

Exploring our Economy Series

Volume 2: Exploring Christchurch Growth Opportunities

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Abstract

This paper assesses the growth opportunities for Christchurch on a sub-industry level. The growth opportunities are identified by combining the city's employment trends with a location quotient analysis.

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Executive Summary

- Sub-industry employment trends reveal that new opportunities for employment in Christchurch is as relevant for smaller industries than larger ones.
- Sub-industries that show strong local employment growth and outpace employment growth for the same industry nationally provide a strong case as a growth industry. Examples of such sub-industries include inter alia, glass and glass product manufacturing, bakery product manufacturing, residential care services, motor vehicle and transport equipment rental and hiring and architectural, engineering and technical services.
- The analysis that illustrates competitiveness of sub-industries, considers the sub-industry employment trends between 2014 and 2018. A location quotient (LQ) analysis is applied to identify sub-industries that exhibit a competitive and comparative advantage.
- An LQ analysis over time, reveals six sub-industry groupings for competitiveness namely low, average, emerging, losing strength, stable strength and strengthening strength.
- Strategy and policy development should be sensitive to the competitive and comparative advantages of a region since it could potentially disrupt the growth prospects of the industries and region.
- Several sub-industries have been identified as having growth prospects for Christchurch, some of these cluster around industries such as health, construction and transport-related activity.
- Christchurch is well connected to the international market through the harbour and international airport which provide an additional export opportunity for local businesses.

Introduction

The Christchurch city economy has been able to pull-ahead and grow even when faced with trying circumstances brought about by the 2010 and 2011 earthquakes. These events influenced the economy and steered it in a direction that is now the 'new normal'. The aim of this series of reports is to assess the Christchurch economy and understand the role and significance of the various industries within the economy. The assessment will further provide insight into the growth potential of industries and identify its competitive advantage within New Zealand.

The series consists out of several stand-alone reports, each with a specific focus. The focus of **VOLUME 2: Exploring Christchurch Growth Opportunities** is to identify growth opportunities for the economy on a sub-industry level. This report is a follow-up on Volume 1 and identifies specific sub-industries that show above-average growth potential.

'Volume 1: Explore our Industries' provided an analysis for the major industries within Christchurch, highlighting the potential industry drivers for the coming years. This report expands the insight into the Christchurch economy by providing an analysis on a sub-industry level offering a more detailed indication of what specific industries in the economy provide growth opportunities.

The analysis is done on a sub-industry level (ANZSIC06). The source of the employment data is the Business Demographic Statistics provided by Statistics NZ and provide detailed employment level data on a sub-regional level¹. The availability of data at the ANZSIC06 level further enables analysis at a finer level of detail for the Christchurch economy.

The analysis also includes an analysis of export activity from the Christchurch ports (Lyttleton harbour and Christchurch International airport).

In several instances, sub-industries form part of larger sector clusters. For example, an increase in employment services sub-industry is due to the increased construction activity and the role that labour brokers play in sourcing the required skills for the industry. The cluster or value chain relationship between sub-industries is not considered in this report as this analysis primarily focus on a sub-industry analysis. The role that smaller sub-industries play within a sector cluster warrants a separate report and analysis.

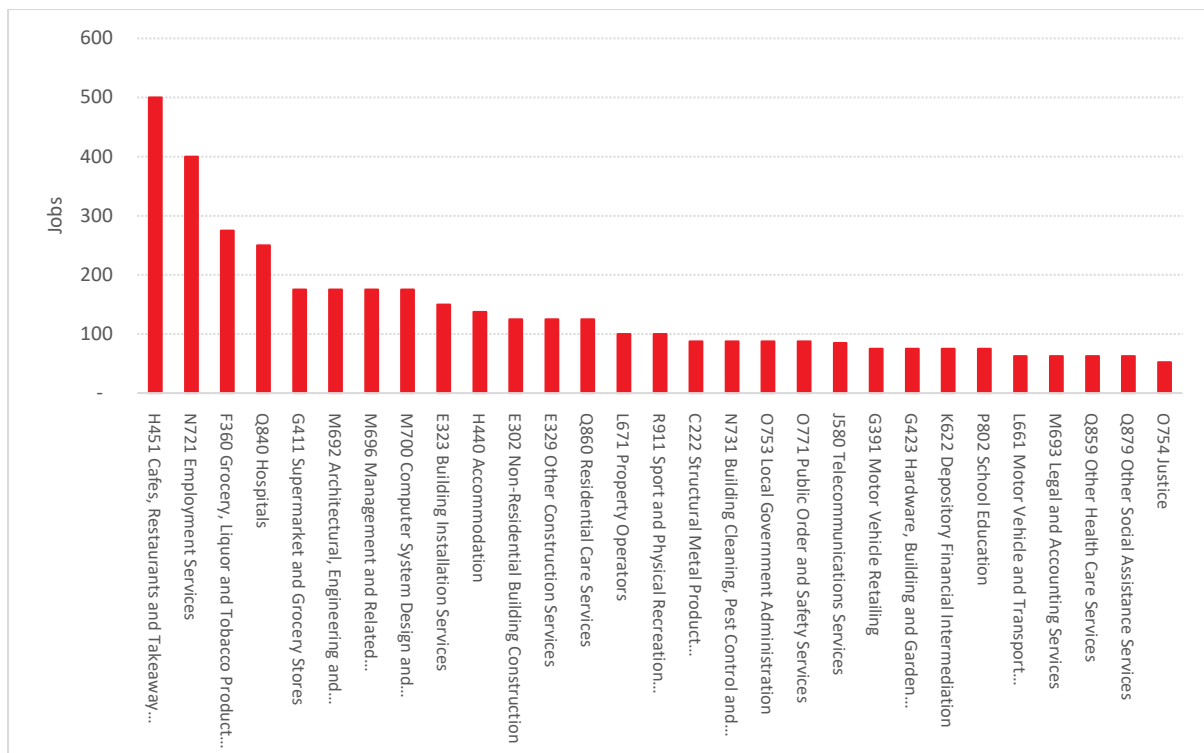
The analysis begins by examining employment growth within each of the sub-industries, followed by evaluating the effect of the employment change on the national employment share for the sub-industry. The value of exports from Christchurch ports is discussed thereafter, highlighting the importance of the international market for local products. The final section of the report identifies the Christchurch sub-industries which have a competitive and comparative advantage compared with the rest of New Zealand and identify those sub-industries that show potential for growth.

1 Business demography statistics give an annual snapshot (as at February) of the structure and characteristics of New Zealand businesses. From 2016 business demography series is based on the Statistic New Zealand Business Register (BR). Business demography statistics are limited to economically significant individual, private-sector and public-sector enterprises that are engaged in the production of goods and services in New Zealand. These enterprises are maintained on the Statistic NZ Business Register, which generally includes all employing units and those enterprises with GST turnover greater than \$30,000 per year.

Employment

Figure 1 shows the sub-industries with the highest employment creation between 2014 and 2018. See Annexure A for a more comprehensive list.

Figure 1: New Employment, 2014 to 2018

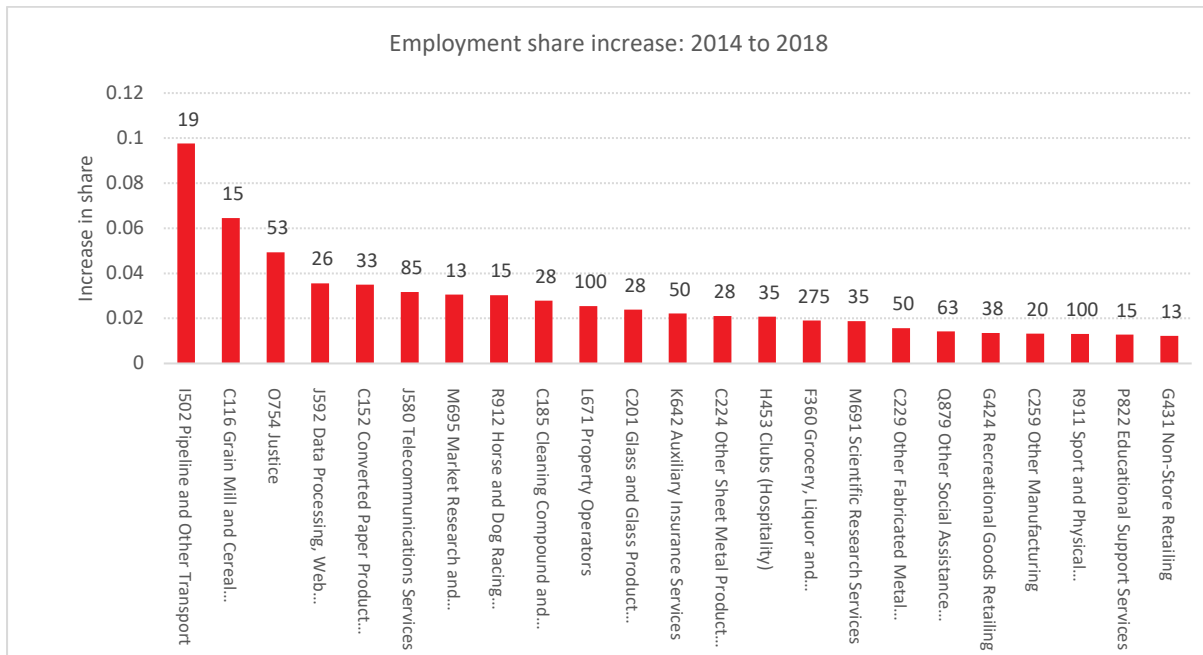


Source: StatsNZ

The largest increase in employment is in cafes, restaurants and takeaways which is noticeable in the new store openings in the Central City and coincides with the strong growth in tourism the city has experienced in recent years. Other sub-industries with high employment growth is associated with health, retail and construction activity.

Evaluating the employment change on a sub-industry level shows which Christchurch sub-industries were able to increase their share of employment in the national context. Figure 2 illustrates the national share change for sub-industry employment of Christchurch industries, for industries with the largest change.

Figure 2: Increase in employment share of national sub-industry, 2014 to 2018



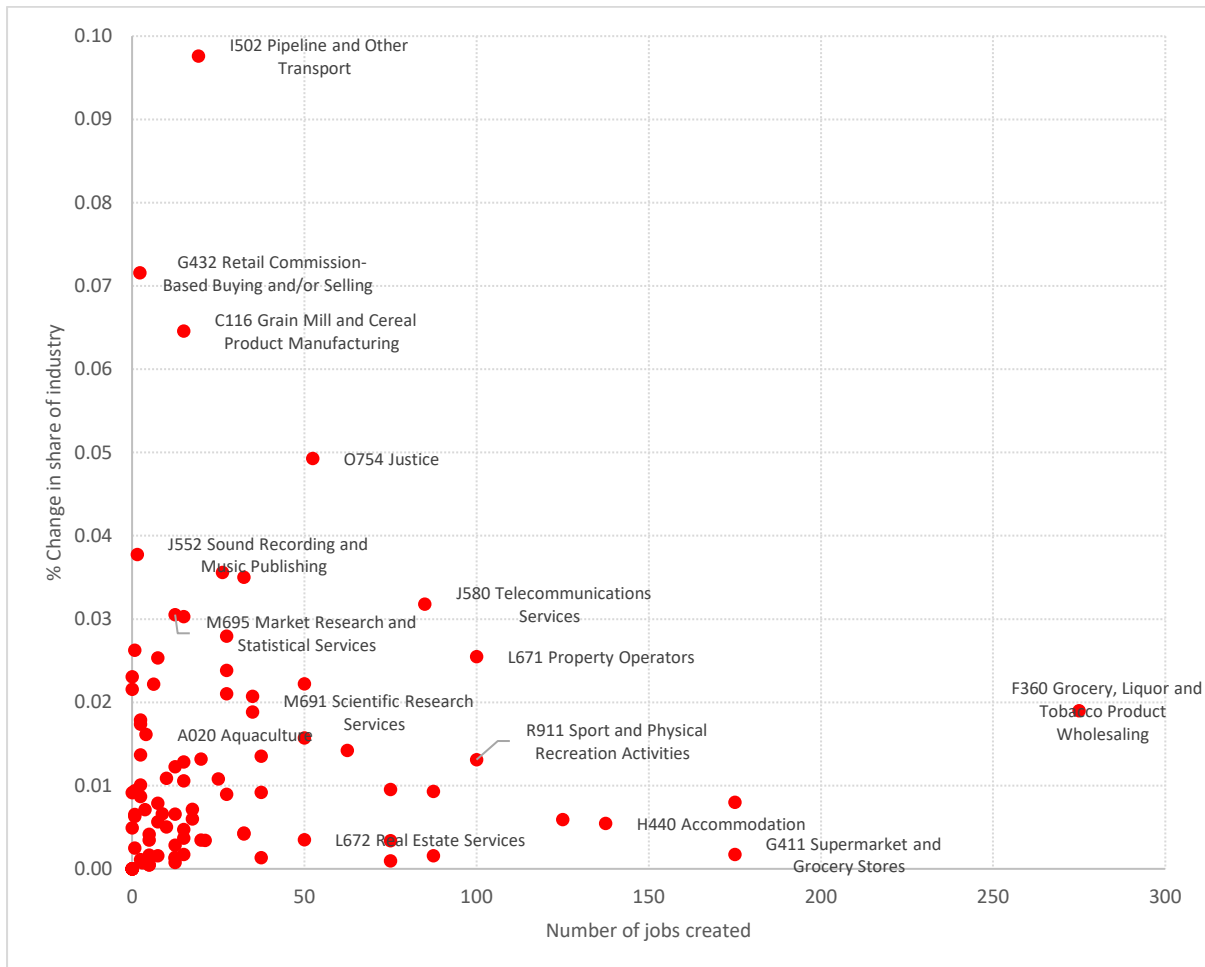
* The number above the bar indicates new employment over the period.

Source: StatsNZ

Figure 2 shows that the pipeline and other transport sub-industry, have increased its share of industry employment in Christchurch by 0.1% with its 19 new jobs. Similarly, justice has also increased its share of national employment in Christchurch, while this increase as a percentage, is smaller compared to pipeline and other transport, even though the number of new jobs is significantly more (53 jobs). This highlights the importance of understanding the sub-industry employment size when advocating for growth and development of certain industries.

Figure 3 shows a summary of new sub-industry employment and the effect on the share for the sub-industry on a national level between 2014 and 2018 for all the Christchurch sub-industries.

Figure 3: Jobs created in Christchurch and the effect on the share to the national sub-industry



Source: StatsNZ & Christchurch NZ

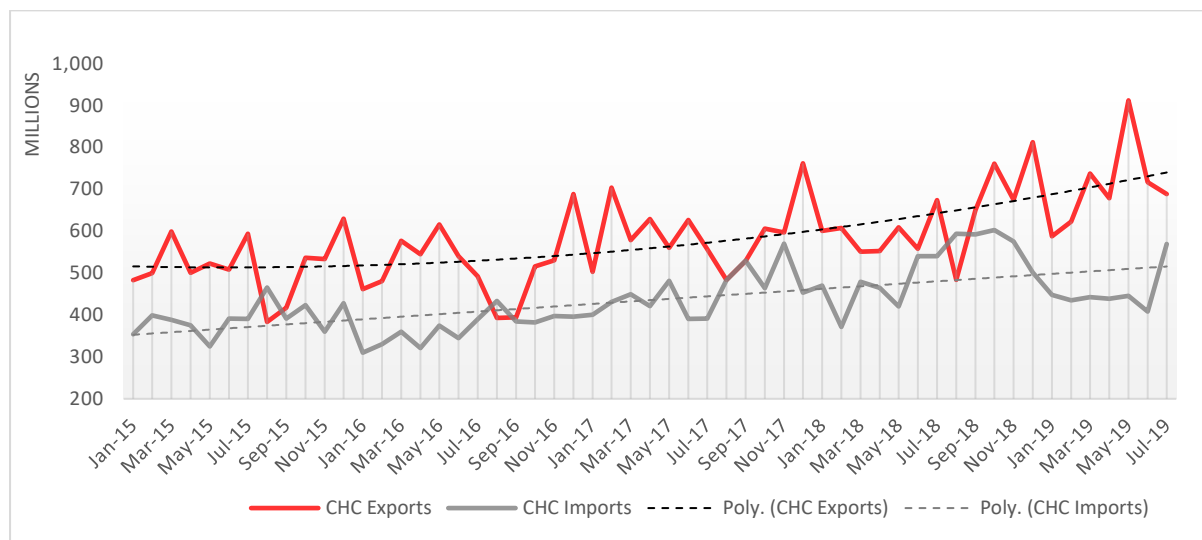
Grocery, liquor and tobacco product wholesaling created the largest number of jobs in Christchurch, however, this increase was only slightly above the national sub-industry employment growth, resulting in a small increase in its share to national employment. The changes in the other sub-industries should be similarly evaluated.

Exports

The ports of Christchurch (Lyttelton and Christchurch International Airport) facilitate the export of a significant amount of agricultural, horticultural, forestry and other manufactured goods. Exports are an important component of the Christchurch and Canterbury economies. Canterbury and Christchurch's economy are dominated by agriculture and manufacturing, industries traditionally associated with strong export capabilities. These industries provide a significant share of local and regional employment. Furthermore, exports contribute to economic growth via flow-on effects from employment, such as spending and the creation of additional employment outside of the export industry itself. Furthermore, exports are a key determinant of an economy's balance of trade.

Persistent trade deficits are generally seen as detrimental to the economic outlook of an economy. Figure 4 displays the monthly import and export values for the two ports of Christchurch. As is evident, Christchurch exports in the period since 2015 outweigh imports with considerable consistency. Moreover, the value of exports has increased significantly over this 3.5-year period, and at a slightly larger rate than imports have increased. While it needs to be recognised that not all goods processed through Christchurch ports originate/have their final destination in Christchurch or Canterbury, the observed imports/exports figures do suggest that the trade pattern of Christchurch that can be seen as favourable.

Figure 4: Monthly Christchurch Exports & Imports



Source: StatsNZ

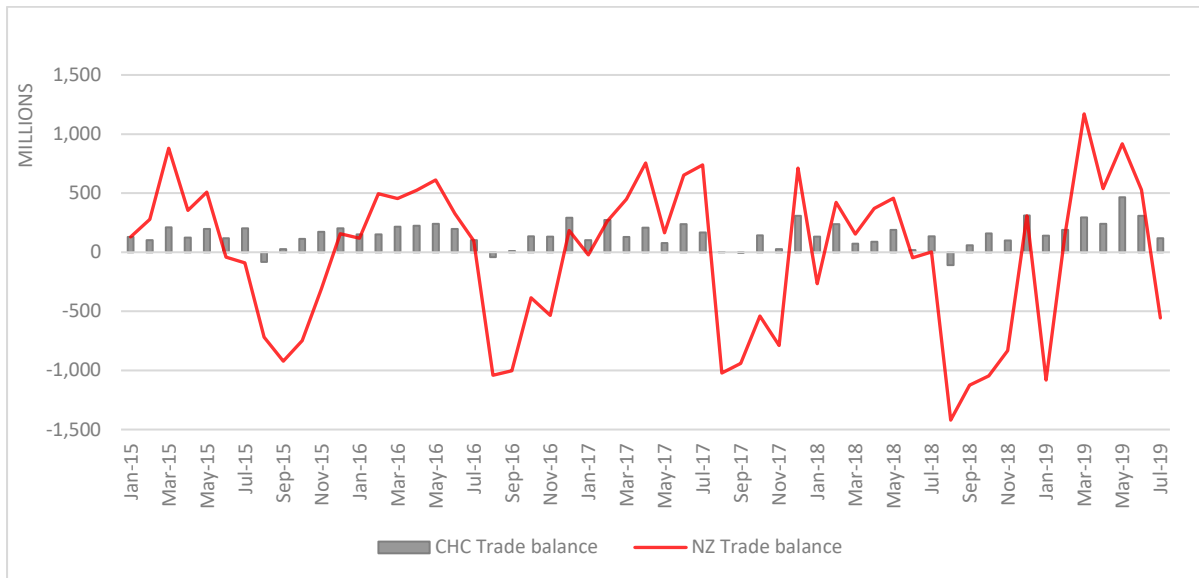
Christchurch’s air and seaport exports total \$7.1 billion² in the year to March 2018, and if the Port of Timaru is added this figure increases to \$8.8 billion, representing 24.7 percent of Canterbury’s GDP of \$35.4 billion. While this regional figure is not really meaningful as a comparison measure, this compares to a New Zealand wide export rate of 20.1%, indicating a significantly higher export share of Canterbury than the average of the remainder of New Zealand.

The side by side comparison between New Zealand and Christchurch’s trade balances can be seen in Figure 5. As already observed, Christchurch’s trade balance (grey bars) is largely positive, with only minor aberrations. New Zealand’s overall export-import balance, on the other hand, is overall negative, with annual strong negative magnitude specifically around September. Given this overall picture, it can thus be argued that the Canterbury/Christchurch economy contributes significantly to alleviating New Zealand’s trade deficit.³

² This omits the port of Timaru, which also processes exports out of Canterbury

³ It should be noted that there may be some exports processed through Christchurch’s ports that did not originate in Christchurch/Canterbury

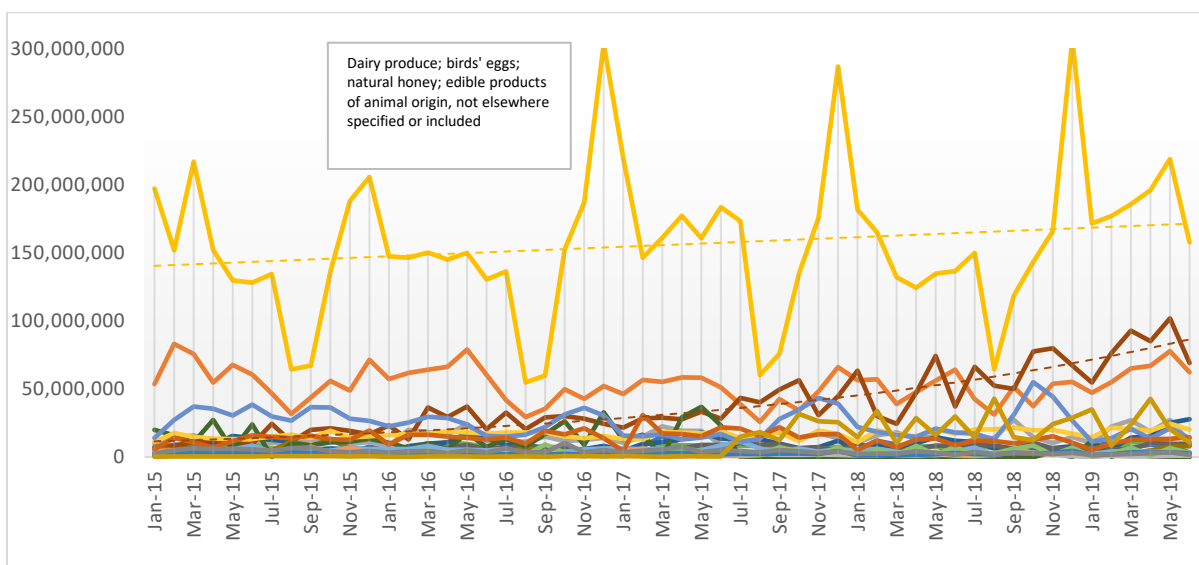
Figure 5: Monthly Christchurch/New Zealand Trade Balance



Source: StatsNZ

Which industries contribute to the strong export performance of the Christchurch/Canterbury economy? Exports through Lyttelton can be seen in Figure 6. Notable is the yellow line, indicating the predominant role dairy-related products Canterbury exports. Also noteworthy is the large share and strong rise of cereal, flour, and processed flour products from Lyttelton (dark red line). The remaining significant export product from Lyttelton are meat products (orange line).

Figure 6: Lyttelton Exports >\$100 million (2015-2019)

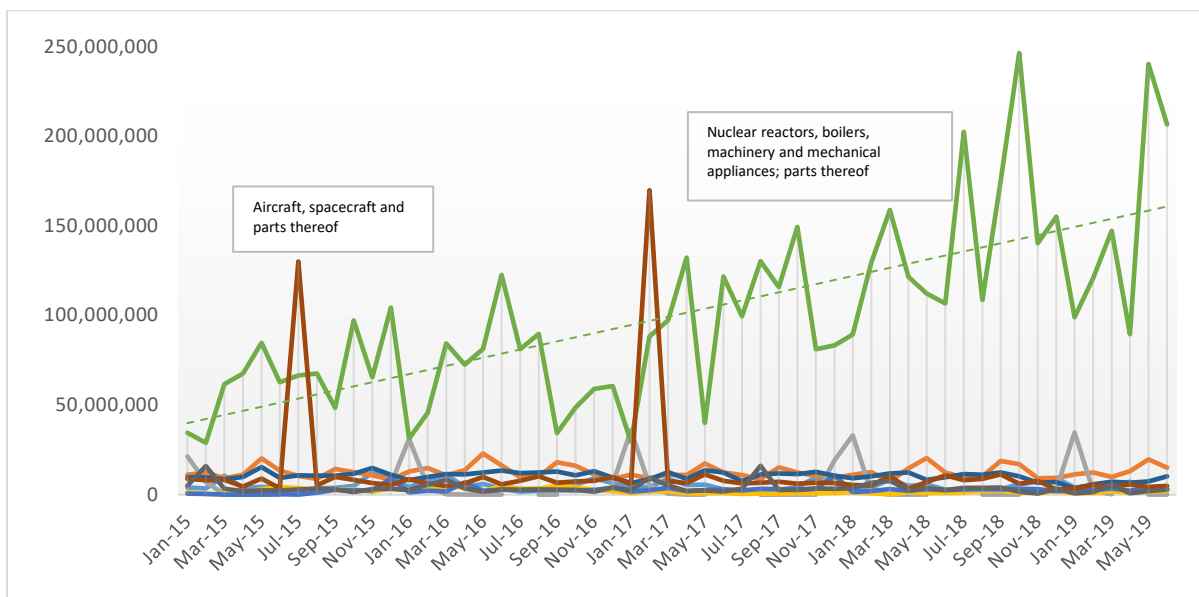


Source: StatsNZ

Together, these three product groups affirm the importance of agricultural production to the Canterbury economy.

Exports via Christchurch International Airport have seen a very significant rise in the value of exported machinery over the period since early 2015 (Figure 7).

Figure 7: Christchurch International Airport >\$100 million (2015-2019)

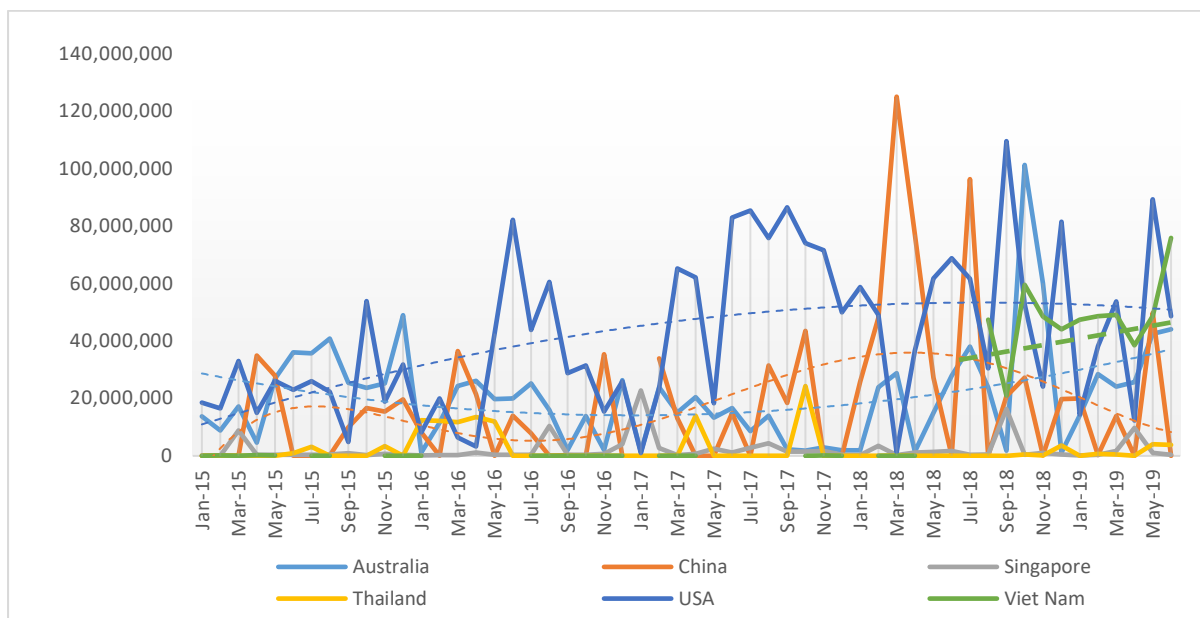


Source: StatsNZ

The ‘Nuclear reactors, boilers, machinery and mechanical appliances’ industry group has seen an enormous increase in exports over the past three years. Average exports from this industry have trebled from around \$50 Million to more than \$150 Million per month. The only other industry having sporadic exports of similar magnitude ‘Aircraft, spacecraft and parts thereof’.

The destination of the exports from the ‘Nuclear reactors, boilers, machinery and mechanical appliances’ industry can be seen in Figure 8. The most notable feature of this graph is the sudden emergence of significant exports from this industry to Vietnam. While exports to Vietnam prior to July 2018 were negligible, this has suddenly changed and for the most recent 12 months period, Vietnam appears to be the primary destination of machinery exports out of Christchurch Airport, amounting to circa 30-40 percent of all of this industry’s exports out of Christchurch International Airport. It maybe worthwhile to explore further the specific drivers behind this development and whether policy can be formed to stimulate additional growth in the industry and market.

Figure 8: Exports of 'Nuclear reactors, boilers, etc' from CHC to countries > \$100 million



Source: StatsNZ

The recent export values (from 2018 onwards) is an indication of recent, new markets that have emerged. Once new employment data become available for the 2018/19 period employment changes in sub-industries such as the nuclear reactors, boilers, etc. sub-industry is expected to reflect.

Competitive Advantage Analysis

This assessment illustrates the comparative and competitive advantage (CCA) of sub-industries in Christchurch by applying the location quotient (LQ) analysis. The analysis illustrates the level of concentration of local industries compared with the national trends. Within the context of a changing economic landscape, where the construction-related activity is returning to normal levels, it is expected that other (sub-) industries will drive the economy forward. This analysis aims to identify the sub-industries that demonstrates employment growth potential for which the Christchurch economy has a competitive and comparative advantage.

The LQ measures the level of employment concentration in the Christchurch economy compared to the national economy by comparing the employment distribution per industry.

$$LQ = \frac{(\text{Employment Industry A in Christchurch} / \text{Total Employment Christchurch})}{(\text{Employment Industry A in New Zealand} / \text{Total Employment New Zealand})}$$

Interpreting the results:

LQ > 1.25. A high level of concentration indicates that the sub-industry employment as percentage of total employment is above the national employment share for the same industry in the national economy. In other words, the local industry employs 25%+ more employees in the industry compared to the national average.

LQ < 1.25 and > 0.75. A normal level of concentration. The local industry employs more or less the same percentage of people than the national sector's contribution to the national economy.

LQ < 0.75. A low level of concentration shows that the percentage of employment in the local industry is lower than the national industry.

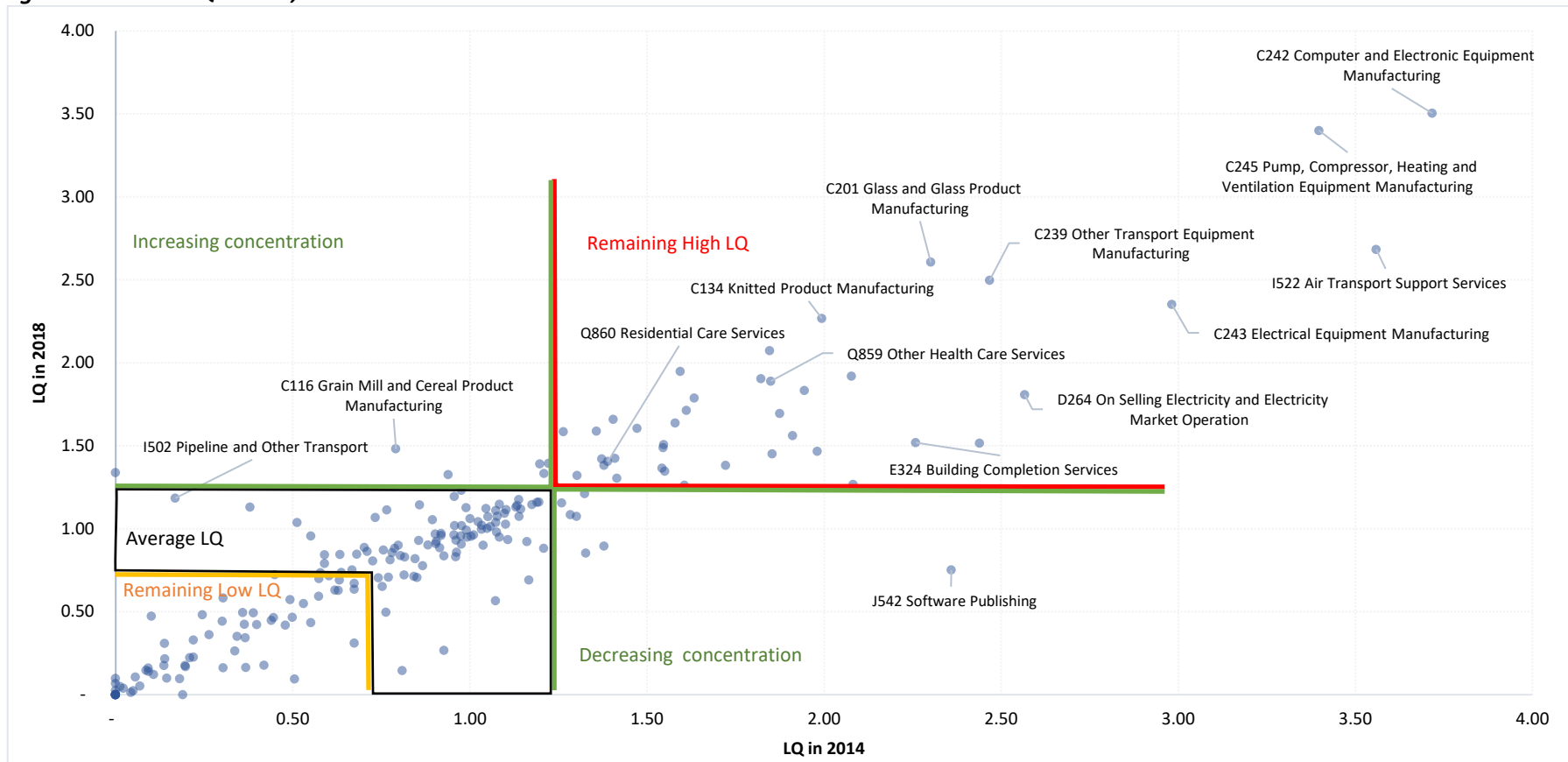
This analysis does not show the size or importance of the sector within the local economic context, it merely shows the level of concentration for a particular period. Changes, over-time, in the LQ measure illustrates local and national trends and provides an opportunity to identify changes in concentration levels for Christchurch. The change in LQ size is then used to identify the CCA for Christchurch⁴.

Figure 9 shows all sub-industry LQ values for 2014 and 2018. The figure shows five distinct groupings. The first group (**red**) shows high LQ values in both periods (2014 and 2018), the second (**yellow**) shows low LQ values in both periods. Group three (**black**) represent the average group, those sub-industries that have an LQ value between 0.75 and 1.25. the final two groups (**green**) represent transition to- (upper-left) or away from (bottom-right) concentration in 2018.

Within the primary sector, no industry in Christchurch shows normal or high levels of concentration. This would be expected, especially considering that the urban region of Christchurch is not intensively used for agriculture or mining.

⁴ LQ represent a tool that identifies if a particular industry is more concentrated in Christchurch compared to the rest of New Zealand which then imply that this industry has a CCA by being located in Christchurch.

Figure 9: Location Quotient, 2014 vs. 2018



Source: ChristchurchNZ & StatsNZ

Competitive Advantage and Strategy Formulation

The industries that have emerged as possible new targets for growth is in the upper-left area (green) with increased levels of concentration. The movement towards high concentration implies that local employment growth outstrips national employment growth for the sub-industries. This change highlights a CCA for Christchurch. **Strategic intervention** for this group should aim to **support and enable growth by identifying markets** for further expansion. The opposite is applicable to the sub-industries located in the lower-right green area, with decreasing LQ. These industries have lost their competitive advantage within a national context. The **strategic focus** for this group is to **turn-around** the decrease with clear and deliberate **intervention** to identify and remove the obstacles/barriers (if possible) that could potentially lead to further decrease in LQ compared to the rest of New Zealand.

Secondly, the sub-industries which continues to have high LQ (red area) represents industries with continued CCA within Christchurch. The strategic intervention for this group would be to **identify new markets/products to encourage new export that** would assist in growth in employment. These industries most likely export from the region and should be encouraged to continue doing so, through market expansion.

The third group are those in the black area, representing average LQ during both 2014 and the 2018 periods. The level of concentration remains stable for these sub-industries. Their LQ value implies that they have a similar share of employment in Christchurch in comparison with New Zealand and therefore do not represent a competitive advantage. A strategy that **supports and encourage expansion** activity where a market gap is observed is proposed.

The final group in Figure 9 are industries that have a low LQ value. The primary sector industries (agriculture, forestry and mining) represent the largest portion of these industries as limited activity takes place within Christchurch.

Each industry is divided into the following categories depending on the observed change between 2014 and 2018. The categories relate to the results in Figure 9.

Low: LQ is low and Christchurch do not represent a competitive location for the sub-industry

Average: LQ is below 1.25 and remains stable at levels similar to the national economy.

Emerging: The LQ has increased significantly since 2014 and the sub-industry represent a possible target for growth. In some cases, the increase has resulted in LQ values above 1.25.

Losing strength: The LQ has decreased since 2014 and the sub-industry is losing its locational competitive advantage. In some cases, the decrease is large with a LQ value below 1.25.

Stable strength: Christchurch continues to have locational advantages and the LQ value remains stable and high.

Strengthening strength: The locational advantages in Christchurch has continued to support the strengthening of an already concentrated sub-industry.

The following tables show the results of the analysis for the higher LQ values coupled with the strategic intervention. The full list can be found as Annexure B.

Table 1 shows all the manufacturing sub-industries while Table 2 shows the other sub-industries.

Table 1: Competitive advantage: Manufacturing sub-industries

Emerging	Losing strength	Stable strength	Strengthening strength
Strategy: Support and enabling growth & identifying markets for expansion	Strategy: Turn-around	Strategy: Identify new markets/products for export	Strategy: Support & encourage expansion
C116 Grain Mill and Cereal Product Manufacturing	C112 Seafood Processing	C117 Bakery Product Manufacturing	C134 Knitted Product Manufacturing
C152 Converted Paper Product Manufacturing	C131 Textile Fibre, Yarn and Woven Fabric Manufacturing	C132 Leather Tanning and Fur Dressing	C185 Cleaning Compound and Toiletry Preparation Manufacturing
C229 Other Fabricated Metal Product Manufacturing	C135 Clothing and Footwear Manufacturing	C192 Natural Rubber Product Manufacturing	C201 Glass and Glass Product Manufacturing
C251 Furniture Manufacturing	C161 Printing	C222 Structural Metal Product Manufacturing	C213 Basic Non-Ferrous Metal Manufacturing
	C182 Basic Polymer Manufacturing	C231 Motor Vehicle and Motor Vehicle Part Manufacturing	C224 Other Sheet Metal Product Manufacturing
	C203 Cement, Lime, Plaster and Concrete Product Manufacturing	C239 Other Transport Equipment Manufacturing	
	C209 Other Non-Metallic Mineral Product Manufacturing	C242 Computer and Electronic Equipment Manufacturing	
	C249 Other Machinery and Equipment Manufacturing	C245 Pump, Compressor, Heating and Ventilation Equipment Manufacturing	

The manufacturing industry in the first report showed declining employment over the 2014 to 2018 period, while a deeper delve within the sub-industries trends have highlighted sub-industries that were able to increase employment and increase its national share as evident in Table 1.

Table 2: Competitive advantage: Other sub-industries

Emerging	Losing strength	Stable strength	Strengthening strength
Strategy: Support and enabling growth & identifying markets for expansion	Strategy: Turn-around	Strategy: Identify new markets/products for new export	Strategy: Support & encourage expansion
A011 Nursery and Floriculture Production	D264 On Selling Electricity and Electricity Market Operation	D292 Waste Treatment, Disposal and Remediation Services	F360 Grocery, Liquor and Tobacco Product Wholesaling
G424 Recreational Goods Retailing	E301 Residential Building Construction	E302 Non-Residential Building Construction	R912 Horse and Dog Racing Activities
G432 Retail Commission-Based Buying and/or Selling	E310 Heavy and Civil Engineering Construction	F332 Mineral, Metal and Chemical Wholesaling	S954 Religious Services
I502 Pipeline and Other Transport	E322 Building Structure Services	G421 Furniture, Floor Coverings, Houseware and Textile Goods Retailing	

Emerging	Losing strength	Stable strength	Strengthening strength
Strategy: Support and enabling growth & identifying markets for expansion	Strategy: Turn-around	Strategy: Identify new markets/products for new export	Strategy: Support & encourage expansion
J552 Sound Recording and Music Publishing	E324 Building Completion Services	I490 Air and Space Transport	
J580 Telecommunications Services	J542 Software Publishing	I521 Water Transport Support Services	
K642 Auxiliary Insurance Services	O772 Regulatory Services	L661 Motor Vehicle and Transport Equipment Rental and Hiring	
	R920 Gambling Activities	M692 Architectural, Engineering and Technical Services	
	C243 Electrical Equipment Manufacturing	N721 Employment Services	
	I522 Air Transport Support Services	Q840 Hospitals	
	K632 Health and General Insurance	Q852 Pathology and Diagnostic Imaging Services	
		Q859 Other Health Care Services	
		Q860 Residential Care Services	
		S949 Other Repair and Maintenance	

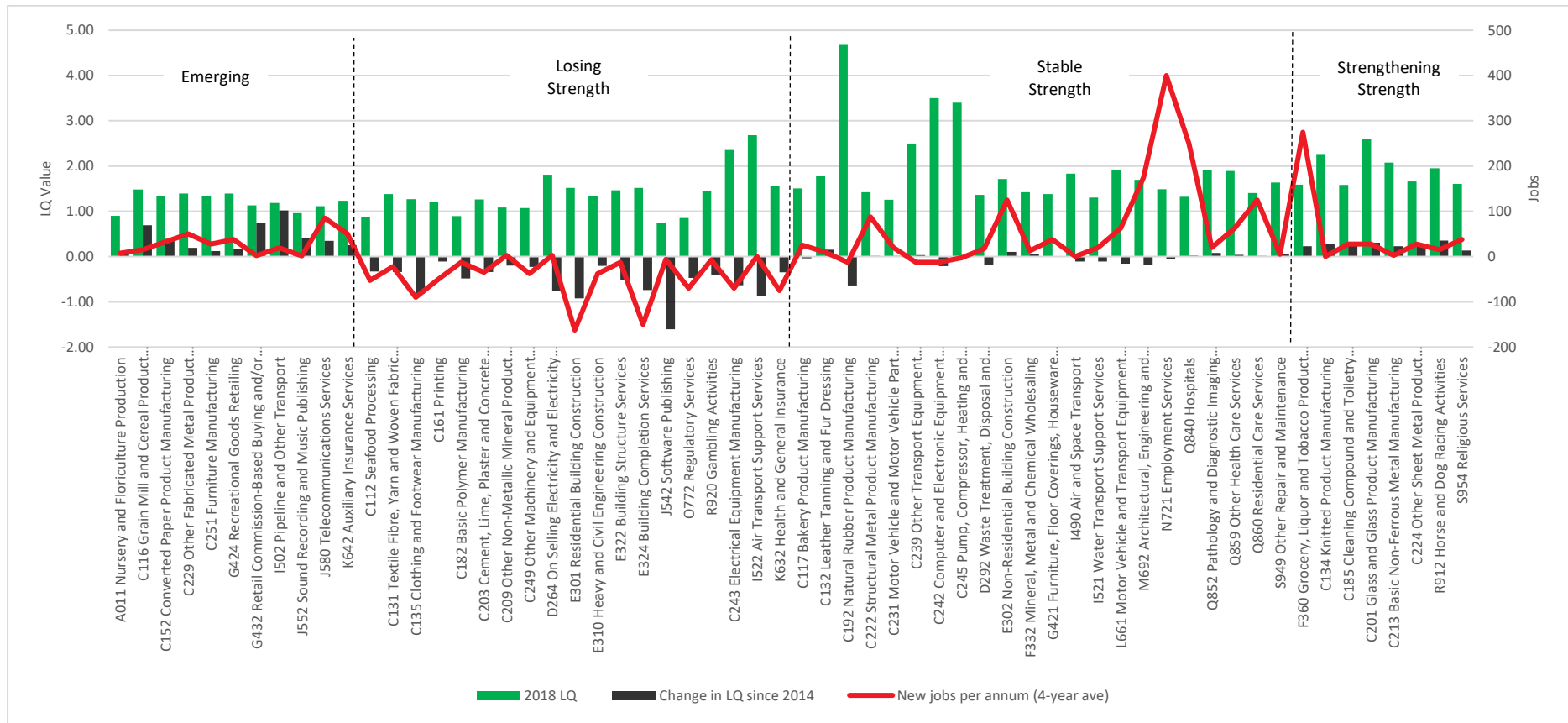
Strategy and policy development should be sensitive to the CCA of a region. The competitiveness and growth opportunities that exist could potentially be disrupted and influenced by implementing strategies and policies that do not align with the growth prospects of a region. For example, a region that is strong in dairy production with high LQ could be negatively influenced when policies and strategies are introduced that increase production cost.

Growth Opportunities

Figure 10 shows the change in sub-industry competitive advantage (as illustrated in Table 1 and 2 above) combined with job creation for the higher LQ sub-industries.

The figure reveals the positive, above industry average employment growth for the emerging and strengthening strength sub-industries. Stable strength sub-industries show employment growth similar to national industry growth, while the losing strength industries have below average and negative employment growth.

Figure 10: Competitive Advantage & Job Creation



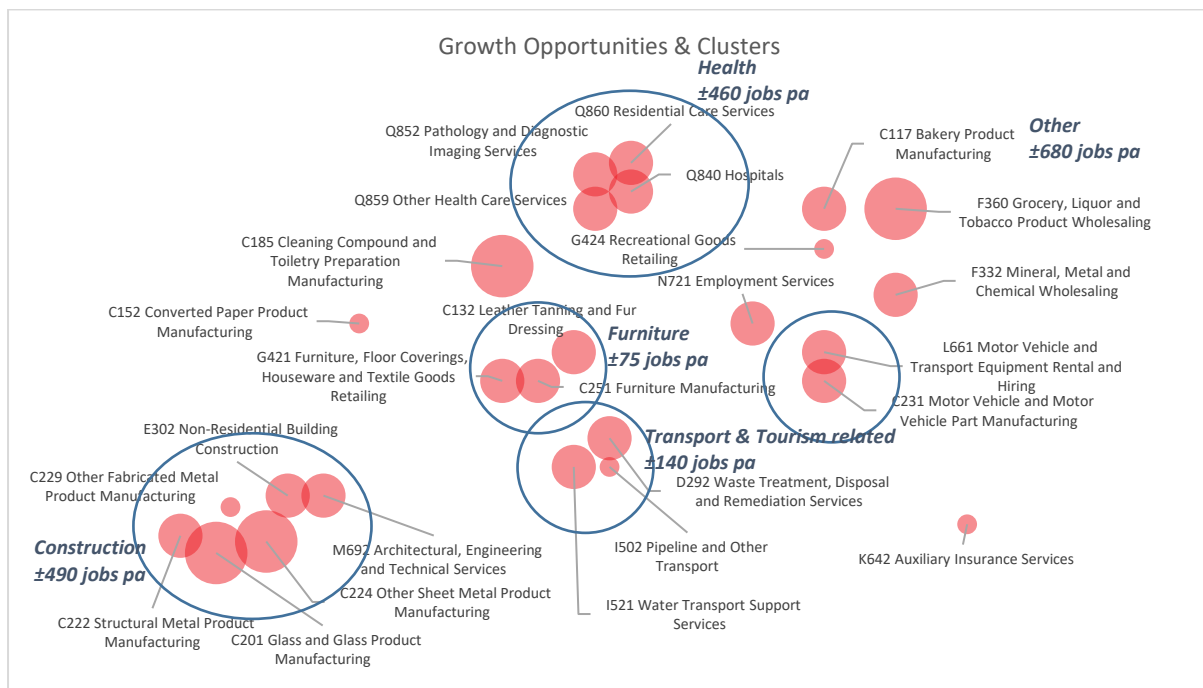
Source: ChristchurchNZ

Sub-industries that exhibit the following characteristics are considered to be short to medium-term growth opportunities for Christchurch:

- Increase in employment over the past 4 years (i.e. local industry is expanding), coupled with
- an increase in national employment numbers (i.e. growing national industry) and an
- improving and highly competitive advantage (LQ).

Monitoring and evaluating over time is required to keep track of changes that might influence future growth. Based on these criteria, the sub-industries that qualify as growth opportunities are illustrated in Figure 11. The sub-industries are clustered according to the sector that best describes the activity while the size of the bubble represents the competitive advantage of the sub-industry (i.e. strengthening strength is the largest, followed by stable strength and emerging). Annexure C gives a detailed description of the sub-industries, the cluster and the type of activities associated with each.

Figure 11: Growth Opportunities for Christchurch⁵



Source: ChristchurchNZ

Christchurch continues to be a base for construction-related activity, particularly in non-residential construction and the related professional and technical services. The investment made and improvement in production by local manufacturing to supply products during the construction period

⁵ It should be noted that the sub-industries identified as growth opportunities most likely form part of clusters that might not have been identified in this analysis. These clusters often have linkages with various sub-industries that form part of the value chain. The aim of this assessment is to identify sub-industries that show potential for growth and development within the Christchurch economy. A separate due diligence of value chains and clusters could flow out from this assessment.

is evident in the growth opportunity sub-industries. These investments have also resulted in exporting of construction-related goods, identified in the export analysis. As the rebuild program is coming to an end, the investment made by manufacturing companies to supply local activity will convert to opportunities for export (nationally and internationally).

The health precinct and the benefit of related activities are evident within the city. With continued investment in the health industry (i.e. wellness) the sub-industries in this cluster is bound for continued growth.

The manufacture and retailing of furniture competitiveness in Christchurch are unexpected, but a welcome result while transport activity in the form of motor vehicle hiring and repair work, coupled with the cruise ship activity at the port of Akaroa (and Lyttleton) confirms the important role of tourism-related activity for employment in Christchurch.

Conclusion

The aim of this report was to build on the result of Volume 1 and to explore sub-industry trends within Christchurch identifying growth opportunities. The assessment method to identify growth industries combines employment and the location quotient changes while exports provided an indication of the linkages that the economy have globally.

The competitive advantage changes that have taken place on a sub-industry level over the past couple of years provides an indication of strategic intervention that could support growth. This varies from providing a supporting role in growing sub-industries to become exporters of their products, to providing turn-around interventions for those that have lost advantage.

The sub-industries that demonstrate an increase in local and national employment over the past 4 years coupled with an improving and high LQ are considered short to medium-term growth opportunities for Christchurch. These sub-industries include construction-related activity, wholesale and retail trade, health, transport and business activity. The growth industries have a realistic opportunity to create 1800 new jobs each year given that the locational advantages of Christchurch provide them with growth opportunities.

The results of this research have identified a possible follow-up analysis to considers the value of exports from the Christchurch ports and the level of employment associated with the industries that export. Understanding the employment opportunities created associated with the export potential could identify specific business growth opportunities.

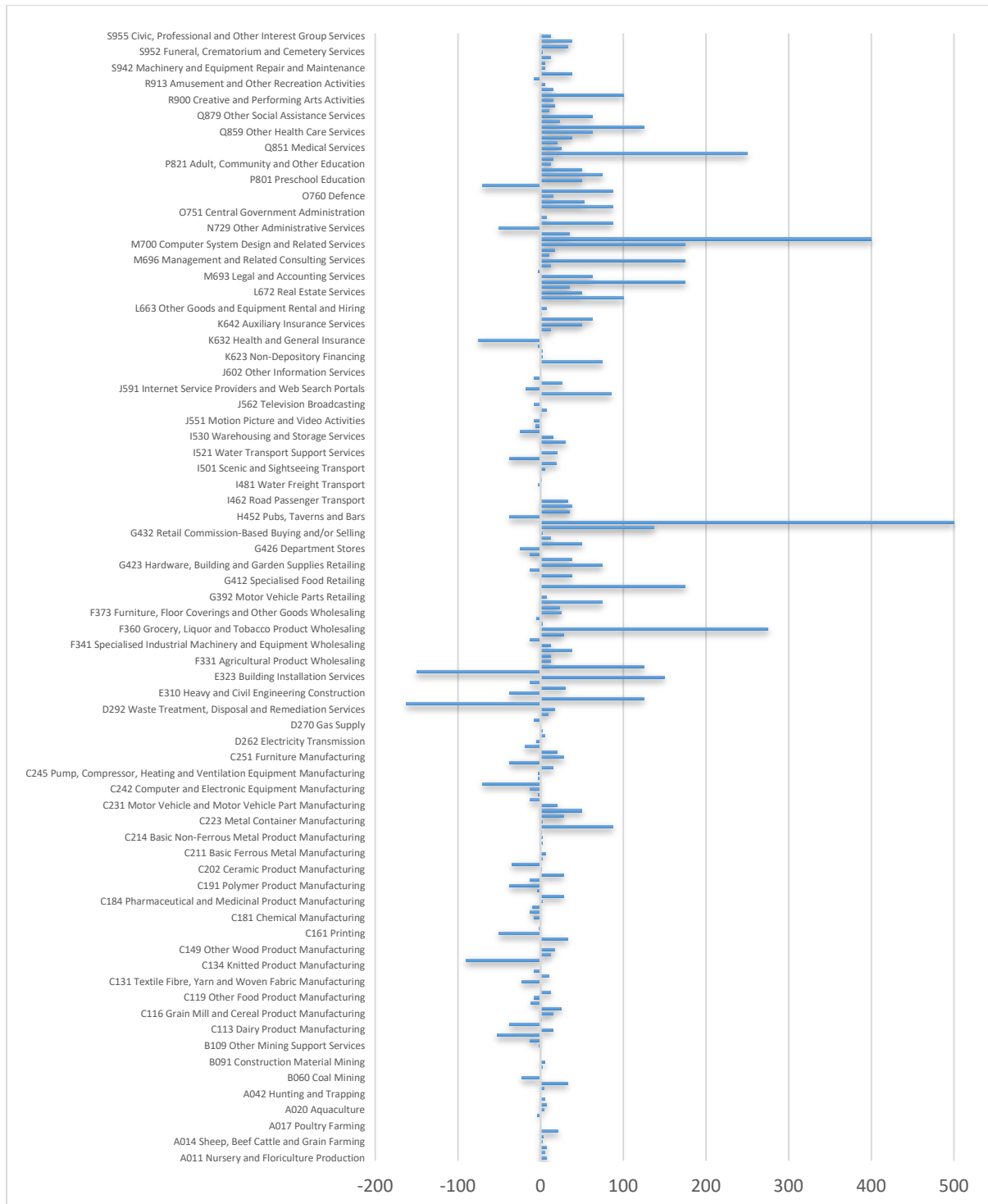
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<http://archive.stats.govt.nz/infoshare/Default.aspx?AspxAutoDetectCookieSupport=1>



Annexure A: Average new employment per annum (2014-2018)



Annexure B: Competitive Advantage

Sub-Industry	Competitive advantage
A011 Nursery and Floriculture Production	Emerging
A012 Mushroom and Vegetable Growing	Average
A013 Fruit and Tree Nut Growing	Low
A014 Sheep, Beef Cattle and Grain Farming	Low
A015 Other Crop Growing	Low
A016 Dairy Cattle Farming	Low
A017 Poultry Farming	Low
A018 Deer Farming	Low
A019 Other Livestock Farming	Low
A020 Aquaculture	Low
A030 Forestry and Logging	Low
A041 Fishing	Low
A042 Hunting and Trapping	Low
A051 Forestry Support Services	Low
A052 Agriculture and Fishing Support Services	Low
B060 Coal Mining	Low
B070 Oil and Gas Extraction	Low
B080 Metal Ore Mining	Low
B091 Construction Material Mining	Low
B099 Other Non-Metallic Mineral Mining and Quarrying	Low
B101 Exploration	Low
B109 Other Mining Support Services	Low
C111 Meat and Meat Product Manufacturing	Low
C112 Seafood Processing	Losing strength
C113 Dairy Product Manufacturing	Low
C114 Fruit and Vegetable Processing	Low
C115 Oil and Fat Manufacturing	Low
C116 Grain Mill and Cereal Product Manufacturing	Emerging
C117 Bakery Product Manufacturing	Stable strength
C118 Sugar and Confectionery Manufacturing	Low
C119 Other Food Product Manufacturing	Low
C121 Beverage Manufacturing	Low
C122 Cigarette and Tobacco Product Manufacturing	Low
C131 Textile Fibre, Yarn and Woven Fabric Manufacturing	Losing strength
C132 Leather Tanning and Fur Dressing	Stable strength
C133 Textile Product Manufacturing	Low
C134 Knitted Product Manufacturing	Strengthening strength

Sub-Industry	Competitive advantage
C135 Clothing and Footwear Manufacturing	Losing strength
C141 Log Sawmilling and Timber Dressing	Low
C149 Other Wood Product Manufacturing	Average
C151 Pulp, Paper and Paperboard Manufacturing	Low
C152 Converted Paper Product Manufacturing	Emerging
C161 Printing	Losing strength
C162 Reproduction of Recorded Media	Low
C170 Petroleum Refining and Petroleum and Coal Product Manufacturing	Low
C181 Chemical Manufacturing	Low
C182 Basic Polymer Manufacturing	Losing strength
C183 Fertiliser and Pesticide Manufacturing	Average
C184 Pharmaceutical and Medicinal Product Manufacturing	Average
C185 Cleaning Compound and Toiletry Preparation Manufacturing	Strengthening strength
C189 Other Basic Chemical Product Manufacturing	Low
C191 Polymer Product Manufacturing	Average
C192 Natural Rubber Product Manufacturing	Stable strength
C201 Glass and Glass Product Manufacturing	Strengthening strength
C202 Ceramic Product Manufacturing	Low
C203 Cement, Lime, Plaster and Concrete Product Manufacturing	Losing strength
C209 Other Non-Metallic Mineral Product Manufacturing	Losing strength
C211 Basic Ferrous Metal Manufacturing	Low
C212 Basic Ferrous Metal Product Manufacturing	Average
C213 Basic Non-Ferrous Metal Manufacturing	Strengthening strength
C214 Basic Non-Ferrous Metal Product Manufacturing	Low
C221 Iron and Steel Forging	Low
C222 Structural Metal Product Manufacturing	Stable strength
C223 Metal Container Manufacturing	Average
C224 Other Sheet Metal Product Manufacturing	Strengthening strength
C229 Other Fabricated Metal Product Manufacturing	Emerging
C231 Motor Vehicle and Motor Vehicle Part Manufacturing	Stable strength
C239 Other Transport Equipment Manufacturing	Stable strength
C241 Professional and Scientific Equipment Manufacturing	Low
C242 Computer and Electronic Equipment Manufacturing	Stable strength
C243 Electrical Equipment Manufacturing	Losing strength
C244 Domestic Appliance Manufacturing	Low
C245 Pump, Compressor, Heating and Ventilation Equipment Manufacturing	Stable strength
C246 Specialised Machinery and Equipment Manufacturing	Low
C249 Other Machinery and Equipment Manufacturing	Losing strength
C251 Furniture Manufacturing	Emerging

Sub-Industry	Competitive advantage
C259 Other Manufacturing	Average
D261 Electricity Generation	Low
D262 Electricity Transmission	Average
D263 Electricity Distribution	Low
D264 On Selling Electricity and Electricity Market Operation	Losing strength
D270 Gas Supply	Stable strength
D281 Water Supply, Sewerage and Drainage Services	Low
D291 Waste Collection Services	Low
D292 Waste Treatment, Disposal and Remediation Services	Stable strength
E301 Residential Building Construction	Losing strength
E302 Non-Residential Building Construction	Stable strength
E310 Heavy and Civil Engineering Construction	Losing strength
E321 Land Development and Site Preparation Services	Average
E322 Building Structure Services	Losing strength
E323 Building Installation Services	Average
E324 Building Completion Services	Losing strength
E329 Other Construction Services	Average
F331 Agricultural Product Wholesaling	Average
F332 Mineral, Metal and Chemical Wholesaling	Stable strength
F333 Timber and Hardware Goods Wholesaling	Average
F341 Specialised Industrial Machinery and Equipment Wholesaling	Average
F349 Other Machinery and Equipment Wholesaling	Average
F350 Motor Vehicle and Motor Vehicle Parts Wholesaling	Average
F360 Grocery, Liquor and Tobacco Product Wholesaling	Strengthening strength
F371 Textile, Clothing and Footwear Wholesaling	Average
F372 Pharmaceutical and Toiletry Goods Wholesaling	Low
F373 Furniture, Floor Coverings and Other Goods Wholesaling	Average
F380 Commission-Based Wholesaling	Average
G391 Motor Vehicle Retailing	Average
G392 Motor Vehicle Parts Retailing	Average
G400 Fuel Retailing	Average
G411 Supermarket and Grocery Stores	Average
G412 Specialised Food Retailing	Average
G421 Furniture, Floor Coverings, Houseware and Textile Goods Retailing	Stable strength
G422 Electrical and Electronic Goods Retailing	Average
G423 Hardware, Building and Garden Supplies Retailing	Average
G424 Recreational Goods Retailing	Emerging
G425 Clothing, Footwear and Personal Accessories Retailing	Average
G426 Department Stores	Average

Sub-Industry	Competitive advantage
G427 Pharmaceutical and Other Store-Based Retailing	Average
G431 Non-Store Retailing	Low
G432 Retail Commission-Based Buying and/or Selling	Emerging
H440 Accommodation	Average
H451 Cafes, Restaurants and Takeaway Food Services	Average
H452 Pubs, Taverns and Bars	Average
H453 Clubs (Hospitality)	Average
I461 Road Freight Transport	Average
I462 Road Passenger Transport	Average
I471 Rail Freight Transport	Low
I472 Rail Passenger Transport	Low
I481 Water Freight Transport	Average
I482 Water Passenger Transport	Low
I490 Air and Space Transport	Stable strength
I501 Scenic and Sightseeing Transport	Low
I502 Pipeline and Other Transport	Emerging
I510 Postal and Courier Pick-up and Delivery Services	Average
I521 Water Transport Support Services	Stable strength
I522 Air Transport Support Services	Losing strength
I529 Other Transport Support Services	Average
I530 Warehousing and Storage Services	Average
J541 Newspaper, Periodical, Book and Directory Publishing	Average
J542 Software Publishing	Losing strength
J551 Motion Picture and Video Activities	Low
J552 Sound Recording and Music Publishing	Emerging
J561 Radio Broadcasting	Low
J562 Television Broadcasting	Low
J570 Internet Publishing and Broadcasting	Losing strength
J580 Telecommunications Services	Emerging
J591 Internet Service Providers and Web Search Portals	Low
J592 Data Processing, Web Hosting and Electronic Information Storage Services	Low
J601 Libraries and Archives	Average
J602 Other Information Services	Low
K621 Central Banking	Low
K622 Depository Financial Intermediation	Low
K623 Non-Depository Financing	Low
K624 Financial Asset Investing	Low
K631 Life Insurance	Low
K632 Health and General Insurance	Losing strength

Sub-Industry	Competitive advantage
K633 Superannuation Funds	Low
K641 Auxiliary Finance and Investment Services	Low
K642 Auxiliary Insurance Services	Emerging
L661 Motor Vehicle and Transport Equipment Rental and Hiring	Stable strength
L662 Farm Animal and Bloodstock Leasing	Low
L663 Other Goods and Equipment Rental and Hiring	Average
L664 Non-Financial Intangible Assets (Except Copyrights) Leasing	Average
L671 Property Operators	Average
L672 Real Estate Services	Average
M691 Scientific Research Services	Average
M692 Architectural, Engineering and Technical Services	Stable strength
M693 Legal and Accounting Services	Average
M694 Advertising Services	Low
M695 Market Research and Statistical Services	Average
M696 Management and Related Consulting Services	Low
M697 Veterinary Services	Low
M699 Other Professional, Scientific and Technical Services	Average
M700 Computer System Design and Related Services	Average
N721 Employment Services	Stable strength
N722 Travel Agency Services	Average
N729 Other Administrative Services	Low
N731 Building Cleaning, Pest Control and Gardening Services	Average
N732 Packaging and Labelling Services	Low
O751 Central Government Administration	Low
O753 Local Government Administration	Average
O754 Justice	Average
O760 Defence	Low
O771 Public Order and Safety Services	Average
O772 Regulatory Services	Losing strength
P801 Preschool Education	Average
P802 School Education	Average
P810 Tertiary Education	Average
P821 Adult, Community and Other Education	Average
P822 Educational Support Services	Low
Q840 Hospitals	Stable strength
Q851 Medical Services	Average
Q852 Pathology and Diagnostic Imaging Services	Stable strength
Q853 Allied Health Services	Average
Q859 Other Health Care Services	Stable strength

Sub-Industry	Competitive advantage
Q860 Residential Care Services	Stable strength
Q871 Child Care Services	Low
Q879 Other Social Assistance Services	Average
R891 Museum Operation	Average
R892 Parks and Gardens Operations	Average
R900 Creative and Performing Arts Activities	Average
R911 Sport and Physical Recreation Activities	Average
R912 Horse and Dog Racing Activities	Strengthening strength
R913 Amusement and Other Recreation Activities	Low
R920 Gambling Activities	Losing strength
S941 Automotive Repair and Maintenance	Average
S942 Machinery and Equipment Repair and Maintenance	Low
S949 Other Repair and Maintenance	Stable strength
S951 Personal Care Services	Average
S952 Funeral, Crematorium and Cemetery Services	Average
S953 Other Personal Services	Average
S954 Religious Services	Strengthening strength
S955 Civic, Professional and Other Interest Group Services	Average

Annexure C: Growth Industries and Clusters

Sub-Industry	Cluster	Companies in Christchurch	Description / Products
C152 Converted Paper Product Manufacturing	Paper, Recycling	BJ Ball Papers, Spicers, B&F Papers	Corrugated paperboard and paperboard container, Paper bag, Paper stationery, Sanitary paper
C229 Other Fabricated Metal Product Manufacturing	Building / Construction	Dawson Springs & Wire Forms, Fortress Fastners, Bellamy & East	Spring and wire product, Nut, bolt, screw and rivet, Metal coating and finishing
C251 Furniture Manufacturing	Furniture, Retail	Kovacs Furniture Factory, Montreux Furniture	Wooden furniture and upholstered seat, Metal furniture, Mattress
G424 Recreational Goods Retailing	Retail	Supasport, Burnsco, Tarata	Sport and camping equipment, Entertainment media, Toy and game, Marine equipment, Newspaper and book retailing
I502 Pipeline and Other Transport	Transport, Infrastructure		
C117 Bakery Product Manufacturing	Food, Hospitality, Retail	Kidds, Couplands	Cake and pastry manufacturing (factory based), Biscuit manufacturing (factory based),
C132 Leather Tanning and Fur Dressing	Retail	DyeTech, Sonder Leather	Repair, manufacturing of leather goods
C222 Structural Metal Product Manufacturing	Building / Construction	VIPStructural Steel, Canterbury Steel Structures	Structural steel fabricating, Prefabricated metal building, Architectural aluminium product, Metal roof and guttering
C231 Motor Vehicle and Motor Vehicle Part Manufacturing	Transport	TMC Trailers, Steelbro	Motor vehicle body and trailer, Automotive electrical component manufacturing
D292 Waste Treatment, Disposal and Remediation Services	Health, Recycling	Junkman, Interwaste	Waste treatment and disposal
E302 Non-Residential Building Construction	Building / Construction	Naylor Love, Leighs construction	Office, Hotel, Commercial development
F332 Mineral, Metal and Chemical Wholesaling	Wholesale/Retail, Transport, Agriculture	Allied Petroleum Limited, Dominion Trading Co, Ecochem	Wholesaling in Petroleum product, Metal and mineral, Industrial and agricultural chemical product
G421 Furniture, Floor Coverings, Houseware and Textile Goods Retailing	Furniture, Retail	Target Furniture, Global living, Bed, Bath & Beyond	Furniture retailing, Floor coverings retailing, Houseware retailing,
I521 Water Transport Support Services	Transport, Infrastructure, Tourism	Lyttleton & Akaroa Harbour	Stevedoring services, Port and water transport terminal operations, ater transport support services

Sub-Industry	Cluster	Companies in Christchurch	Description / Products
L661 Motor Vehicle and Transport Equipment Rental and Hiring	Construction, Infrastructure, Tourism	Juicy, Avis, Hertz, Kennards	Passenger car rental and hiring and other transport equipment rental and hiring
M692 Architectural, Engineering and Technical Services	Construction, Medical, Infrastructure	CRL, Beca, Athfield Architects	Architectural services, Surveying and mapping services, Engineering design and engineering consulting services, Scientific testing and analysis services
N721 Employment Services	Health, Government, Construction, Education	Advanced Personnel Services, Bishop recruitment	Employment services
Q840 Hospitals	Health, Science, Education	Christchurch hospital, Woman's Hospital	Hospital
Q852 Pathology and Diagnostic Imaging Services	Health, Science, Education	Canterbury Health laboratories, Canterbury SCL, Pacific Radiology	Pathology and diagnostic imaging services
Q859 Other Health Care Services	Health, Education	St Johns, Lifecare ambulance	Ambulance & other health services
Q860 Residential Care Services	Health	Addington Gardens Rest Home, Golden Age Retirement, Heritage Lifecare	Aged Care and residential care
F360 Grocery, Liquor and Tobacco Product Wholesaling	Agriculture, Retail	Canterbury Seafood, Westmeat, Growers Direct	General line grocery wholesaling, Meat, poultry and smallgoods wholesaling, Dairy produce wholesaling, Fish and seafood wholesaling, Fruit and vegetable wholesaling, Liquor and tobacco product wholesaling
C185 Cleaning Compound and Toiletry Preparation Manufacturing	Health, Retail, Hospitality, Commercial	Ecochem, Peerage	Cleaning compound manufacturing, Cosmetic and toiletry preparation manufacturing
C201 Glass and Glass Product Manufacturing	Building / Construction	Stake Glass, NZ Frameless Glass	Glass products
C224 Other Sheet Metal Product Manufacturing	Building / Construction	Priest, Pioneer Sheetmetals	Sheet metal manufacturing



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