Special Report **12th March 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	Low
	Manufacturing		
C11	Food Product Manufacturing	High	High
C12	Beverage Manufacturing	High	Low
C13	Textile, Leather, Clothing and Footwear Manufacturing	High	Moderate
C14	Wood Product Manufacturing	Moderate	High
C15	Pulp, Paper and Converted Paper Product Manufacturing	Moderate	Moderate
C16	Printing	Low	Low
C17	Petroleum and Coal Product Manufacturing	Low	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	Low	N/A
C21	Primary Metal and Metal Product Manufacturing	Low	Moderate
C22	Fabricated Metal Product Manufacturing	Low	Low
C23	Transport Equipment Manufacturing	Moderate	Moderate
C24	Machinery and Equipment Manufacturing	Moderate	Moderate
C25	Furniture and Other Manufacturing	Low	Low
	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	Low	Low
G40	Fuel Retailing	Moderate	Moderate
G41	Food Retailing	Moderate	Moderate
G42	Other Store-Based Retailing	Moderate	Moderate
	Accommodation and Food Services		
H44	Accommodation	High	High
H45	Food and Beverage Services	Moderate	Moderate
	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	Moderate
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	Low
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	Low	Moderate
L67	Property Operators and Real Estate Services	Low	Low
	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	Low
N73	Building cleaning, pest control and other support services	Low	Low
	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	Low	Low
R90	Creative and Performing Arts Activities	Moderate	Moderate
R91	Sports and Recreation Activities	Low	Low
R92	Gambling Activities	Low	Low
	Personal Services		
S94	Repair and Maintenance	Low	Low
S95	Personal and Other Services	Light	Light

Australia

Agriculture, Forestry and Fishing

A01 Agriculture: High

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

Sheep, beef and dairy cattle farmers have benefited from downstream demand for lamb, beef and dairy products. Over the first half of 2019-20, already strong exports of beef and lamb to China surged, following the outbreak of African swine fever that cut China's pig herd in half. However, since the outbreak of the COVID-19 virus, demand has fallen. Furthermore, as of February 2020, meat products exported to China have been stranded in docks, as local dock workers have been in quarantine. This will also affect other agricultural exports, such as dairy and fruit. However, in the long term, this is likely to benefit agricultural producers, as demand for Australia's high-quality produce is forecast to increase. Consumers in China have already begun avoiding the traditional wet markets in favour of online businesses and supermarkets.

A02 Aquaculture: Low

The Aquaculture subdivision is expected to be only lightly affected by the outbreak of COVID-19. While seafood exports to China have been increasing, this has largely come from the Fishing industry, with industry exports accounting for below 5% on a value basis. 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 considerably affected by a deep and prolonged downturn in other seafood industries that have high export levels to virus-affected countries.

A03 Forestry and Logging: High

COVID-19 is expected to have a high impact on the Forestry and Logging industry. Closures of ports in China, and other ongoing disruption to supply chains, has halted demand for timber in China, with shipments already in-port unable to be unloaded. 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. In addition, China accounts for the over half of global timber demand, so the sudden drop-off in demand is projected to create a global oversupply and reduce the domestic price of timber.

A04 Fishing, Hunting and Trapping: High

The Fishing industry is the only industry covered in this subdivision, and the outbreak of COVID-19 has already had a substantial negative affect on industry revenue. In late January 2020, in response to the outbreak, China placed a ban on seafood imports. Seafood exports in the Fishing industry account for over half of industry revenue. Approximately 45% of 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 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

There is likely to be a timber supply glut due to reduced demand from China. This is forecast to reduce logging and timber processing activity, which would restrict demand for forestry support services. Other agricultural support services, such as sheering and cropping, will also depend on primary producing and growing activities. In the short term, cropping activity is forecast to be less affected, as producers will probably proceed with harvesting crops as normal. Cropping activity is more likely to be significantly negatively affected only if farmers reduce future plantings, as would cotton ginning. The current cotton crops would still be processed in the short term, but future plantings could be reduced as a consequence of COVID-19 concerns. However, while China is a significant export market for the Cotton Ginning industry, its share was already declining due to other factors.

Mining

B06 Coal Mining: High

The Coal Mining subdivision is expected to be significantly disrupted by the effects of COVID-19. China is one of the largest export markets for Australian coal, where it is primarily used in the production of 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, leading to a decline in export prices. China may also seek to increase reliance on its own coal production, in an effort to stimulate its economy amid a downturn from COVID-19. The capacity for Australian exporters to redirect sales to alternative markets is limited, particularly given the ongoing shift towards renewable energy sources. Over the long term, a significant decline in oil prices associated with the outbreak of COVID-19 may cause demand for coal to decline, as oil and coal are partial substitutes in energy generation. Despite a probable recovery in the global economy as the effects of COVID-19 fades, oil prices may remain low for an extended period.

B07 Oil and Gas Extraction: High

The Oil and Gas Extraction subdivision is at risk of a major impact from COVID-19. China and South Korea, the site of two major outbreaks of COVID-19, are major markets for Australian natural gas. As Chinese economic activity is expected to significantly decline, demand for natural gas is also expected to fall. 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. The closure of Chinese ports could result in force majeure being triggered. 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, in an attempt to maintain beneficial supply relationships with Australian producers.

Declining demand for oil from Chinese buyers has led to a breakdown in negotiations between the Organisation of the Petroleum Exporting Countries and Russia. In early March, both Saudi Arabia and Russia announced plans to significantly increase oil output, amid a declining demand environment due to COVID-19. Oil prices have strongly 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 are likely to 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 the prices for these commodities. In contrast, precious metals producers are likely to 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 are likely to 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, are likely to be disrupted by the closure 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 slowing economic activity in China. 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. A reduction in the 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 impact on mineral and petroleum exploration firms. However, a significant impact on this subdivision is likely to occur through fluctuations in the global prices of commodities such as oil, natural gas, and iron ore. In the short term, a decline in commodity prices may discourage mining firms from investing in exploration. However, if firms assume the impact of COVID-19 is likely to be temporary and that commodity prices will improve in 2020-21, any change to exploration activity is likely to be minor. The Contract Mining Services industry may be hindered in the short term if large mining firms curtail output amid 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 temporarily closed their stores. These closures have affected out-of-home food consumption. Demand has fallen for 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. However, this decline is only anticipated to last over the short term, while parts of China remain in lockdown.

The Chinese Government has put a temporary ban on seafood imports. Seafood processors that export fresh seafood to China have 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.

While at-home consumption for meat, dairy and grain products has remained unchanged in China, delays in supply chains and a shortage of workers have affected Australian food product manufacturers. Australia's largest meat processing cooperative, Northern Co-operative Meat Company, has voiced its concerns over meat products stuck at Chinese ports waiting for dock workers to return to work. If COVID-19 remains uncontained, demand for food product manufacturers will likely decline further.

Despite worries related to COVID-19, a weaker Australian dollar is helping industry players divert exports to alternate markets. Producers are anticipated to sell redirected perishable food at discounted prices. This factor will likely put downward pressure on prices over the short to medium term. Food product manufacturers that have production facilities in China or import food products for further domestic processing could potentially face delays in the manufacturing process.

C12 Beverage Manufacturing: High

COVID-19 has a moderate influence on this subdivision. As most beverage manufacturers rely on domestic consumption, this subdivision has not been severely affected. However, wine producers are 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. 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.

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.

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.

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: Low

This subdivision is made up of the Petroleum Refining and Petroleum Fuel Manufacturing industry and Lubricants and Other Petroleum Product Manufacturing industry. 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.

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. Additionally, some manufacturers import packaging supplies from China. The COVID-19 outbreak could potentially lead to a temporary shortage in packaging supplies due to factory closures in China. 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: Low

COVID-19 is expected to have a light effect on 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.

C21 Primary Metal and Metal Product Manufacturing: Low

This subdivision is expected to be minimally disrupted, with the impact of COVID-19 limited to a reduction in demand due to a slowdown in Asian manufacturing activity. Industries in this subdivision derive most production inputs domestically, and thus have a lower risk of production disruption due to insufficient supply of inputs from overseas. The outputs of this subdivision are used in a wide range of manufacturing applications. Depending on the severity of global supply chain disruption and demand contraction, demand for this subdivision's outputs could fall. For example, the production of copper tubes, steel pipes, and steel could decline amid a recession in global manufacturing. A reduction in the price of oil is expected to exert downward pressure on operating costs, assisting the viability of firms in this subdivision.

C22 Fabricated Metal Product Manufacturing: Low

This subdivision is expected to be lightly 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, an escalation in manufacturing disruption 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. As 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.

C25 Furniture and Other Manufacturing: Low

This subdivision is unlikely to be significantly 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. Cuts to the cash rate, and fiscal stimulus may assist households through exerting upward pressure on discretionary income, incentivising greater expenditure on goods produced by this subdivision.

Electricity, Gas, Water and Waste Services

D26 Electricity Supply: Moderate

A decline in thermal coal prices due to reduced demand from Chinese manufacturers is 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. 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 from the spread of the COVID-19 virus 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 face increased levels of 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: Low

COVID-19 is expected to have minimal effect on Australia's Motor Vehicle and Motor Vehicle Parts Retailing subdivision. In value terms, Chinese products make up 14.8% of imported motor vehicle parts in Australia. Disrupted supply lines due to the COVID-19 outbreak could therefore potentially raise the price of aftermarket components. However, Chinese imports represent a small portion of motor vehicle sales. Overall, subdivision revenue and demand trends will likely be mostly unaffected. 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 over the first two months of 2020. However, several oil-producing countries have announced plans to curtail oil production due to the COVID-19 outbreak to counterbalance weakened demand. For example, Saudi Arabia has indicated that oil output will likely fall heavily. 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: Moderate

COVID-19-related supply disruptions 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 travel ban currently in place for visitors from mainland China, until they have spent 14 days outside of China in another location, has stopped the flow of tourists from Australia's largest inbound market. China is Australia's largest market in terms of visitor arrivals, accounting for approximately 15% of total visitors. Chinese tourists also stay longer and spend more when in Australia compared with visitors from other markets. Chinese tourism expenditure in Australia totalled almost $12 billion in 2018-19.

Accommodation providers have already had to deal with limited demand caused by bushfires. The lack of international visitors from China is starting to weigh heavily on tourism businesses around the country. This trend is negatively affecting capital city hotels that often rely on Chinese travellers. Additionally, small regional businesses that rely on package holiday visits are struggling with low demand. Many accommodation providers have cut prices to stimulate demand in an already highly competitive sector. As a result, profitability in the overall subdivision will likely fall in 2019-20.

H45 Food and Beverage Services: Moderate

The COVID-19 outbreak will likely have a moderate effect on operators in the Food and Beverage Services subdivision. Restaurants, cafes, pubs and other food-service establishments often generate a significant portion of their income from tourists. As China is Australia's largest market in terms of arrival numbers and spend, the current travel ban will likely reduce the pool of customers available for food service companies. However, these players primarily service the domestic market, so the negative influence will not likely be as strong for food service establishments compared with firms in the accommodation sector. However, 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 transported 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. Road passenger transport operators are likely to suffer with the expected downturn in passenger demand, due to concerns regarding the spread of the virus in enclosed spaces.

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 Chinese manufacturing sector as a result of 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 concerns regarding the spread of the virus in enclosed spaces.

I48 Water Transport: High

Australia's lack of land borders means 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. Concerns regarding the spread of the virus in enclosed spaces is expected to discourage consumers from using industry services.

I49 Air and Space Transport: High

The outbreak of the COVID-19 virus is expected to substantially reduce demand for air transport. Australia receives approximately 1.4 million tourists from China annually, with many more tourists transferring through China. The Federal Government has issued a travel ban on foreign residents arriving from mainland China. Additionally, the government has issued travel warnings for South Korea, Japan, Italy and Mongolia due to concerns regarding the virus. These trends are expected to substantially reduce demand for international air travel. Additionally, demand for domestic air travel is expected to decline, due to concerns regarding the spread of the virus in enclosed spaces, such as on air planes.

I50 Other Transport: High

The outbreak of the COVID-19 virus, along with the associated travel bans, is expected to reduce the number of tourists visiting Australia. The Scenic and Sightseeing Transport industry relies heavily on tourists for revenue. The expected drop in tourism is expected to have a negative effect on industry revenue. Additionally, concerns regarding the spread of the virus in enclosed areas are expected to further reduce demand for industry services. The expected decline in oil and natural gas prices due to declining demand from China will likely have a negative effect on the Pipeline Transport industry.

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

Concerns regarding the outbreak of the COVID-19 virus 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 outbreak of the COVID-19 virus.

I52 Transport Support Services: High

The Transport Support Services subdivision provides a number of services to the wider transport sector. The anticipated slowdown of the Chinese manufacturing sector is expected to have a negative impact on international trade between Australia and China, and reduce demand for domestic freight transport services. The Transport Support Services subdivision is expected to decline in line with the forecast fall in international trade between Australian and China.

I53 Warehousing and Storage Services: Moderate

The expected slowdown of international trade between Australia and China 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. The decline of the Chinese manufacturing sector is expected to reduce international trade between Australia and China, subsequently reducing 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 effects of COVID-19 on the Publishing subdivision are expected to be mixed. Demand for newspaper, magazine and book publishing is expected 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.

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, and although there is potential for a reduction in orders for some software, this is anticipated to be counteracted by a surge in orders for software that can assist businesses to overcome risks of COVID-19, such as software that enables easier remote working operations.

J55 Motion Picture and Sound Recording Activities: High

The Motion Picture and Sound Recording Activities subdivision is anticipated to be heavily affected by the effects of COVID-19. The production and distribution of videos is anticipated to be delayed over this period, partially due to the risk of exposure to COVID-19 by continuing production, and potentially weaker demand for services over the next few months, particularly for movies.

The Cinemas industry is anticipated to be the most affected in the subdivision, with consumers expected to opt for subscription video-on-demand services such as Netflix and Stan as viable substitutes to minimise the risk of exposure to COVID-19. Furthermore, major studios are expected to rework their release schedules for major movie titles over the next few months in the face of COVID-19, further dampening demand for cinemas over the period.

J56 Broadcasting (Except Internet): Low

The Broadcasting subdivision is expected to be lightly affected by COVID-19. Upstream supply of advertisement is anticipated to be disrupted, 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, is likely to increase. Additionally, more viewers are expected to tune in over the next few months, as the fear of COVID-19 encourages individuals to stay indoors.

J57 Internet Publishing and Broadcasting: Low

The effects of COVID-19 on the Internet Publishing and Broadcasting industry are expected to be mixed. Some industry segments, such as online property listings, are anticipated to be moderately disrupted, as many consumers are likely to avoid public areas while COVID-19 remains a risk. However, other segments of the industry, such as subscription video-on-demand services, are anticipated to benefit from stronger demand, as more individuals avoid going out and seek at-home entertainment alternatives.

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, this remains unlikely.

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

The Internet Service Providers, Web Search Portals and Data Processing Services subdivision is likely to face mixed effects from COVID-19. Growing demand for remote working and the ability to work on the cloud is anticipated to benefit both internet service providers and data processing services. However, the Data Storage Services industry may face challenges from COVID-19 if demand begins to rapidly increase, as the technology resources used to construct and operate data centres are largely sourced from overseas.

Internet service providers may also be negatively affected during this period, as the National Broadband Network's (NBN) pricing model for data charges based on total bandwidth used. A potential spike in the number of remote working users could place additional strain on service providers' networks, forcing them to pay overage charges to NBN and resulting in a net deficit to internet service providers, despite greater demand.

J60 Library and Other Information Services: Moderate

The effects of COVID-19 on the Library and Other Information Services subdivision are expected to be mixed. Although demand for libraries and public archives is anticipated to fall, this subdivision is largely publicly funded. Therefore, 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 lower the cash rate in March was in large part due to the risks 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.

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 impacted by the virus, and demand and activity for auxiliary finance and insurance services are likely to remain otherwise unchanged. Current forecasts are likely to remain given the industry is largely serviced-based with no major supply chain disruptions.

Rental, Hiring and Real Estate Services

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

COVID-19 is projected to have a modest effect on the Passenger Car Rental and Hiring industry. Inbound international travellers are a significant market for car hire companies. Declines in global tourism and the travel ban on Chinese tourists are expected to cause demand for automobile rental services to fall significantly. Other industries in the subdivision are forecast to be unaffected, as these industries are service-based and largely focused on domestic customers.

L67 Property Operators and Real Estate Services: Low

Australia's property management subdivision is expected to be mostly unaffected by COVID-19. The outbreak is not expected to significantly affect demand for residential and industrial property, and current trends are forecast to continue. The industry is service-based and has minimal exposure to supply chain disruption. However, a slowdown in retail activity may threaten the viability of some retailers, slightly affecting retail property operators.

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 already imposed travel restrictions to mitigate the risk of employees being exposed to COVID-19. For example, PwC Australia has stopped all business travel to mainland China, Hong Kong, Macau and Iran. The company also requires internal approval for flights other than direct flights to New Zealand, the United States, the United Kingdom and Europe. These 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 supply-chain ties to China 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 million in funding for developing a vaccine for COVID-19. The Scientific Research Services industry has also been working on a vaccine, with the University of Queensland stating in February 2020 that it was close to doing animal testing of a new 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, and could limit 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 likely to be only lightly affected by COVID-19 outbreak, the Travel Agency and Tour Arrangement Services industry is expected to be highly affected. Travel agencies are expected to be negatively affected by the COVID-19, as consumers will be less willing to travel, particularly to the virus-affected areas. In February 2019, Flight Centre Travel Group Ltd stated that COVID-19 was affecting travel patterns, particularly to Asian regions, making it difficult for the company to achieve its 2020 revenue target. As a result, most travel agencies are anticipated to contend with constrains in revenue and profit over the second half of 2019-20, underpinned by lack of consumer confidence in overseas travel. Travel restrictions already enforced by many businesses have limited corporate travel bookings, further constraining travel agencies' revenue and margins.

Demand for tour arrangement services is expected to be subdued due to COVID-19, as operators are heavily dependent on international tourists. COVID-19 is expected to reduce the number of international tourists in Australia, particularly from the affected areas on which Australia has placed travel restrictions or bans. The Department of Foreign Affairs and Trade announced that, as of March 2020, foreign nationals traveling from Iran or mainland China will not be allowed to enter Australia for 14 days from the time they departed those countries. In addition, international tourists are expected to delay travel due to the uncertainty of whether the COVID-19 will spread globally. As a result, the related declines in demand are expected to put downward pressure on profitability and revenue for tour arrangement service operators over 2019-20.

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

The effect of the COVID-19 outbreak is forecast to me light on the Building Cleaning, Pest Control and Other Support Services subdivision. Demand for building cleaning, pest control, gardening and packaging services is not expected to be significantly affected by COVID-19, due to the serviced-based nature of the businesses in the subdivision. Subdivision operators are expected to be minimally exposed to supply-chain disruptions. However, players in the Building Cleaning Services industry could face supply constraints relating to hand-sanitiser products that are used in building toilet facilities. In February 2020, retailers Coles, Woolworths and Chemist Warehouse stated that there has been an unexpected increase in demand for hand sanitiser since the COVID-19 outbreak in China. This short-term supply constraint is expected to put upward pressure on the availability of hand sanitiser and other related products. This could slightly increase the associated operating costs for building cleaning services companies.

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. 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.

P81 Tertiary Education: High

The Tertiary Education subdivision has been highly affected by the COVID-19 outbreak. The government's travel ban currently applies to visitors from mainland China until they have spent 14 days outside of China in another location. This ban put pressure on Australia's higher education sector, just 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 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.

As Chinese students are a key source of income for many domestic universities, many have made arrangements to allow students to study remotely. As a result, many domestic universities have quickly ramped up their online learning capabilities to reduce pressure on Chinese students still in mainland China. An increasing number of Chinese students are also arriving in Australia via a third country. However, if the coronavirus outbreak and the Australian travel ban continues over the longer term, the education sector will come under increasing pressure.

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 month, has resulted in a run on inventory in many stores and warehouses. In the event of COVID-19 expanding further into the general population, hospitals are expected to delay elective surgeries and prioritise COVID-19 patients, particularly those experiencing severe symptoms, in an effort to control the 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 is likely to 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 are likely to delay unnecessary medical appointments.

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.

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.

Arts and Recreation Services

R89 Heritage Activities: Low

COVID-19 outbreak is anticipated to have a modest effect on the Heritage Activities subdivision. The subdivision may record lower visitor numbers to locations due to reduced travel both domestically and abroad. However, local visitors make up the main markets for most industries in the subdivision. Current trends and projections are expected to remain unchanged unless the spread of the outbreak significantly escalates.

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: Low

The majority of the Sports and Recreation Activities subdivision is expected to be largely unaffected by the COVID-19 outbreak. The Sports and Recreation Facilities Operation and the Sports Administrative Services industries may be potentially impacted if the situation escalates and there are delays or cancellations of large-scale sporting events. There are currently no plans to play sporting matches behind closed doors or cancel any sporting events, although attendances may fall for some sporting events. However, any delays or cancellations of large-scale sporting events can mean significant lost revenue or costs for stadium operators and sports administrators.

R92 Gambling Activities: Low

Certain segments of the Gambling Activities subdivision are expected to be affected. However, forecasts for most of the subdivision are likely to remain unchanged. The Casinos industry is likely to be hit by travel restrictions placed on some of its key markets for its VIP programs. 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 with potential for further travel restrictions to be implemented. The remainder of the subdivision is unlikely to be affected given 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, 29.3% 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. The subdivision would only be significantly affected if a large-scale voluntary or compulsory home quarantine were to be imposed.

New Zealand

Agriculture, Forestry and Fishing

A01 Agriculture: High

COVID-19 is expected to have a significant impact on agricultural producers in New Zealand. Operators in these industries rely significantly on sales in export markets for their revenue. Furthermore, 30% of these agricultural exports are bound for China. This is true for fruit and vegetable growers as well as livestock farmers whose meat and dairy products are sold by downstream processors. Exports of kiwifruit account for the majority of revenue earned by growers. The largest national export market is China, accounting for approximately 23% of total exports. While the first shipments of New Zealand kiwifruits in China are not due until April, logistical issues following port closures and other supply chain disruptions may impact still impact growers.

The impact of the virus is expected to be greater for livestock farmers. Meat, particularly sheep meat, and dairy products are exported in significant quantities to China. Lamb and mutton exports, as well as export prices, grew strongly during 2019 following the outbreak of African Swine Fever in China, which led to the destruction of over half of the country's pig herd. However, now that demand has fallen dramatically in China, prices are falling as the market heads towards oversupply. This trend is particularly the case for mutton, with over 70% of production usually destined for China. Lamb exporters have been able to find alternative markets. Dairy producers are also likely to see a short-term drop in export sales due to port closures. These industries may benefit in the long term, due to a likely increase in demand for high-quality food and beverages. New Zealand agricultural produce has a high global reputation.

A03 Forestry and Logging: High

Forestry and Logging is expected to be substantially impacted by the COVID-19 virus. New Zealand is one of the world's largest forestry and logging product producers and rely significantly on exports. Exports account for over half of industry revenue, with exports to China making up over 70% of this amount. 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. The resulting global oversupply of product is expected to lead to a significant fall in domestic and global timber prices. In response to this trend, production has been substantially reduced. According to the Forest Industry Contractors Association, 30% of logging crews in New Zealand are now out of work.

A04 Fishing and Aquaculture: High

The Fishing and Aquaculture subdivision is highly reliant on exports. Close to 40% of combined revenue from fishing and aquaculture operators come from exports and approximately 64% of this amount comes from China. As a result of the COVID-19 outbreak, China has imposed a seafood import ban. Consequently, exports of seafood over the first two months of 2020 were down $40 million, 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 outbreak of COVID-19 is expected to have a moderate impact on these operators. With China accounting for approximately half of New Zealand’s wool clip, shearing services are likely to be most affected by the outbreak, although demand has been slowing in recent years due to trends shifting away from heavy wool products. The virus is less likely to affect cropping services, at least in the short-term, with minimal vegetable and grain crop exports to China, and apple and kiwifruit growers still optimistic about their export prospects. Cropping services are only likely to be significantly impacted 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, the centre of the outbreak, 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. Although New Zealand does not trade oil or gas directly with China, producers in this subdivision remain exposed to the risk of a downturn in global prices for oil and gas. Lower Chinese 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. The potential closure of 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. Business confidence in New Zealand may weaken in response to the COVID-19 outbreak, which could cause an associated downturn in manufacturing and construction activity. This downturn would likely lower demand for gravel and sand. However, if the disease is transitory, this factor is unlikely to affect the subdivision over the long term. 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 unlikely to significantly 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 high 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, has reduced the consumption of meat, seafood and dairy products. Many meat products, such as lamb and mutton, have remained on wharves and in cold storage facilities in China. Industries that heavily rely on selling into the food service market in China have been affected by a short-term disruption 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.

While at-home consumption of meat and dairy products has remained largely unchanged, food product manufacturers have been affected by logistic disruptions. Producers are anticipated to redirect perishable food to alternative markets where demand is strong, albeit at a discounted price. This is likely to 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: Low

COVID-19 is expected to have a light impact on the Beverage Manufacturing subdivision. Most beverage manufacturers are not anticipated to be affected by COVID-19, as they rely on domestic consumption. However, wine producers have seen a decline in wine consumption due to the closure of food service sectors. 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. China's suspension on outbound tourism could have an impact on domestic sales of wine. As partial lockdown remains, wine producers could potentially see a rise in volumes of wine sold online, as distributors attempt to sell their products through this channel.

C13 Textile, Leather, Clothing and Footwear Manufacturing: Moderate

Wool Scouring is the main industry in this subdivision. COVID-19 is anticipated to have a moderate 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. Reduced foot traffic at shopping malls will likely reduce demand for industry products. Additionally, constrained logistics, labour shortages due to travel restrictions and factory closures are likely to create disruptions in the supply chain for delivery of goods.

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. COVID-19 related logistic disruptions could have a more severe effect for 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 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.

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.

C16 Printing: Low

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. Transporting printed products overseas is inefficient and costly. Competition from digital media is likely to have a greater effect on the Printing industry.

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 export to China are likely to 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. Manufacturers that import products or parts from China could face short-term disruption 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 lead to a decrease in 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. If quarantine measures in South Korea escalate further, this subdivision will likely be further affected.

C22 Fabricated Metal Product Manufacturing: Low

COVID-19 is expected to have a minimal 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, which is yet to record a significant COVID-19 outbreak, 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.

C23 Transport Equipment Manufacturing: Moderate

Transport equipment manufacturers in New Zealand are expected to be moderately 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. 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.

C25 Furniture and Other Manufacturing: Low

COVID-19 is unlikely to significantly disrupt furniture manufacturers in New Zealand. 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 if consumers begin to save money due to fears of an economic downturn. Fiscal and monetary stimulus measures would likely partially alleviate demand shocks, preserving demand for furniture and other goods. This factor is expected to support this subdivision over the remainder of 2019-20.

Electricity, Gas, Water and Waste Services

D26 Electricity Supply: Moderate

The expected slowdown of the Chinese manufacturing sector is likely to reduce global demand for oil and coal. This 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: Low

COVID-19 is expected to have a low 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 during the same period. The Motor Vehicle Retailing industry is therefore expected to report minimal effects from COVID-19.

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, have already 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.

Accommodation and Food Services

H44 Accommodation: High

The New Zealand Accommodation subdivision is likely to be highly affected by the outbreak of COVID-19. In February 2020, the New Zealand Government placed a ban on visitors from mainland China entering the country unless they have been in a third country for 14 days or more. The New Zealand Government then extended this ban to include visitors from Iran. China is a key source of inbound tourists for the New Zealand economy, and represents its second largest inbound market by expenditure.

Considering that the Accommodation subdivision, as part of the wider tourism sector, relies on international travellers, the ban on visitors from China entering the country is going to significantly constrain demand. In particular, international leisure travellers account for over 30% of the Hotels and Resorts industry's revenue. As a result, the reduction in Chinese visitors is likely to significantly constrain revenue for many capital city establishments. Smaller accommodation providers in regional areas are also likely to be affected, as many rely on catering to large groups of Chinese tourists on package holidays. Many accommodation providers have had to cut prices to try to stimulate demand in an already highly competitive sector. As a result, profitability in the overall subdivision is likely to fall in 2020-21.

H45 Food and Beverage Services: Moderate

The Food and Beverage Services subdivision is expected to be moderately affected by the outbreak of COVID-19. As restaurants, cafes, pubs, takeaway outlets and other food-service establishments primarily service local residents, the decline in tourist numbers from China is likely to have a lower impact on this subdivision, compared to other subdivisions such as the accommodation sector. However, the Restaurant Association of New Zealand has called on the New Zealand Government (Te Kawanatanga o Aotearoa) for fiscal relief in March 2020. The association claims that $6.0 million is being lost by local hospitality businesses per week, as more local residents stay home and inbound tourism is reduced. In particular, many Chinese restaurants are struggling with local residents avoiding these restaurants due to fear of catching the virus. There have been reports of several Chinese restaurants shutting down, as they cannot afford to pay wages and rent.

Transport, Postal and Warehousing

I46 Road Transport: High

China is New Zealand's largest trading partner. Trade between the two countries is worth an estimated $30 billion per year. New Zealand's lack of an extensive rail network ensures the majority of the country's freight task is transported via road. The COVID-19 outbreak in China has contributed to a slowdown in the Chinese manufacturing sector, disrupting the supply chains of many New Zealand companies. This is expected to reduce international trade between New Zealand and China, and diminish the domestic freight task, which would reduce demand for road freight services. Additionally, demand for road passenger transport is expected to decline due to consumer fears regarding the spread of the virus.

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, as a result of falling tourist numbers and consumer fears regarding the spread of the virus.

I48 Water Transport: High

New Zealand's imports and exports arrive via air or sea, as it is an island. Air freight transport is used primarily for high-value or time-sensitive products, due to its expensive nature. Consequently, the majority of New Zealand's international trade is conducted by sea. International trade between New Zealand and China is worth over $30 billion annually. The slowdown of the Chinese manufacturing sector is expected to diminish New Zealand's imports from and exports to China, consequently reducing demand for sea freight services. Additionally, demand for water passenger demand is expected to decline, as tourist numbers fall and consumers refrain from travel for fears of the virus spreading.

I49 Air and Space Transport: Moderate

China accounts for a significant source of international tourists to New Zealand. The COVID-19 outbreak in China has prompted the New Zealand Government to instigate a travel ban on foreign nationals entering New Zealand from China. Consequently, demand for international air travel is forecast to decline. Additionally, demand for air transport is projected to fall as passenger numbers decline due to consumers fearing the spread of the virus.

I50 Other Transport: High

The expected decline in New Zealand's tourist numbers as a result of the government's travel ban on foreign nationals entering from China is likely to have a negative impact 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, concerns regarding the spread of the virus are expected to discourage domestic consumers from using industry 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 a number of services to the wider transport sector. The expected slowdown of the Chinese manufacturing sector will have a negative impact on international trade between Australia and China, reducing demand for domestic freight transport services. 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. Revenue for the Transport Support Services subdivision is expected to decline in line with the forecast decline in international trade between Australian and China.

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 likely to moderately impact the Publishing subdivision. Supply chains for input factors such as paper are likely to be disrupted, which could place pressure on production. Furthermore, demand is expected to be suppressed as consumers are likely to avoid purchasing industry goods in the short-term.

The Software Publishing industry is the least likely to be affected by COVID-19. The nature of software publishing allows for easy remote working operations, significantly reducing the risk of contracting COVID-19 while maintaining business operations. However, downstream industries which 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. Video post-production services in the New Zealand film industry are anticipated to decline in demand, as filmmakers both domestically and abroad delay production due to the risks of the virus. Furthermore, demand for cinemas is anticipated to decline due to COVID-19, as viewers are expected to seek alternative forms of entertainment and avoid public spaces.

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 equipment such as cameras and broadcasting equipment. However, broadcasters are expected to have sufficient inventory on hand to maintain services without additional supplies for the peak periods of COVID-19.

Advertisers are likely to re-evaluate their positions, as some businesses will shift focus away from advertising, such as restaurants, due to anticipated sharp declines in demand. However, other businesses, such as pharmacies, are likely to replace these, therefore no net negative effect is expected. Additionally, more viewers are expected to watch TV over the next few months, as the fear of contracting COVID-19 reduces demand for visiting public places and encourages citizens 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

Internet Publishing and Broadcasting is expected to be mildly affected by COVID-19. Although some elements, such as online sales listings, are anticipated to be affected, this trend is expected to be outweighed by other industry elements. In particular, subscription video-on-demand services are anticipated to see a rise in demand, as more individuals avoid going out and seek at-home entertainment alternatives.

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 in areas that are at higher risk of COVID-19. However, the underlying demand for the network is expected to remain stable. Demand for services such as dark fibre is expected to increase, but these services are usually built to business specifications.

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

The Internet Service Providers, Web Search Portals and Data Processing Services subdivision is expected to have mixed effects from COVID-19. Data storage service providers are anticipated to see growing demand for their services, as businesses are likely to shift more operations to the cloud and encourage more remote working to minimise the risks of COVID-19 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 in the event of a large surge in demand.

Internet service providers are expected to see an increase in demand due to the expected increase in individuals avoiding public areas and working remotely. This trend is anticipated to benefit the industry, and some consumers are expected to upgrade their existing internet connection subscriptions to handle the greater volumes of data required on their home networks 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 at a mixed level of risk from COVID-19. Demand for libraries and publicly accessible archives is likely to fall substantially, as the public is expected to minimise visits to public areas. 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 to 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 economic outlook was positive, with the RBNZ expected to keep the OCR unchanged for 2020. 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. Any 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. 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 falls. International tourists were expected to account for 24.9% 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. Furthermore, tourism from China had already fallen significantly during 2019, with visitor arrivals declining by 9.2% over the year. However, as the rest of the subdivision is primarily service-based and focused on the domestic market, the COVID-19 outbreak is only expected to lightly affect these industries.

L67 Property Operators and Real Estate Services: Low

The subdivision's two industries, the Commercial Property Operators industry and the Real Estate Services industry, are projected to be largely unaffected by the COVID-19 outbreak. 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 mostly protected from international trends and events. However, a decline in consumer sentiment stemming from the COVID-19 outbreak may slightly 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 lightly affected by COVID-19. Many companies in this subdivision have 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 slightly 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. In addition, 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 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 a low effect on the Computer System Design Services subdivision. IT consultants can work remotely, which lessens the risk of exposure for employees in this subdivision. However, as many Chinese 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 Chinese manufacturing facilities to resume production of key parts and computer products used by end consumers.

Administrative and Support Services

N72 Administrative Services: Low

As a service-based subdivision, Administrative Services is expected to be lightly affected by COVID-19. However, due to its reliance on tourism and travel patterns, the outbreak will likely have a heavy impact on the Travel Agency and Tour Arrangement Services industry. Due to concerns from international travellers relating to COVID-19, the number of international tourists visiting New Zealand is expected to decline over 2019-20. Additionally, New Zealand has placed travel restrictions on people entering the country from affected areas, which is expected to further constrain international tourist numbers. Declining tourist numbers are anticipated to decrease demand for tour arrangement services, putting downward pressure on revenue for the Travel Agency and Tour Arrangement Services industry in 2019-20. Travel Agencies will also be affected by an expected decline in traveller numbers, as consumers and businesses continue to express concerns relating to the spread of COVID-19. Travel bookings to Asia are expected to significantly decline, as several countries in the area are considered high risk for New Zealand travellers. Corporate travel bookings are also expected to decline as businesses enact travel restrictions to limit the spread of COVID-19. As a result, declines in both business and consumer flight bookings are anticipated to further limit revenue in the Travel Agency and Tour Arrangement Services industry.

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

The COVID-19 outbreak is expected to have minimal influence on the Building Cleaning, Pest Control and Other Support Services subdivision. This subdivision is service-based, which reduces potential exposure to COVID-19. Furthermore, most industries in Building Cleaning, Pest Control and Other Services 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 lightly affect the Building Cleaning Services industry. Anticipated supply issues over the short term may put upward pressure on price of 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 is likely to be moderately affected by the outbreak of COVID-19. The ban on travellers from mainland China until they have spent 14 days or more in a third country is likely to restrict Chinese students that are enrolled in domestic high schools from entering the country. There have been reports that two students whose mother contracted the virus in Italy have been pulled out of their Auckland schools and are now in isolation. There could be more cases of students being told to remain at home if the virus continues to spread in New Zealand.

P81 Tertiary Education: High

The Tertiary Education subdivision in New Zealand is likely to be highly affected by the outbreak of COVID-19. New Zealand's travel ban on visitors from mainland China has blocked Chinese students from entering the country. Many Chinese students are stuck outside the country, with reports stating that close to 6,000 students are banned from entering the country until they have spent 14 days outside of mainland China.

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, in late February 2020, the University of Auckland announced that it had ceased hiring new staff, due to the financial hit of the outbreak of COVID-19. 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.

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.

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: Low

The Art Galleries and Museum Operation industry is the sole industry in the subdivision and is expected to face little impact from the COVID-19 outbreak. The industry may record fewer domestic and international visitors, especially with travel restrictions in place. However, domestic visitors are anticipated to make up the core market for the industry. As a result, the effects are expected to be modest.

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.

R91 Sports and Recreation Activities: Low

The Sports and Recreation Activities subdivision is expected to be largely unaffected by the COVID-19 outbreak. The Sports and Recreation Facilities Operation industry and the Sports Administrative Services industry could face some delays or cancellations for sporting events, and attendances may fall for some events if the situation worsens. However, current trends and forecasts remain largely unchanged, unless the COVID-19 outbreak escalates significantly.

R92 Gambling Activities: Low

Certain segments of the Gambling Activities subdivision are expected to be affected by the outbreak, but forecasts across most of the subdivision will likely remain unchanged. 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, further potential travel restrictions may affect international visitation for casinos. Other operators in the subdivision are unlikely to be significantly affected by the outbreak.

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. If factories in China remain closed for an extended period of time, then a tools and parts shortage would impact the ability of repair and maintenance service firms to generate revenue.

S95 Personal and Other Services: Low

The outbreak of COVID-19 is not expected to significantly impact the personal and other services subdivision. These services rely on the domestic market and therefore have not been impacted by travel restrictions. While some people may be deterred from using beauty services, most people are continuing on with their daily lives as normal. A significant impact would only result from mandatory quarantine restrictions or large-scale voluntary quarantine actions.