects.

D29 Waste Collection, Treatment and Disposal Services: Moderate

A significant outbreak of the COVID-19 virus in New Zealand would greatly increase the amount of contaminated waste from hospitals and other medical facilities. Additionally, the increase in New

Zealand consumers using personal protective equipment to reduce their exposure to the virus would further increase the volumes of potentially contaminated waste. These trends are likely to boost demand for hazardous waste management services, as well as increase government regulation of the subdivision.

Construction

E30 Building Construction: Low

COVID-19 is anticipated to have a light effect on building construction activity in New Zealand. Construction firms do not engage in international trade, and derive demand from the domestic market. Construction activities are highly labour-intensive, and require input materials, machinery and equipment. Consequently, any disruption in the supply chains of required inputs or a reduction in labour availability have the potential to negatively affect the subdivision. Lower oil prices may positively affect this subdivision by reducing operating costs.

E31 Heavy and Civil Engineering Construction: Low

COVID-19 is anticipated to have a light effect on the Heavy and Civil Engineering Construction subdivision. Firms in this subdivision do not engage in international trade, and derive demand from the domestic market. Construction activities are highly labour-intensive, and require input materials, machinery and equipment. Consequently, any disruption in the supply chains of required inputs or reduction in available labour has the potential to negatively affect the subdivision. Projects undertaken by firms in this subdivision are often rely on government funding. As a result, diversion of funds towards virus prevention or containment efforts has the potential to negatively affect the subdivision. Lower oil prices may assist business viability.

E32 Construction Services: Low

COVID-19 is anticipated to lightly affect the Construction Services subdivision. Subdivision firms service the domestic market and do not engage in international trade. This subdivision includes a range of activities that require different machinery, equipment and materials. Disruption to supply chains of necessary inputs has the potential to negatively affect construction firms. Construction services are highly labour-intensive. As a result, a reduction in the availability of labourers due to illness or quarantine measures has the potential to negatively influence subdivision operators.

Wholesale Trade

F33 Basic Material Wholesaling: Moderate

COVID-19 is anticipated to have a moderate effect on the Basic Material Wholesaling subdivision. Wholesalers of materials such as wool, metal and minerals sell a significant proportion of domestically produced materials to overseas buyers, particularly in China. For example, foreign metal and mineral buyers account for approximately 21% of revenue for the Metal and Mineral Wholesaling industry. Reduced manufacturing activity in China has the potential to constrain demand for these raw materials, negatively affecting wholesalers that focus on export markets.

F34 Machinery and Equipment Wholesaling: Moderate

COVID-19 is anticipated to have a moderate effect on the Machinery and Equipment Wholesaling subdivision. Wholesalers that source products from overseas, such as desktop computers, household appliances, telecommunications and electrical equipment, are anticipated to be negatively affected by declining production in affected areas. Declining demand for minerals from China has the potential to negatively affect Industrial and Mining Machinery Wholesaling industry firms that depend on demand from resource developments. Exports account for approximately 38% of revenue for the Iron Ore Mining industry, with approximately 97% of this revenue attributable to China. Consequently, machinery and equipment wholesalers that service these mines are exposed to risks associated with weakening demand for minerals.

The containment and prevention effort will potentially boost demand for firms in the Medical and Scientific Equipment Wholesaling industry. Researchers and healthcare providers are anticipated to require specialised equipment to study the virus, and diagnose and treat patients.

F35 Motor Vehicle and Motor Vehicle Parts Wholesaling: Moderate

Motor Vehicle and Motor Vehicle Parts Wholesaling firms heavily depend on imports. Consequently, COVID-19 is anticipated to have a moderate effect on the subdivision. New cars are primarily sourced from Japan. Consequently, decreasing production in Japan would negatively affect wholesalers' ability to source vehicles. Wholesalers of new parts primarily source goods from countries such as China, Japan and the United States. Reduced manufacturing activity in China has the potential to negatively affect wholesalers' ability to source low-cost parts.

Wholesalers of used vehicles and parts are not anticipated to be strongly affected by the outbreak, as they operate primarily in the domestic market. A decline in oil prices may positively affect this subdivision, as lower petrol prices could encourage consumers to increasingly use and purchase motor vehicles.

F36 Grocery, Liquor and Tobacco Product Wholesaling: Moderate

COVID-19 is anticipated to moderately affect operators in the Grocery, Liquor and Tobacco Product Wholesaling subdivision. Consumers have been increasingly stocking up on essential and non-perishable grocery items such as canned goods and pasta. Consequently, supermarkets have needed to strengthen their supply chains to maintain adequate stock of these goods. This trend has the potential to boost demand for subdivision firms, especially those in the Soft Drink and Pre-Packaged Food Wholesaling industry.

F37 Other Goods Wholesaling: High

COVID-19 is anticipated to strongly affect the Other Goods Wholesaling subdivision. Firms that wholesale textile products, clothing and footwear, toy and sporting goods, and paper products source a significant proportion of these goods from China. Consequently, reduced manufacturing activity in China is anticipated to inhibit these firms' ability to source goods. However, rising demand for pharmaceutical and toiletry goods from both healthcare providers and consumers has the potential to boost demand for the Pharmaceutical and Toiletry Goods Wholesaling industry. Supermarkets have been reporting that consumers are increasingly stockpiling toilet paper and hand sanitiser. Consequently, supermarkets are anticipated to strengthen their supply chains to secure stable stock of these goods. This trend has the potential to increase demand for operators in the Pharmaceutical and Toiletry Goods Wholesaling industry and the Paper Product Wholesaling industry. Lower global oil prices may assist wholesalers in this subdivision by reducing purchase costs, due to the widespread use of oil across most supply chains.

Retail Trade

G39 Motor Vehicle and Motor Vehicle Parts Retailing: Moderate

COVID-19 is expected to have a moderate effect on the Motor Vehicle and Motor Vehicle Parts Retailing subdivision. China was the second largest source of imported motorcycles in 2018-19, slightly behind the United States. Declines in Chinese manufacturing activity due to COVID-19 therefore threatens the supply chain of motorcycle retailers. Similarly, motor vehicle parts retailers are expected to report supply disruptions. In 2018-19, New Zealand imported $69.0 million of parts and accessories from China, which ranked third over the year. However, in value terms, these two product lines are minimal compared with motor vehicles.

Imports of cars from China totalled only $55.4 million in 2018-19. Comparatively, New Zealand imported $1.7 billion worth of vehicles from Japan, $505.5 million from Germany and $402.2 million from the United States during the same period. Motor vehicle manufacturers in Japan, Germany and the United States have also begun temporarily closing manufacturing facilities or reducing production due to the outbreak. This factor is expected to create supply constraints and increase prices for subdivision products in the short term. Price increases combined with weak consumer sentiment are expected to constrain demand from this subdivision in the current year, as many consumers postpone major purchases due to global economic uncertainty.

G40 Fuel Retailing: Moderate

Retail petrol prices are anticipated to decline as a result of the COVID-19 outbreak. A decline in Chinese demand for oil, particularly from its manufacturing sector, is expected to place strong downward pressure on oil prices. Furthermore, decreased aviation activity will reduce demand from the fuel-intensive global aviation sector. However, a cutback of supply from oil producing nations is anticipated to moderate price declines. Several producers, such as Saudi Arabia and Russia, are in negotiation over the curtailed output in response to softer demand. As is typical with petrol retailing, a delay will likely occur between the fall in oil prices and lower fuel prices for consumers.

G41 Food Retailing: Moderate

As economic activity slows, weaker demand for premium food products from China is expected to affect New Zealand's food supply chain. As exports decrease from food-focused industries, such as the Meat Processing industry and the Vegetable Growing industry, supermarkets and grocery stores will likely report an increase in supply. The COVID-19 outbreak will therefore likely constrain growth in export revenue. In response, exporting companies are expected to divert supply to the domestic market, causing prices to fall. While lower prices are anticipated to limit revenue in the Supermarkets, Grocery Stores and Convenience Stores industry, this trend is expected to be offset by increased stockpiling of non-perishable goods by consumers. While the COVID-19 outbreak is projected to significantly disrupt the supply chain for food retailers, it is expected to have minimal effect on revenue. Similarly, the outbreak is expected to have little effect on the Liquor Retailing industry.

G42 Other Store-Based Retailing: Moderate

COVID-19 is expected to have a moderate impact on the Other Store-Based Retailing subdivision. A significant proportion of electronics products retailed in New Zealand are produced in China. Disrupted supply lines and a decrease in manufacturing output in China due to the outbreak may therefore result in shortages for some products. However, retail price rises are expected to be modest and competition in the consumer goods retailing sector is anticipated to remain robust. Companies will likely maintain prices to gain market share, rather than raising prices to boost margins. In addition to electronics products, clothing and footwear are common imports from China, and some disruptions in these supply chains are also expected.

On 25 March 2020, the New Zealand Government announced that all non-essential businesses must remained closed during the level 4 lockdown period. These restrictions are expected to carry over a prolonged period of time in an effort to contain the virus. This factor is expected to affect many industries in this subdivision that are considered non-essential retailing. However, the restrictions are expected to have less of an effect on retailers with online stores. Employee numbers and wage costs are expected to fall as retail businesses, such as clothing retailers, lay off staff due to mounting operating cost and slow demand conditions. The New Zealand Government has announced a stimulus package supporting affected retail businesses. This support package will offer $5.1 billion in wage subsidies to affected businesses, which is expected to support short-term job retention in this subdivision and partially offset expected declines in employment.

Accommodation and Food Services

H44 Accommodation: High

The New Zealand Accommodation subdivision is likely to be highly affected by the outbreak of COVID-19. On 20 March, the New Zealand Government implemented a ban on non-New Zealand citizens and residents entering the country. As the Accommodation subdivision, as part of the wider tourism sector, relies on international travellers, the ban on overseas visitors entering the country is significantly constraining demand. In particular, international leisure travellers account for over 30% of the Hotels and Resorts industry's revenue. As a result, restrictions on overseas visitors will significantly constrain revenue for many capital city establishments. Smaller accommodation providers in regional areas will also likely be affected, as many rely on catering to large groups of Chinese tourists on package holidays. On 24 March, the Central Government announced a stage 4 lockdown, which mandated the closure of all non-essential businesses. Subdivision operators are permitted to stay open to provide services to essential workers. However, severe declines in domestic tourism are expected to contribute to a sharp drop in demand for accommodation services.

H45 Food and Beverage Services: High

The Food and Beverage Services subdivision is expected to be highly affected by the outbreak of COVID-19. On 22 March, the New Zealand Government announced the closure of pubs and restaurants, including for takeaway services. This factor is expected to cause a significant decline in revenue for operators, which must cease trading. In an effort to support subdivision operators, the government has announced a wage subsidy package. This package pays eligible business up to $585.80 per week per person employed. Despite the expected sharp contraction in subdivision revenue, declines in subdivision employment are therefore expected to be limited.

Transport, Postal and Warehousing

I46 Road Transport: High

New Zealand's lack of an extensive rail network ensures that most of the country's freight task is transported by road. The COVID-19 outbreak in China has contributed to a slowdown in demand for freight services, due to the expected decline in international trade and demand from commercial customers, such as retailers. These trends are expected to diminish the New Zealand's domestic freight task, reducing demand for subdivision services. Additionally, demand for road passenger transport is expected to decline due to decreased tourist activity and domestic travel restrictions.

I47 Rail Transport: Moderate

Operators in the Rail Freight Transport subdivision dominate the movement of New Zealand's non-bulk freight task. The COVID-19 outbreak is expected to reduce demand for commodities from China's manufacturing sector. This is expected to reduce New Zealand's commodity exports to China, prompting a contraction in the country's non-bulk freight task and reducing demand for rail freight services. Additionally, demand for rail passenger services is expected to decline, due to a decline in tourist activity, due to government travel restrictions.

I48 Water Transport: High

All of New Zealand's imports and exports arrive via air or sea. Air freight transport is primarily used for high-value or time-sensitive products, due to its expensive nature. Consequently, most of New Zealand's international trade is conducted by sea. The slowdown in international trade is expected to limit demand for water freight transport services. Additionally, demand for water passenger demand is expected to decline, as tourist numbers fall and consumers are required to remain at home.

I49 Air and Space Transport: High

On 20 March, the New Zealand Government implemented a ban on all non-New Zealand citizens and residents entering the country. Consequently, demand for international air travel is forecast to decline substantially, with New Zealand's airlines grounding much of their fleets.

I50 Other Transport: High

The expected decline in New Zealand's tourist numbers due to the government's travel ban on foreign nationals entering the country will likely have a negative effect on the subdivision. The Scenic and Sightseeing Transport industry relies heavily on tourists, and operators are expected to face industry revenue declines as a result of falling tourism numbers. Additionally, travel restrictions placed on domestic consumers are expected to further reduce demand for these services.

I51 Postal and Courier Pick-up and Delivery Services: Moderate

The COVID-19 outbreak is forecast to reduce New Zealand consumer sentiment. This trend is expected to reduce demand for online shopping from New Zealand consumers. Additionally, the slowdown of the Chinese manufacturing sector is likely to reduce the availability of consumer goods produced in China. The forecast contraction in demand from online shopping is expected to reduce the volume of products transported by subdivision operators, reducing demand for subdivision services.

I52 Transport Support Services: High

The Transport Support Services subdivision provides several services to the wider transport sector. The slowdown of New Zealand's international trade is expected to reduce this demand. For example, reduced demand for water freight transport is expected to have a negative effect on Port and Water Transport Terminals operators, due to fewer ships arriving at New Zealand's ports.

I53 Warehousing and Storage Services: Moderate

The COVID-19 outbreak in China is expected to reduce the volume of international trade between China and New Zealand. Operators in the Warehousing and Storage Services subdivision provide storage services for products imported into New Zealand, as well as for products awaiting export. The expected slowdown of the Chinese manufacturing sector will reduce international trade between New Zealand and China, contributing to a decline in demand for storage services. However, a significant COVID-19 outbreak is expected to weigh heavily on New Zealand consumer sentiment. This trend is expected to reduce consumer retail spending and the ability of New Zealand retailers to clear stock. This trend is expected to boost retail demand for subdivision operators.

Information Media and Telecommunications

J54 Publishing (Except Internet and Music Publishing): Moderate

The COVID-19 virus is expected to moderately affect the Publishing subdivision. Supply chains for inputs, such as paper, are anticipated to be disrupted, which could place pressure on production. Furthermore, demand is expected to decline as consumers avoid purchasing industry goods over the short term. In addition, falling revenue from advertising has negatively affected print media publishers, with Bauer Media announcing that it is closing its New Zealand magazine operations due to declines in advertising revenue.

The Software Publishing industry is unlikely to be affected by COVID-19. The nature of software publishing allows for easy remote working operations, minimising disruptions to business operations caused by the four-week lockdown. However, downstream industries that demand software may reduce their needs if business confidence declines.

J55 Motion Picture and Sound Recording Activities: High

The Motion Picture and Sound Recording Activities subdivision is anticipated to be significantly affected by COVID-19. Demand for video production and post-production services is anticipated to decline as filmmakers both domestically and abroad delay production due to restrictions imposed to curb the virus's spread. Furthermore, the government-imposed lockdown has significantly affected the Cinemas industry, as cinemas have been forced to close.

J56 Broadcasting (Except Internet): Low

The Broadcasting subdivision is anticipated to be lightly affected by COVID-19. Supply chains will likely be disrupted, particularly for broadcasting equipment such as cameras. However, broadcasters are expected to have sufficient inventory on hand to maintain services without requiring additional supplies.

Advertisers will likely reevaluate their positions, as some businesses, such as restaurants and cinemas, will cease advertising due to mandated closures. However, advertising undertaken by other businesses, such as pharmacies, is expected to increase, partly offsetting declines in demand. Additionally, more viewers are expected to watch TV as lockdowns and restrictions on travel and social gatherings encourage individuals to stay indoors. This trend presents an opportunity for broadcasters and advertisers to expand their presence in the economy.

J57 Internet Publishing and Broadcasting: Moderate

The Internet Publishing and Broadcasting subdivision is expected to be moderately affected by COVID-19. Although some products and services, such as online sales listings, are anticipated to be negatively affected, greater demand for other products and services is expected to outweigh this trend. In particular, subscription video-on-demand services are anticipated to benefit from greater demand, as restrictions on movement and activity lead to more consumers seeking at-home entertainment options.

J58 Telecommunications Services: Low

Telecommunications services are anticipated to be largely unaffected by COVID-19. Call centre support services may experience disruption, particularly for services that use offshore call centres based in areas that are at higher risk of COVID-19. However, underlying demand for telecommunications services is expected to remain stable. Demand for services such as dark fibre is anticipated to increase, but these services are usually built to business specifications.

J59 Internet Service Providers, Web Search Portals and Data Processing Services: Moderate

COVID-19 is expected to have mixed effects on the Internet Service Providers, Web Search Portals and Data Processing Services subdivision. Data storage service providers are anticipated to benefit from growing demand for their services, as businesses are likely to shift more operations to the cloud and encourage more remote working to minimise disruptions to business operations. However, the technology used to operate and construct data centres is almost exclusively sourced from international manufacturers, and local providers may struggle to ramp up their domestic offerings if demand sharply rises.

Demand for internet service providers is expected to increase as more individuals avoid public areas and work from home. This trend is anticipated to benefit the industry, with some consumers likely to upgrade their existing internet plans to handle the greater volumes of data required for activities such as remote working and online video streaming, particularly for larger families and whanau.

J60 Library and Other Information Services: Moderate

This subdivision consists of libraries and other archives, which are expected to be moderately affected by COVID-19. Demand for libraries and publicly accessible archives will likely fall substantially, as the four-week lockdown forces these venues to close temporarily. However, subdivision activities are largely operated through public funding and a short-term fall in demand is unlikely to have any substantial negative long-term effect on the subdivision.

Financial and Insurance Services

K62 Finance: Moderate

The Finance subdivision is expected to be affected by volatility in financial markets and the increased likelihood of further cuts to the Official Cash Rate (OCR) by the RBNZ. Prior to the COVID-19 outbreak, the RBNZ was expected to keep the OCR unchanged for 2020 as the economic outlook was positive.

However, as the outbreak escalated and extended to countries outside of China, risks to both the domestic and global economy have risen, increasing the likelihood of a rate cut in the current year. In March 2020, the RBNZ cuts OCR by 75 bps to 0.25%. The RNBZ has indicated OCR will remain at 0.25% for at least 12 months. Rate cuts will likely reduce interest revenue for banks and non-bank lenders. Additionally, profit margins are anticipated to narrow, as lenders pass on interest rate cuts to borrowers. Volatility in financial markets is also expected to affect the investment returns of the Financial Asset Investing industry and may prompt investors to move their funds to safer assets.

K63 Insurance and Superannuation Funds: Low

The COVID-19 outbreak is anticipated to have little effect on the Insurance and Superannuation Funds subdivision. Claims are not expected to rise significantly for general insurers due to exclusions on standard travel and business interruption policies. Most insurers have exclusions relating to pandemic and virus-related claims. Customers may be insured if they purchased travel insurance prior to the COVID-19 outbreak becoming a known event. Life insurers and reinsurers are not expected to be affected unless the outbreak escalates significantly. However, investment income is a key revenue driver for many insurance companies and investment revenue could decline for insurers over the current year. The outbreak will likely have a short-term effect on investment returns for superannuation funds, but the long-term nature of investing in superannuation means these operators have a greater ability to withstand volatility in sharemarkets compared with other market participants.

K64 Auxiliary Finance and Insurance Services: Low

The COVID-19 outbreak is expected to have little effect on the Auxiliary Finance and Insurance Services subdivision. Demand for subdivision services will likely remain largely unchanged given its service-based nature. Subdivision operators also primarily provide services domestically and to local clients, limiting their exposure to international demand volatility. As a result, current trends and forecasts are expected to remain largely unchanged.

Rental, Hiring and Real Estate Services

L66 Rental and Hiring Services (Except Real Estate): Moderate

This subdivision includes the Passenger Car Rental and Hiring industry, which is anticipated to report a significant decline in demand as inbound international tourism stalls. International tourists were expected to account for around 25% of industry revenue in 2019-20, representing a key driver of industry expansion. As Chinese tourists represent 10.5% of total visitors to New Zealand, the decrease in visitors from China is anticipated to adversely affect this industry. However, as the rest of the subdivision is primarily service-based and focused on the domestic market, the COVID-19 outbreak is anticipated to have a less severe impact on these industries. However, the closure of non-essential businesses and the subsequent slowdown in economic activity are expected to influence the subdivision's performance.

L67 Property Operators and Real Estate Services: High

The subdivision's two industries, the Commercial Property Operators industry and the Real Estate Services industry, are projected to be highly affected by the COVID-19 outbreak. Some businesses are anticipated to have difficulty meeting rent obligations due to the restrictions on non-essential businesses, which includes real estate services, and the general slowdown in economic activity. In October 2018, the New Zealand Government introduced the Overseas Investment Amendment Act 2018. This legislation restricts overseas buyers from purchasing residential property in New Zealand. Domestic property markets are therefore partly protected from international trends and events. However, declines in consumer sentiment stemming from the COVID-19 outbreak are expected to curtail subdivision demand, as New Zealanders are discouraged from making major purchases.

Professional, Scientific and Technical Services

M69 Professional, Scientific and Technical Services: Low

As a service-based subdivision, the Professional, Scientific and Technical Services subdivision is expected to be modestly affected by COVID-19. Prior to government enforced travel restrictions, many companies in this subdivision had already implemented travel restrictions to affected areas, and a 14-day self-quarantine period in which employees work from home after traveling overseas. These travel restrictions are expected to adversely affect business-related activity in this subdivision.

The COVID-19 outbreak has caused disruptions to business supply chains and international trade. Businesses affected by these supply disruptions are expected to seek advice on mitigating costs and exposure, which could boost demand for management consulting services. However, restrictions on non-essential businesses may reduce demand for professional services from some sectors. Demand for biological and medical research services is expected to rise as global demand for a vaccine increases. Funding for COVID-19 research programs from both the private and public sector is expected to increase as the outbreak continues to spread. In February 2020, New Zealand's Health Research Council launched a $3.0 million rapid research response, funding research into threats from COVID-19 and preparation for future outbreaks. As a result, the COVID-19 outbreak is anticipated to boost turnover for the Scientific Research Services industry over 2019-20.

M70 Computer System Design Services: Low

COVID-19 is expected to have little effect on the Computer System Design Services subdivision. IT consultants can work remotely, reducing the risk of exposure for employees in this subdivision. However, as many global manufacturers have ceased operations during the COVID-19 outbreak, key computer components, hardware and parts used in the Computer System Design Services industry could have supply issues. Demand for software and app development services is expected to slightly decrease as firms wait for manufacturing facilities to resume production of key parts and computer products used by end consumers.

Administrative and Support Services

N72 Administrative Services: Moderate

As a service-based subdivision, the Administrative Services subdivision is expected to be moderately affected by COVID-19. The Travel Agency and Tour Arrangement Services industry is expected to be heavily affected, as travel bans have stopped all non-essential travel to and from New Zealand. Travel bans are anticipated to significantly reduce demand for tour arrangement services, with revenue for the Travel Agency and Tour Arrangement Services industry set to decline substantially. Travel Agencies will also be affected by uncertainty regarding when travel restrictions will be relaxed, as governments around the world impose significant travel restrictions in a bid to curb the spread of COVID-19. Demand for employment placement and recruitment services is expected to increase due to COVID-19, as declines in economic activity contribute to a rise in unemployment.

N73 Building Cleaning, Pest Control and Other Support Services: Moderate

The COVID-19 outbreak is expected to have a moderate effect on the Building Cleaning, Pest Control and Other Support Services subdivision. As this subdivision is service-based, demand for subdivision services has fallen following the government-imposed four-week lockdown. Nevertheless, most industries in the subdivision are expected to have minimal exposure to supply chain disruptions relating to the outbreak. However, global supply shortages of products such as hand sanitiser, which is stocked in many building toilet facilities, will likely affect the Building Cleaning Services industry. Anticipated supply issues over the short term may place upward pressure on prices for hygiene products, such as soap and hand sanitiser, slightly increasing operating costs for the industry.

Public Administration and Safety

O76 Defence: Low

This subdivision includes the Defence industry in New Zealand. The New Zealand Defence Force (NZDF) consists of three services, the Royal New Zealand Navy, the Army and the Air Force. COVID-19 has not affected the NZDF so far. However, if the outbreak were to worsen in New Zealand, the NZDF would likely be relied on to help maintain quarantine controls, deliver medical supplies, or support police and firefighting operations. Medics and health staff in the NZDF could also be called on to support civilian efforts to control COVID-19.

O77 Public Order, Safety and Regulatory Services: Low

This subdivision is expected to experience no significant disruption due to COVID-19. Police and firefighting services may be called as first responders for normal medical emergencies, while medical resources are occupied with COVID-19. Correctional facilities may be at a higher risk of contracting and spreading the disease. Inmates in these facilities have a higher chance of spreading the infection as they live in close proximity.

Education and Training

P80 Preschool and School Education: Moderate

The New Zealand Preschool and School Education subdivision will likely be moderately affected by the COVID-19 outbreak. As New Zealand moves into stage four lockdown, preschools and domestic schools will be mandated to close for four weeks from 25 March 2020. Care-at-home arrangements will be provided to essential workers with children aged between zero and 14.

A ban on travellers from mainland China until they have spent 14 days or more in a third country previously restricted Chinese students enrolled in domestic high schools from entering the country. The subsequent ban on travellers entering New Zealand has further limited entry for international students enrolled in domestic high schools.

P81 Tertiary Education: High

The Tertiary Education subdivision in New Zealand will likely be highly affected by the COVID-19 outbreak. New Zealand's ban on most travellers from mid-March has negatively affected the Tertiary Education subdivision. The previous travel ban on visitors from mainland China blocked Chinese students from entering the country. The stricter travel ban will negatively affect the Universities industry, as international students account for 14.8% of the Universities industry's revenue of $4.5 billion. The downturn in Chinese student numbers is expected to limit the finances of several domestic universities in the short term. Tuition fees from Chinese students provide a key source of income for some New Zealand universities. The ban is therefore likely to negatively affect the sector in the short term, and potentially in the longer term. For example, the University of Auckland announced that it had ceased hiring new staff in late February 2020, due to the financial effects of the COVID-19 outbreak. To ease pressure on domestic universities, Universities New Zealand has asked the New Zealand Government for an exemption for Chinese international students. However, this has not yet occurred at the time of writing.

Some international students could face financial difficulties from temporarily losing part time work. However, as New Zealand entered stage four lockdown, the New Zealand Government removed working hour restrictions for international students that are already working in major supermarkets. Additionally, international students that are existing healthcare workers are now allowed to work fulltime for a period of three months.

P82 Adult, Community and Other Education: Low

COVID-19 is expected to have a light effect on the Adult, Community and Other Education subdivision. Establishments in this subdivision primarily service the domestic market, which means that their international student numbers are typically low. However, providers of English Language Intensive Courses for Overseas Students have faced weaker demand from Chinese students, due to the travel ban.

Health Care and Social Assistance

Q84 Hospitals: Moderate

The Hospitals subdivision is expected to be moderately affected by COVID-19 at its current stage. The largest challenge facing New Zealand hospitals is a shortage of medical supplies, such as surgical masks and hand sanitiser. The disruption of supply chains of these goods from China has exacerbated the issue, with wholesalers and retailers finding it difficult to restock these products. Consequently, this shortage of supplies can restrict a hospital's ability to contain and minimise the spread of infection, and cause serious potential risk to patients. In the event of COVID-19 expanding further into the general population, hospitals are anticipated to delay or even cancel elective surgeries and prioritise COVID-19 cases. On 17 March 2020, the New Zealand Government dedicated $500 million to support health services. These funds are expected to support the subdivision's infrastructure and medical supply capacities if cases significantly rise.

Q85 Medical and Other Healthcare Services: High

The Medical and Other Healthcare Services subdivision is expected to face a number of challenges from COVID-19. GP's are expected to struggle to obtain basic medical supplies, disrupting their ability to provide services to patients afflicted with COVID-19. Other industries in the subdivision are also expected to be exposed, as patients are likely to delay unnecessary medical appointments from fear of catching the virus.

Q86 Residential Care Services: High

The Residential Care Services subdivision is expected to face heavy disruption from COVID-19. Aged Care Residential Facilities are particularly vulnerable to any potential COVID-19 outbreaks, and staff will be expected to respond accordingly to minimise risk for themselves and residents. The shortage of preventative medical supplies, particularly hand sanitiser, will likely also cause issues for these facilities, as preventative measures will be more difficult to implement without access to these basic supplies.

Q87 Social Assistance Services: Moderate

Social Assistance Services is expected to be moderately disrupted by COVID-19. Operators in the Child Care Services industry face two potential challenges, as the potential for an outbreak may require facilities to shut down for a period. However, these facilities may instead have a surge in demand, if schools are closed in response to COVID-19 without a corresponding response from businesses. Demand for Personal Welfare Services may also rise, as workers (particularly self-employed or contract workers) end up accruing debt due to COVID-19 from the mandated isolation period.

Arts and Recreation Services

R89 Heritage Activities: High

The Art Galleries and Museum Operation industry is the sole industry in the subdivision and is expected to be significantly affected by the COVID-19 outbreak. The industry will record fewer domestic and international visitors, as public venues are required to close under level 4 restrictions. Consequently, museums and art galleries will only be able to operate digitally until the threat level is reassessed.

R90 Creative and Performing Arts Activities: Moderate

The Creative and Performing Arts Activities subdivision is anticipated to be moderately affected by COVID-19. International artists and acts may cancel or reschedule concerts, performances and tour dates if the COVID-19 situation intensifies. These delays and cancellations could affect demand for the subdivision. Some operators may face lost revenue and significant expenses for changes in event scheduling. However, arts activities that take place in the digital space are anticipated to continue performing well.

R91 Sports and Recreation Activities: High

The Sports and Recreation Activities subdivision is expected to be severely affected by the COVID-19 outbreak. The Sports and Recreation Facilities Operation industry and the Sports Administrative Services industry will face delays or cancellations for sporting events, as events cannot take place under level 4 restrictions.

R92 Gambling Activities: High

Certain segments of the Gambling Activities subdivision are expected to be affected by the outbreak. Travel restrictions on Chinese visitors have negatively affected the Casinos industry. According to SkyCity, patronage is primarily made up of local clients, with Chinese visitors only making up a small share of earnings. However, casinos cannot operate at all under the current restriction level, meaning that they will face significant revenue declines.

Personal Services

S94 Repair and Maintenance: Low

The Repair and Maintenance subdivision is expected to be largely unaffected by the COVID-19 virus outbreak. Operators in these industries service the domestic market and risk for contracting the virus is low for people travelling in the country. Furthermore, businesses are less likely to purchase capital equipment such as trucks and heavy machinery during periods of uncertainty. Consequently, demand for repair and maintenance services may increase, depending on the duration and severity of the virus.

The only potential threat to the industry comes from the supply of tools and parts required by businesses in this subdivision. Around 30% of imports of power automation equipment and machine tools and parts originate from China, on a value basis. Chinese production has been constrained over the initial outbreak period, as many manufacturers were temporarily shut down. This factor is expected to limit supply of tools and parts in the short-term, which could affect the ability of repair and maintenance service firms to generate revenue.

S95 Personal and Other Services: Moderately

The COVID-19 outbreak is expected to moderately affect the personal and other services subdivision. These services rely on the domestic market and therefore have not been affected by travel restrictions. However, the New Zealand Government has enforced strict lockdown rules, announcing the temporary closure of non-essential businesses during the level 4 lockdown. These regulations are expected to be in place for a prolonged period of time to limit the spread of COVID-19. This factor is expected to moderately affect this subdivision, as some operations are considered non-essential and must be closed over this period, such as firms in the Hairdressing and Beauty Services industry. Closures of non-essential business will limit revenue over this initial period and decrease employment as operators look to minimise costs. The New Zealand Government has provided some relief to affected business in this subdivision through a stimulus package. In particular, the package offers $5.1 billion in wage subsidies to affected businesses, allowing these businesses to retain staff while the business is forced to temporarily close. This factor is expected to partially offset employment declines in the current year.