MINISTRY OF BUSINESS, INNOVATION & EMPLOYMENT
HĪKINA WHAKATUTUKI

New Zealand's Export Advantage:

Composition and performance of New Zealand's comparative advantages from 1995-2018

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HĪKINA WHAKATUTUKI

Authors

Regions, Sectors, Business & Economic Development Team

Daniel Baigent, Daniel.baigent@mbie.govt.nz

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Ministry of Business, Innovation & Employment
PO Box 1473
Wellington 6140
New Zealand
www.mbie.govt.nz
0800 20 90 20
Media enquiries: media@mbie.govt.nz

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Abstract

This report provides an overview of the competitiveness of New Zealand's exports since 1995, using the detailed 6-digit harmonised classification system (HS6). The analysis uses an index of comparative advantage to measure the international competitiveness of traded product lines in the economy, at annual intervals. The index used, Revealed Comparative Advantage (RCA), is the ratio of New Zealand's share of trade in a particular line of products, against the world's share of trade in the same product line. The paper also looks at services exports, although it is constrained in this regard by limits on the disaggregation of service categories in international trade data. The findings of this project were used to inform the MBIE report titled New Zealand's areas of (economic) strength: A literature review (2022).

JEL classification

O10, O25, O130, O43

Keywords

Economic Development, Revealed Comparative Advantage

Executive summary

- **New Zealand's comparative advantages reflect strong and enduring ties to agricultural production.** For each year from 1995 to 2018, New Zealand sustained comparative advantages across 214 product lines (5.4% of the total number of products that New Zealand exported at the HS6 digit level). In 1995 these 214 product lines accounted for 69.8% (US $9.2 billion) of New Zealand's overall merchandise export value, compared to 73.9% (US $29.1 billion) of export value in 2018. This finding indicates that for the most part New Zealand's export growth has primarily been driven by adding scale and/or variety to existing product lines, where comparative advantages have already been present, rather than diversifying into new product lines. This group of products includes a range of Dairy, Meat, Forestry and Fruit products, but also chemical derivatives such as Casein, and more processed food commodities such as Wine and Infant Formula.
- **A diverse range of comparative advantages have emerged (or re-emerged) in recent years.** These products are varied but still tend to leverage off New Zealand's base agricultural activity. This includes products like 'Worked fibreboard, >0.8g/mc2', 'Salmon', and 'Bovine leather, pre-tanned', and suggests that the evolution of comparative advantages in merchandise exports have a tendency to follow path-dependent, rather than path-defying, trajectories.
- **A range of comparative advantages were lost in the decade following the global financial crisis (GFC), particularly within the Machinery and electrical, and Textiles and clothing industries.** Overall, New Zealand experienced a narrowing in the range and number of comparative advantages, from a peak of 809 product lines in 2006, to 531 product lines in 2018. However, for some of these product lines (particularly within specific Plastics, stone & glass and Chemical products) the loss of comparative advantage was more a function of product lines not matching growth in the world market, rather than the product lines themselves declining in nominal export value.
- **The results of this project show that the value derived from New Zealand's merchandise exports has become increasingly concentrated within industries that have experienced higher than average world growth**, indicating that in the decade to 2018, productive export capacity in the economy has reallocated resources towards more efficient and profitable product lines. However, in 2018 there was still a sizable proportion of export value derived from comparative advantages (22.8% of export value in 2018) that have under-performed relative to growth in the global marketplace. This finding was an increase from Nesbit's (2013) results for 2007 which showed this group of 'potential star' product lines accounted for only 5.7% of total export value. This indicates that while New Zealand has increasingly leaned into existing export

advantages, some product lines have not scaled up their export activities in line with growth in the world market and may not have captured all the potential benefits from an increase in world demand.

- **Outside of merchandise trade, New Zealand's service exports have exhibited significant growth momentum in recent years.** However, the only two service categories with discernible comparative advantages in 2018 were Travel services (tourism) and Personal, cultural and recreational services (tourism related). A number of other service subsectors (including Insurance and pension services, Financial services, and Charges for the use of intellectual property n.i.e.,) have experienced rapid growth in recent years, with growth in export value of 16.4%, 8.7%, and 14.1% per annum from 2008 – 2018, respectively. This rate of growth has greatly outpaced growth in the world market for these services and likely masks comparative advantages that may be apparent if lower levels of aggregation were possible. Overall, these sub-sectors are well placed to emerge as future comparative advantages if growth momentum can be sustained.
- **Strong path dependencies in agricultural (and related) production imply that any noticeable shift in future goods production would require concerted and deliberate efforts.** Global megatrends such as climate change and the increasing scrutiny that emissions intensive industries are placed under, reiterate the continued importance of policy settings that influence 'how' goods are produced in New Zealand, rather than a narrow focus on 'what' goods are produced.

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What do we mean by comparative advantage?

Comparative advantage is a core concept of international trade theory, dating back to Ricardo (1817) who recognised that countries tend to allocate resources to their most productive use, i.e., to the production of goods and services that incur lower opportunity costs than their trading partners. Comparative advantage posits that countries benefit from specialising in a certain class of products for export, while importing the rest – even if the country holds an absolute advantage in all products. The concept has been widely drawn from in the economics discipline to understand where advantages or disadvantages exist for a given economy, and thereby help assess where future export potential may reside.

Since the work of Balassa (1965), a standard method for the measurement of comparative advantage is the calculation of a revealed comparative advantage (RCA) index on the basis of trade flows. It is calculated as the ratio of a country's share of trade in a particular line of products, against the world's share of trade in the same product line. When a country has a revealed comparative advantage for a given product line (RCA >1), it is inferred to be a competitive producer and exporter of that product line. The numerator of the RCA ratio is the export share a given product has in a country's total exports and reflects the ability of firms to attract domestic resources (technology, land, labour and capital) towards their production lines. The denominator in the RCA ratio is the overall export share a given product occupies in the world market and reflects the outcome of the same competition for productive resources globally.

$$RCA_{ij} = \frac{\text{share of product } j \text{ in country } i\text{'s total exports}}{\text{share of product } j \text{ in world exports}}$$

As an example, global exports of apples represented 0.04% of world trade, valued at $US 7.4 billion in 2018. Of this total, New Zealand exported $US 559 million worth. Since New Zealand's total merchandise exports for that year were $US 39.4 billion, apples accounted for 1.4% of New Zealand's total goods exports. Dividing 1.4% by 0.04% gives an RCA of 34.7, indicating that NZ is 34.7 times more productive than an average country in producing apples.

Products with an RCA index greater than 4 are generally considered to have a 'high comparative advantage' (French, 2017). So in the example above, we can say that New Zealand has a high revealed comparative advantage in apple exports, accounting for 7.3% of global trade in the commodity. In other words, New Zealand has specialised in the production of apples far more than the average country.

While the RCA metric is useful in providing an approximation of a country's competitive export strengths, government measures that affect competitiveness such as tariffs, and other trade distortions, are not taken into account in the standard Balassa RCA index. Findings should therefore be interpretated as a suggestive, rather than definitive, account of New Zealand's comparative advantages.

What do we know about New Zealand's export advantages?

A range of studies have analysed New Zealand's revealed comparative advantage (see for example Lattimore 2019a, Lattimore 2019b, Nesbitt 2013, Ballingall and Briggs 2002).

Lattimore (2019a) investigated merchandise trade at the 2 and 4-digit Harmonised System (HS) product level from 1989 - 2017, a period of trade liberalisation for New Zealand. Lattimore found that, at the broad 2-digit level, New Zealand had revealed comparative advantages in the broad categories of Animal, Vegetable and Food industries. Lattimore found that New Zealand's comparative advantage in Animal, Food, and Wood products had increased over time – particularly for Food and Wood products.

Lattimore found that at a lower level of aggregation (HS 4-digit) there had been considerable changes over the period. Lattimore found that the export competitiveness of Animal, Vegetable and Food industries had grown in a wide variety of product lines (not just in wine). Some ingredients of Food exports were sourced from the farm sector, but production was increasingly seen to be incorporating imported ingredients. The author also commented that the removal of most import protections had unveiled export competitive manufactures in Textiles and Clothing, Machinery, Transport equipment and other categories.

Nesbitt (2013) used detailed 6-digit HS codes to get an in-depth picture of New Zealand's exports for 2007, and to compare that with Ballingall and Brigg's (2002) findings for 1999. She found that New Zealand's strongest revealed comparative advantage was still largely in processed and unprocessed products from the Food and Fibre sectors. However, the more detailed analysis revealed a strong comparative advantage in several niche areas, including product lines such as Therapeutic respiration apparatus, for which Fisher and Paykel is a global leader. The services analysis indicated a comparative advantage in tourism and international education.

In terms of changes over time, Nesbitt found that New Zealand gained and lost a revealed comparative advantage in more than 200 product lines between 1999 and 2007. To put this in context, New Zealand had a revealed comparative advantage (RCA>1) in more than 600 HS6 level products overall in 2007.

An updated view of New Zealand's export advantages

This brief updates and extends the analysis of New Zealand's revealed comparative advantage (RCA) and market share, published by Nesbit in 2013. It updates Nesbit's approach by analysing exports across a time-series (from 1995 – 2018), rather than at two points in time. This added level of granularity allows us to better assess comparative advantages that have emerged, declined, increased and/or persisted in the economy over time.

The analysis focuses predominantly on merchandise (goods) exports because this has the most detailed data available on an internationally comparable basis. Services exports are also included, but the analysis is limited to higher levels of aggregation. The analysis does not cover income from overseas investments, such as sales by overseas subsidiaries of New Zealand firms.

Section 1 summarises product level (HS6) changes in revealed comparative advantage over-time, in terms of three sub-groupings:

1) 'Sustained advantages' – product lines that maintained comparative advantage (RCA>1) across the entire time series (1995 – 2018);

2) 'Emerging advantages' – product lines that gained or regained comparative advantage in the decade to 2018 (RCA>1); and

3) 'Declining advantages'– product lines that have lost a previously held comparative advantage in the decade to 2018 (RCA<1).

'Emerging' and 'declining' advantages were assessed for the decade following the global financial crisis (2008 – 2018), a period in which New Zealand's trade advantages consolidated toward a narrower range of product lines. A series of appendices are also included in this brief, which provide detailed product level statistics for each of the three sub-groupings.

Section 2 assesses the performance of product lines which held a comparative advantage in 2018 (RCA>1) in terms of industry composition and growth relative to world markets, following Nesbit (2013) and Ballingall and Briggs (2002).

To give an indication of relative magnitude, in the year ended December 2018, New Zealand revenue from overseas included:

- Merchandise exports valued at $US 39.4 billion
- Services exports valued at $US 17.7 billion.

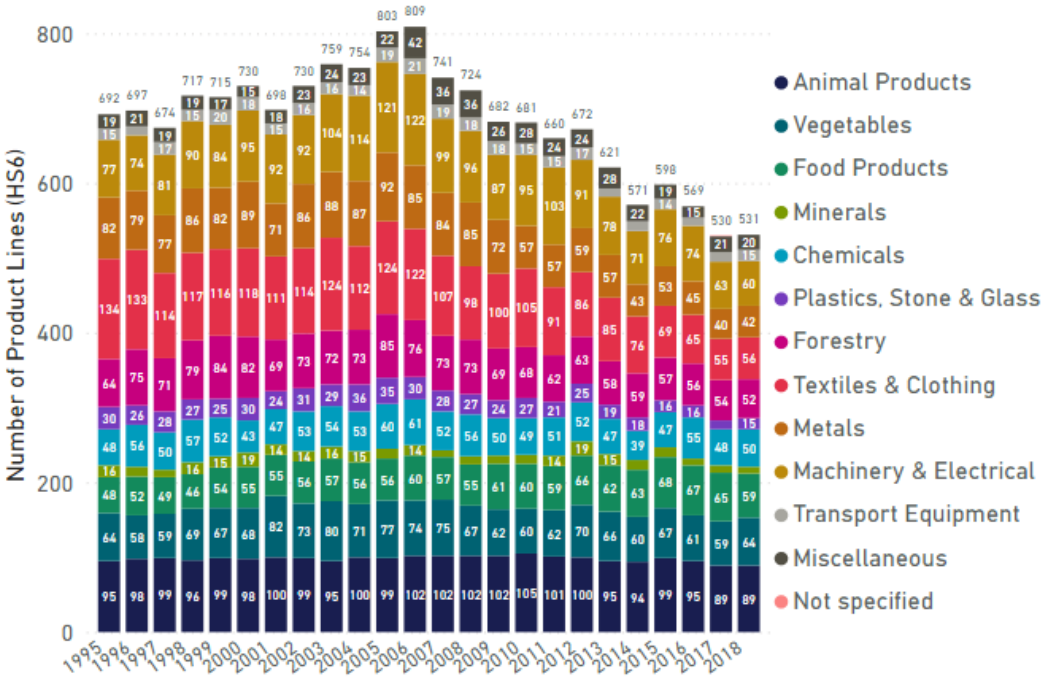
Since 2008, the value of New Zealand's merchandise exports has grown at a faster rate than world exports, and New Zealand's share of world trade has increased (from 0.19% of world trade in 2008, to 0.21% in 2018). In terms of merchandise export value, product lines with a 'high' comparative advantage (RCA > 4) accounted for 74.9% of New Zealand's merchandise exports (US$ 29.5 billion) in 2018. Product lines with a low-medium comparative advantage (RCA >1 and <4) accounted for a further 7.9% of New Zealand's merchandise exports (US$ 3.1 billion). And the remaining 17.3% of New Zealand's exports (US$ 6.8 billion) was made up of product lines with no discernible comparative advantage. In 2018, New Zealand exported across 3,935 different product lines (at the HS 6-digit level), out of a possible 5,038.

Table 1. Merchandise exports (HS6) by RCA value

	RCA Value	# of product lines in 2018	Export Value $US 2018	% of total Export Value
High RCA	> 4	216	$29.5b	74.9%
Medium RCA	>1 & <4	315	$3.1b	7.9%
No RCA	< 1	3404	$6.8b	17.3%
Total		3935	$39.4b	100%

For product lines without revealed comparative advantage in 2018 (RCA <1), the export value of this group is often linked to extractive industries, including: *Gold in unwrought forms* (US$ 414 million), *Crude petroleum oils* (US$ 393 million) and *Liquefied natural gas* (US$ 272 million). The group also contains product lines that were *not specified according to kind* (US$ 1.46 billion). Thousands of other product lines are also found within this group, typically exporting at relatively small scales.

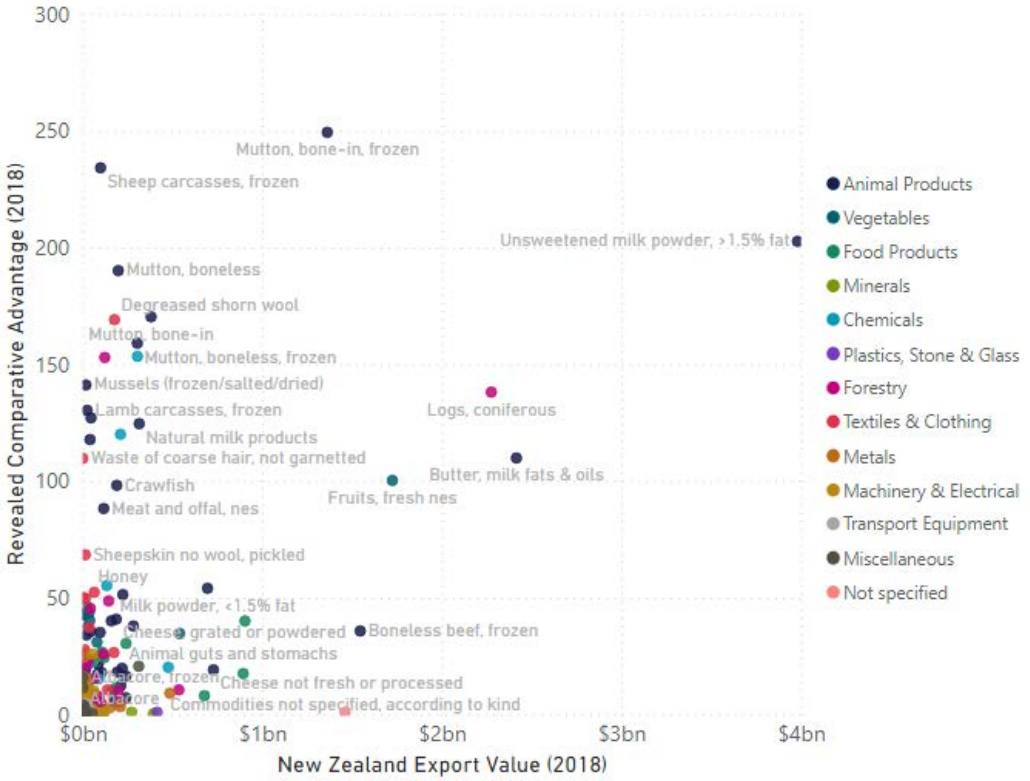
Figure 1: Product lines (HS6) with RCA >1



As shown in Figure 1, the number of product lines New Zealand exports with revealed comparative advantage (RCA >1) has narrowed since 2006 (from 809 product lines in 2006 to 531 product lines in 2018). Changes in the number of products with comparative advantage can occur due to structural changes in the composition of our exports and/or changes in the size of the world market for a given product line. Some

products can lose comparative advantage despite a nominal increase in export value. This can occur if a product line does not increase in value at the same pace as New Zealand's total exports, and/or when the pace of growth in the world market exceeds what has occurred locally. For example, *Animal feed preparations* had a comparative advantage in 2016, but didn't in 2017 despite exports of the product line lifting US$2.4 million.

Figure 2. NZ merchandise exports with comparative advantage (RCA>1) by nominal export value US$ (2018)



Much of New Zealand's export success in recent years has been driven by strong demand from China for New Zealand's produce (particularly dairy), which has helped drive export growth in Food Products, Animal Products, Vegetables and Forestry exports. Proximity to the Asia-Pacific region has also been beneficial and a driver in developing and sustaining New Zealand's comparative advantages in these areas.

As shown in Figure 2, in 2018 New Zealand's strongest comparative advantages were primarily linked to agricultural production, with HS6 categories of *Mutton, bone-in frozen, Sheep carcasses, frozen* and *Unsweetened milk powder, >1.5% fat*, having the highest RCA indices. In the same year, some products stood out as having both high RCAs and high export values, including *Unsweetened milk powder, >1.5% fat*, *Coniferous logs, Butter, milk fats and oils*, and *Fruits, fresh nes.*

Section 1: New Zealand's advantages reflect strong ties to agricultural production

As shown in Table 2, from 1995 to 2018, New Zealand sustained comparative advantage across 214 product lines (RCA>1). In 1995 these 214 product lines accounted for 69.8% ($9.2 billion) of New Zealand's overall merchandise export value, compared to 73.9% ($29.1 billion) of export value in 2018. This finding indicates that for the most part New Zealand's export growth has primarily been driven by adding scale and/or variety to existing product lines, where comparative advantages have already been present, rather than diversifying into new product lines.

A key characteristic of this group of exports with 'sustained advantage' is that the 214 product lines are, for the most part, directly or indirectly linked to agricultural production. This includes a range of Dairy, Meat, Forestry and Fruit products, but also chemical derivatives such as Casein, and more processed food commodities such as Wine and Infant Formula. Even within the 17 Machinery & Electrical product lines, those related to agricultural machinery are prevalent. This includes products such as *Machines for cleaning, sorting, grading eggs/fruit, Commercial equipment for heating food*, and *Germination, bee-keeping plants.* However, while these higher-tech machinery products have endured longstanding comparative advantages, exporting at scale in these product lines is often constrained by the limited size of the world market for such goods. Appendix 1 provides summary statistics for each product line in this group.

Table 2. Product lines with sustained RCA > 1 from 1995 to 2018

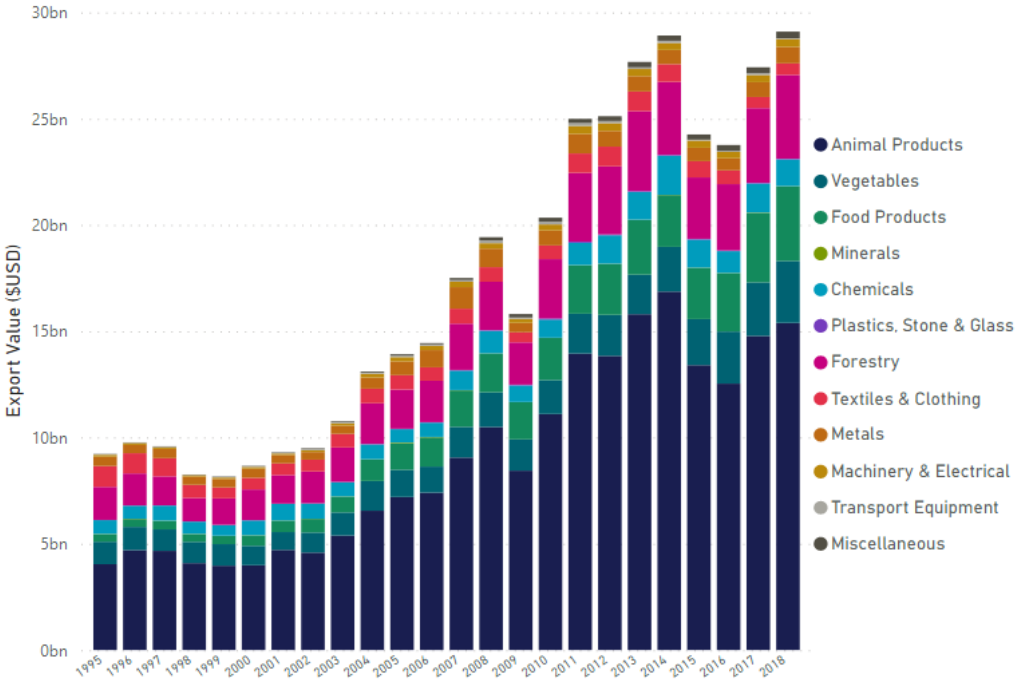
Industry	Number of Product Lines (HS6)	Export Value ($USD) 1995	Export Value ($USD) 2018
Animal Products	67	$4,039,619,827	$15,390,769,097
Forestry	25	$1,555,908,657	$3,941,151,737
Food Products	24	$354,921,668	$3,496,288,946
Vegetables	31	$1,058,917,316	$2,916,578,369
Chemicals	12	$648,903,661	$1,261,756,589
Metals	8	$443,246,890	$776,469,427
Textiles & Clothing	23	$979,077,417	$543,074,361
Machinery & Electrical	17	$88,666,483	$368,992,795
Miscellaneous	1	$12,374,369	$311,952,549
Transport Equipment	3	$29,371,467	$37,226,526
Plastics, Stone & Glass	1	$7,221,444	$32,280,891
Minerals	2	$11,649,490	$18,816,095
Total	**214**	**$9,229,878,689**	**$29,095,357,382**

The 214 product lines that have sustained advantage since 1995, reflect how important path dependencies have been in shaping New Zealand's export composition. For more than 100 years New Zealand has developed world-leading capabilities in the efficient production of product lines in response to strong market demand (e.g., firstly from the

UK, and more recently China) and the fact that commodities could be produced at scale from our natural resource base and could be transported long distances. The skill sets and capabilities in the economy have developed largely in line with this activity. These capabilities are likely to have reinforced growth in adjacent and downstream industries, such as in higher value-added Food Products, with wine and honey product lines being more recent examples.

Indeed, exports of competitive Food Products (RCA>1) represent New Zealand's most rapidly growing comparative advantages in terms of export value since 2008, with compounded annual growth totalling 6.7% (see Figure 4). Food product exports are often based on further processing of agricultural production but are also increasingly supplemented by imported ingredients such as cereals, flours, sugar and spices (Lattimore 2019a).

Figure 3. Value of product lines that sustained RCA >1 from 1995 - 2018



New Zealand's emerging advantages are diverse

A range of new comparative advantages have emerged in New Zealand's export basket over the decade to 2018, following the global financial crisis. This group of 'emerging advantages' are defined here as product lines that did not have RCA in the decade prior to 2018 but had amassed an RCA value greater than 1.0 by 2018. As shown in Table 3, 217 product lines fit this definition, representing $1.8 billion (4.6%) of merchandise export value in 2018.

The value of exports within the emerging product lines typically experienced rapid growth since 2008, with compounded annual growth averaging 12%. The leading product lines by export value in 2018 for this group included: Worked fibreboard, >0.8g/mc2 (US$ 197 million), Bovine leather, pre-tanned (US$ 138 million), and Turbo-jet engine, > 25 KN (US$ 119 million).

Table 3. New product lines that developed comparative advantages (RCA > 1) by 2018

Industry	Number of Product Lines (HS6)	Export Value ($USD) 2018	Compound Annual Growth Rate 2008 - 2018
Forestry	15	$287,596,577	21.32%
Machinery & Electrical	33	$258,427,342	10.42%
Food Products	21	$212,509,968	18.05%
Metals	23	$205,260,122	3.53%
Animal Products	13	$197,319,650	14.38%
Textiles & Clothing	24	$183,003,015	24.80%
Chemicals	28	$173,647,036	11.47%
Plastics, Stone & Glass	12	$82,856,990	17.80%
Minerals	4	$67,681,963	47.44%
Transport Equipment	8	$59,634,940	-1.06%
Vegetables	22	$57,863,470	7.61%
Miscellaneous	14	$30,218,671	3.60%
Total	**217**	**$1,816,019,744**	**11.97%**

On the surface, the 'emerging advantages' product lines were dispersed across product groupings, with no individual grouping accounting for a significantly outsized share of products or export value. However, under closer examination, individual product lines were often directly or indirectly related to agricultural activity, suggesting the evolution of comparative advantages in New Zealand has continued to follow path-dependent, rather than path-defying, trajectories. For example, within the Machinery and electrical grouping, emerging advantages included Industrial machinery for food/drink prep, Machine parts for food/drink prep, Harvesting machinery, nes, Straw or fodder balers, Machines for cocoa/chocolate manuf, Manure spreaders, fertilizer distributors, and Dryers for wood, paper.

A range of comparative advantages have been lost over the last decade

By 2018, comparative advantages had been lost across 342 different product lines (see Table 4). These 'declining' product lines are defined as products that lost a comparative advantage (RCA<1) by 2018, which had been held at any year of the preceding decade. Together this group of products accounted for US$ 1.4 billion (3.6%) of merchandise export value in 2018, compared to US$ 2.66 billion (8.9%) in 2008 — reflecting a decline of 6.1% in export value per annum since 2008.

There were 24 Plastics, Stone & Glass product lines which accounted for the largest share (33%) of export value for this group in 2018. And while growth in the value of the 24 Plastics, Stone & Glass product lines averaged 1.57% per annum since 2008, this was well below growth in the world market over the same period, which averaged 6.6%. Similarly, for the 24 Chemical product lines, where local growth averaged 4.0% — far slower than the 17.1% growth evident in the world market for the same product lines. So, for the two aforementioned product groups, the loss of comparative advantage has been more a function of being unable to match growth in the world market, rather than the product lines declining in nominal export value.

For the remaining industry groups, the loss of relative advantage is mostly driven by declining export value at the national level. This includes 72 Machinery & Electrical products and 58 Textiles & Clothing product lines. Appendix 3 provides key summary statistics for each of the 'declining' product lines.

Table 4. Product lines that lost comparative advantages (RCA<1) in the decade to 2018

Industry	Number of product lines (HS6)	Export Value ($USD) 2018	Compound Annual Growth Rate 2008 - 2018
Plastics, Stone & Glass	24	$469,115,676	1.57%
Chemicals	24	$173,118,358	3.99%
Metals	43	$167,982,584	-7.88%
Minerals	7	$141,535,221	-8.36%
Machinery & Electrical	72	$133,458,352	-11.05%
Food Products	18	$96,303,980	-6.70%
Miscellaneous	26	$90,146,149	-3.85%
Textiles & Clothing	58	$44,723,590	-15.90%
Transport Equipment	11	$33,917,956	-17.06%
Forestry	23	$26,512,876	-12.07%
Vegetables	21	$21,277,960	-7.13%
Animal Products	15	$21,052,534	-9.20%
Total	**342**	**$1,419,145,236**	**-6.10%**

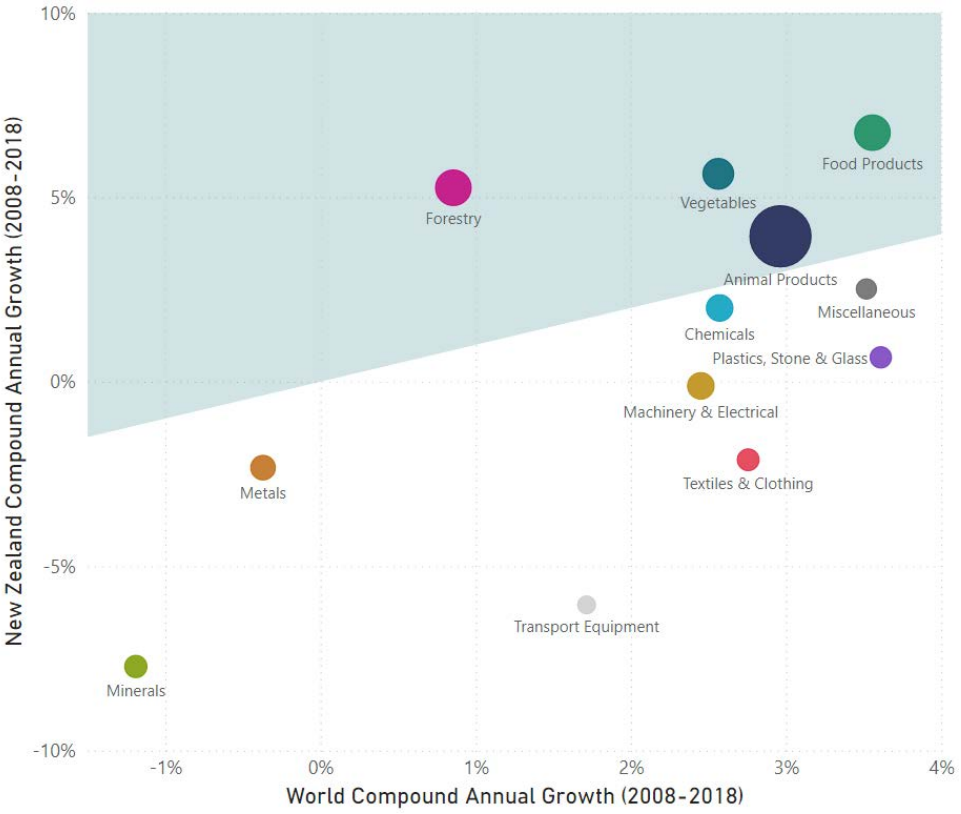
Section 2: New Zealand's comparative advantages relative to world markets

This section focuses on the performance of New Zealand product lines, relative to growth in the world market, in line with previous studies undertaken by Nesbit (2013) and Ballingall and Briggs (2002).

When aggregated to broad HS industry groups, the nominal export value of New Zealand's comparative advantages has grown most rapidly for Forestry, Animal Products, Vegetables, and Food Products. As depicted in the upper right quadrant of Figure 4, the value of New Zealand's comparative advantages in Food Products, Vegetables, and Animal Products has outpaced the already strong growth evident in the

world market since 2008. Industries in this corner reflect what Ballingall and Briggs (2002) defined as New Zealand's 'star performers'. These are industries where New Zealand's exports have grown faster than the world market, where world exports have grown faster than average, and where New Zealand has a revealed comparative advantage (RCA>1).

Figure 4. Merchandise export growth relative to world growth, for product lines (aggregated by industry) with comparative advantage (RCA>1 in 2018)



*Note the size of each circle indicates relative export value

Industries in the bottom right of Figure 4 (Chemicals, Machinery & Electrical, Textiles & Clothing, and Plastics, Stone & Glass and Miscellaneous) reflect areas where New Zealand has underperformed relative to growth in the global market since 2008. At the aggregate level, reasons for this underperformance are well documented and include the removal of most import protections for manufactures in the late 1980's (Lattimore 2019a), the increased competitiveness of China as a manufacturing powerhouse, the long run effect of the 'tyranny of distance' to overseas markets (Blakeley et al 2009, Lattimore 2019a), the rapid rise of other textile and clothing producers (particularly in East and South Asia), and increased competition for wool producers against alternative synthetic materials.

A key finding of Nesbit's 2013 analysis of New Zealand's revealed comparative advantages, was that in 2007 products with comparative advantage (RCA>1) were concentrated in areas with slower than average world growth. Specifically, Nesbit found that 26.9% of New Zealand's competitive product lines were 'losers in slow growing markets' i.e., growth in the world market for those product lines was below average, but where New Zealand's exports growth was even slower.

Nesbit found that the export value of 36.2% of New Zealand's competitive product lines were 'winners in slow growing markets' i.e., New Zealand was growing quickly into world markets that were experiencing below average growth. The updated findings in this paper show that since Nesbit's results from 2007, the composition of competitive product lines in New Zealand's export basket has shifted significantly (table 5 summarises these changes).

Table 5. Summary of the relative performance of merchandise exports (HS6) by area

	Value of exports in each area ($US billions 2018)	# of product lines	% of total exports (2018)	2007 result from Nesbit (2013)
Star performers[1]	$10.64	131	27.0%	14.6%
Potential stars[2]	$8.96	118	22.8%	5.7%
Losers in slow growing markets[3]	$4.02	100	10.2%	26.9%
Winners in slow growing markets[4]	$8.84	180	22.5%	36.2%
No comparative advantage	$6.78		17.2%	16.6%
Total exports	**$39.36**		**100.0%**	**100%**

- The value of New Zealand's 'star performing' comparative advantages have increased as a share of total export value. New Zealand's star performers (competitive product lines that have grown faster in New Zealand than in the already above average growth seen in the world market) accounted for 27.0% of New Zealand's export value in 2018 (up from the 14.6% reported by Nesbit for 2007).

[1] Star performers – world exports grew faster than average, NZ exports grew even faster and RCA>1

[2] Potential stars – World exports grew faster than average, but NZ exports grew slower than world exports and RCA>1

[3] Losers in slow growing markets - world exports grew slower than average, NZ exports even slower and RCA>1

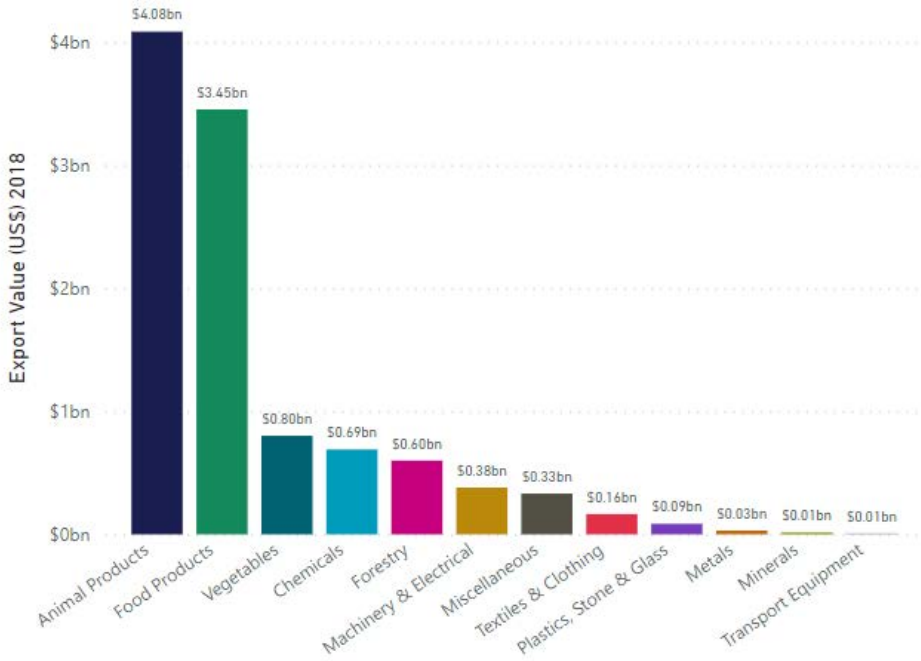
[4] Winners in slow growing markets – world exports grew slower than average, but NZ exports grew faster and RCA>1

- New Zealand's 'potential stars' (competitive product lines that have lost market share in high growth markets) accounted for 22.8% of exports (much higher than the 5.7% reported by Nesbit for 2007).

- The proportion of export value derived from competitive product lines (RCA>1) that were losing market share in slow growing product lines (the losers in slow growing markets) declined to 10.2% of total merchandise export value in 2018.

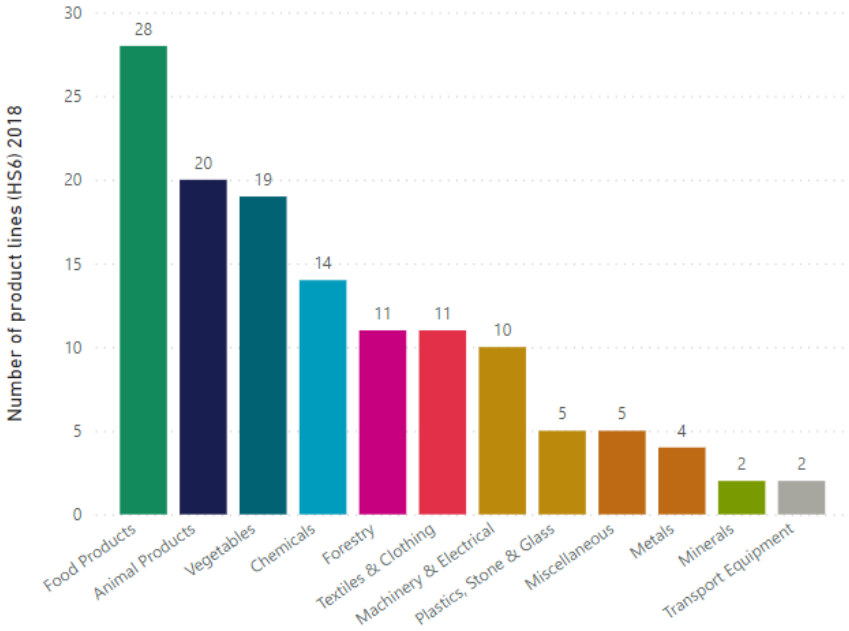
- Export value derived from competitive product lines (RCA>1) that were gaining market share in slow growing markets (the winners in slow growing markets) declined to 22.5% of total export value.

Figure 5. New Zealand's 'star performing' product lines by industry and nominal export value $US 2018



In 2018, the export value of New Zealand's 'star performing' product lines were heavily concentrated within Animal Products and Food Products, as shown in Figure 5. These two industries also accounted for the greatest number of different product lines (HS6), as shown in Figure 6. Notable product lines from this group include *Wine*, *Infant formula*, *Food preparations nes*, *Butter, milk fats & oils*, *Honey*, *Fresh cheese, curd*, *Boneless beef*, and *Therapeutic respiration apparatus.*

Figure 6. Number of 'star performing' product lines (HS6) by industry 2018



These results indicate the value derived from New Zealand's merchandise exports is now concentrated more heavily in industries that have experienced higher than average world growth, suggesting productive export capacity in the economy has reallocated resources towards more efficient and profitable product lines. This is particularly evident in the 'star performers' category, where compounded annual growth in export value totalled 9.7% from 2008 to 2018, compared to 5.1% world growth across the same product lines.

Ballingall and Briggs (2002) defined 'potential stars' as competitive product lines where world exports have grown faster than average, but in which New Zealand exports have grown at a slower rate. This updated analysis shows New Zealand's 'potential stars' now account for a considerably larger share of export value (22.8%), much higher than the 6% reported by Nesbit for 2007. This finding indicates that a large share of product lines have not managed to scale up their export activities in line with growth in the world market. These product lines may not have captured all the potential benefits from an increase in world demand. There are a range of possible explanations for this, including supply side constraints, limitations on market access, increased competition, environmental limitations and distance to markets – some of which may be amenable to intervention.

Following Nesbit's (2013) suggestion, this group of product lines could be a good place to start when considering where marginal improvements could provide a significant boost to export performance, and path dependencies suggest building on these existing strengths may have a greater likelihood of success. Various product lines are found within this group, including some that are outside the dominant agricultural industries.

However, there are also a number of product lines that are very much on the margins within the 'potential stars' group, i.e., growth is only fractionally behind world growth, or the product lines reflect incumbent producers that already hold considerable market share in their respective categories — so care should be taken when interpreting this finding.

Figure 7. New Zealand's 'potential star' product lines by industry and nominal export value $US 2018

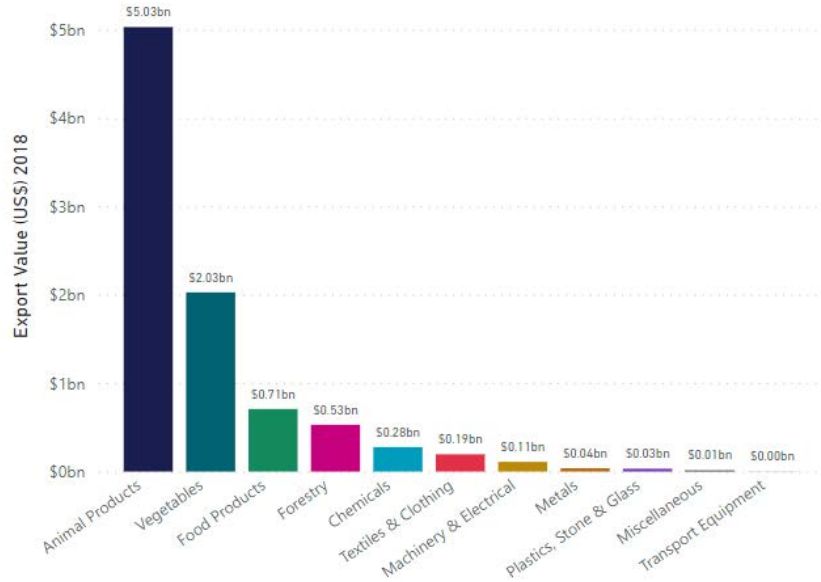
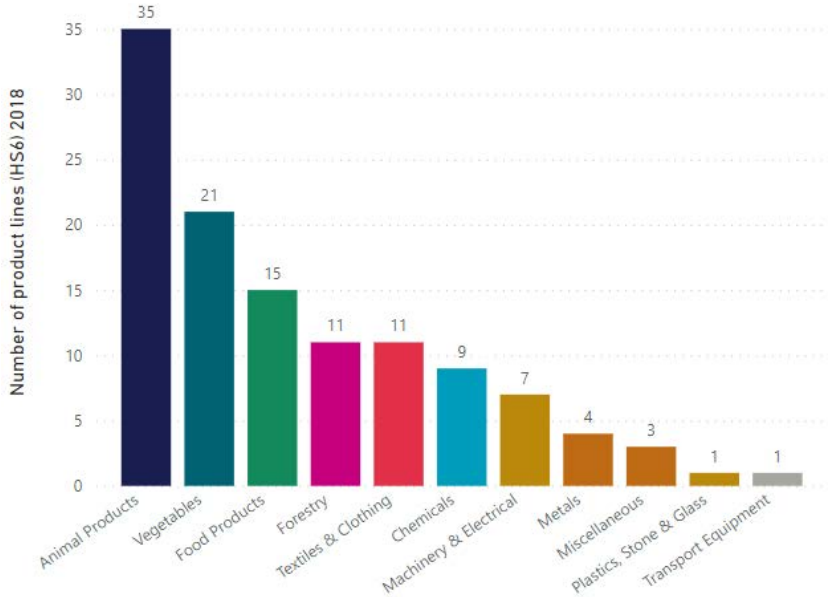


Figure 8. Number of 'potential star' product lines by industry 2018

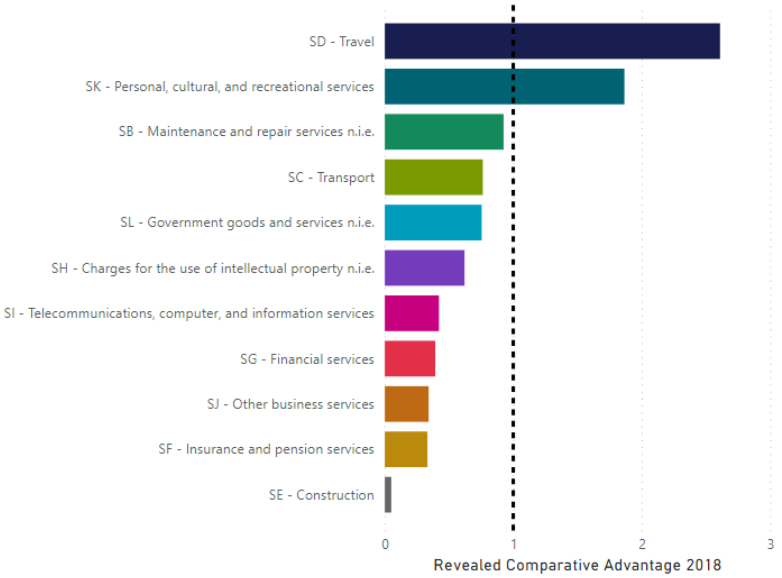


New Zealand's service exports

The importance of New Zealand's service exports has risen in recent years, accounting for 30.8% of New Zealand's total exports in 2018, up from 27.2% in 2008. Growth in the value of services exports has averaged 4.3% per annum from 2008 - 2018, fractionally higher than growth in the world marketplace for services (4.1%) and faster than growth in New Zealand's merchandise exports over the same period (2.7%).

Travel services (tourism) accounted for the majority of New Zealand's service exports (61.5% of service exports in 2018), with growth of 4.9% per annum from 2008-2018. Travel services reflect New Zealand's strongest revealed comparative advantage in service exports, with an RCA value of 2.6 in 2018. The only other broad service category with comparative advantage (RCA>1) in 2018 was Personal, cultural and recreational services (RCA of 1.9). This finding is similar to Nesbit's (2013) results for 2007. A breakdown of personal travel from previous studies suggests New Zealand has a strong comparative advantage in education related travel (e.g., spending by international students in New Zealand). This is likely still the case, however, the coverage of world trade data collected at this lower level of aggregation is not comprehensive. The only service sub-category showing comparative advantage (RCA>1) of sufficient data quality, was Air Transport (RCA value of 1.6 in 2018), within Transport services.

Figure 9. New Zealand's revealed comparative advantage in service exports, 2018



The strength of New Zealand's comparative advantage in Travel services has risen slightly over the last decade, while Personal, cultural and recreational services has steadily declined (from an RCA of 2.7 in 2008, to an RCA of 1.9 in 2018). This decline has been driven by world growth outpacing local growth in the category. While New Zealand does not have comparative advantages (RCA>1) in Insurance and pension

services, Financial services, and Charges for the use of intellectual property n.i.e., using the RCA metric; these service categories have experienced rapid growth in recent years (with growth in export value of 16.4%, 8.7%, and 14.1% per annum from 2008 – 2018, respectively). This rate of growth has greatly outpaced growth in the world market for these services and likely masks comparative advantages that may be apparent if lower levels of aggregation were possible. Overall, these service industries exhibit significant growth momentum, and alongside considered policy settings, are well placed to emerge as future comparative advantages.

Table 6. Performance of New Zealand's trade in services

Service	Services Export Value US$ millions 2018	% Share	NZ Compound Annual Growth Rate 2008-2018	World Compound Annual Growth Rate 2008-2018
SB - Maintenance and repair services n.i.e.	$275	1.6%		9.4%
SC - Transport	$2,297	13.0%	1.6%	1.4%
SD - Travel	$10,875	61.5%	4.9%	4.0%
SE - Construction	$17	0.1%		1.9%
SF - Insurance and pension services	$137	0.8%	16.4%	3.5%
SG - Financial services	$594	3.4%	8.7%	3.3%
SH - Charges for the use of intellectual property n.i.e.	$755	4.3%	14.1%	5.8%
SI - Telecommunications, computer, and information services	$777	4.4%	6.0%	7.4%
SJ - Other business services	$1,342	7.6%	1.4%	5.0%
SK - Personal, cultural, and recreational services	$458	2.6%	2.1%	5.8%
SL - Government goods and services n.i.e.	$170	1.0%	3.5%	1.1%
Total services	$17,697	100.0%	4.3%	4.1%

Concluding remarks

The findings of this study reiterate the strong and enduring ties New Zealand has to agricultural production. These path dependencies imply that any noticeable shift in future production would require concerted and deliberate efforts. Global megatrends such as climate change and the increasing scrutiny that emissions intensive industries are placed under, reiterate the continued importance of policy settings that influence 'how' goods are produced in New Zealand, rather than a narrow focus on 'what' goods are produced.

A key finding in this paper is that a sizable proportion of export value was being derived from comparative advantages (22.8% of export value in 2018) that have under-performed relative to growth in the global marketplace. A useful avenue of future research would be to develop a deeper understanding of the barriers to growth for product lines or firms that have held on to comparative advantages but have not managed to scale up export activities in line with growth in the global marketplace. Research into the impact of past government initiatives on the comparative advantages analysed in this note would also provide useful insights for policymaking.

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Notes on data sources and method

This analysis used merchandise trade data from 1995 to 2018, maintained by the Harvard Centre for International Development. The data set contains trade flows classified via Harmonised System (HS) 1992, at the 6-digit level, categorising approximately 5,000 product lines of trade between all countries.

The most disaggregated (6-digit or HS6) data allows us to drill down into more specific product lines to better understand what is driving the higher level findings and identify strong performing products that have been hidden due to aggregation with other weaker performing product lines. Individual product lines can exhibit very different growth trajectories within a given industry. For New Zealand, this is particularly relevant given the prevalence of various niche product lines, which can be obscured at broad industry aggregations.

However, even at the HS6 level, product line groupings are sometimes too aggregated for our purposes, as they do not separate out all the products that are important for individual economies. For example, kiwifruit does not have an individual product line at the HS6 level in the 1992 version of the HS used in this paper. Rather, this product is captured within the *Fruits, fresh nes* product line.

Raw data on trade in goods is provided by United Nations Statistical Division (COMTRADE). The data is then cleaned by Harvard Growth Lab researchers using the Bustos-Yildirim Method which uses bilateral trade flows to account for inconsistent reporting between countries, and provides for more reliable accounting.

In addition to trade in goods, the analysis used data on services trade provided by the World Trade Organisation: annual trade in services data are jointly produced with UNCTAD in cooperation with the ITC and UNSD. Data are sourced from Eurostat, the OECD, the IMF, and national statistical sources. Where possible, reported data has been complemented by estimates produced by the WTO and UNCTAD .

Revealed comparative advantage

Theory/background

Comparative advantage is a classic concept within the theories of international trade (Wosiek and Visvizi 2021). David Ricardo's seminal theory of 1817 predicts that locations benefit when they trade in the goods in which they have a comparative advantage i.e. those produced with a higher relative productivity within that location (Hausmann, Hidalgo and Stock, et al. 2014). Comparative advantage posits that countries should specialise in a certain class of products for export but import the rest – even if the country holds an absolute advantage in all products.

The product cycle theory developed by Vernon (1966, 1979) attributes comparative advantage in the production of new products to sources that may change over the life cycle of the products (Siggel 2006). In the early stages of the cycle, comparative advantage is based on the first-come advantage of the country in which the product was developed. The cost advantage shifts to lower cost countries, where their advantage is likely to come from factor abundance. In further stages, scale economies and learning effects may become the source of comparative advantage.

Method

A commonly used measure of comparative advantage is the revealed comparative advantage (RCA) index. This assesses the share a group of goods or services has in a given country's exports and in the world exports to a selected market (Wosiek and Visvizi 2021). The Balassa index is an early and commonly used version, which is calculated as the ratio of two shares: the numerator is the share of a country's exports of the good/service of interest in its total exports, and the denominator is the share of world exports of the same good/service in total world exports. Values of the RCA index lower than 1 indicate that an economy has no comparative advantages, values between 1 and 4 show a weak to moderate comparative advantage, and those over 4 signify a strong comparative advantage.

Numerous empirical studies explore modifications of the main index. For example, French (2017) developed some measures that he argued overcome one of the main limitations of the Balassa Index – that the index is affected by subsidies and other trade distortions – and which get closer to a country's fundamental comparative advantage.

Appendix 1: 'Sustained advantages': Export product lines that sustained comparative advantage (RCA>1) from 1995-2018

HS 6-digit product description	Export value 1995 $USD	Export value 2018 $USD	RCA for 1995	RCA for 2018
Unsweetened milk powder, >1.5% fat	$491,900,855	$3,980,262,414	52.1	202.7
Butter, milk fats & oils	$441,520,075	$2,415,179,260	44.4	109.9
Logs, coniferous	$437,413,175	$2,275,408,572	33.4	138.1
Fruits, fresh nes	$332,382,148	$1,724,463,747	108.5	100.3
Boneless beef, frozen	$602,793,924	$1,545,566,975	47.8	35.7
Mutton, bone-in, frozen	$354,648,421	$1,361,934,667	264.9	249.4
Infant foods of cereals, milk	$24,413,321	$903,899,029	7.8	40.0
Grape wines, < 2l pack	$24,239,019	$894,044,704	1.4	17.5
Cheese not fresh or processed	$286,715,390	$728,006,404	14.2	19.1
Milk powder, <1.5% fat	$219,835,265	$695,239,093	23.1	54.0
Food preparations nes	$55,861,489	$678,053,187	2.4	8.0
Apples	$362,119,945	$539,111,070	44.7	34.7
Lumber, coniferous < 6mm	$275,397,656	$535,377,330	5.8	10.5
Aluminium, unwrought	$337,441,878	$485,153,867	9.1	9.1
Methyl alcohol	$287,295,510	$476,430,458	42.9	20.2
Mutton, bone-in	$63,175,126	$380,704,456	147.8	170.4
Natural milk products	$19,820,422	$314,714,992	40.6	124.6
Therapeutic respiration apparatus	$12,374,369	$311,952,549	4.9	20.6
Casein	$181,864,158	$304,769,991	72.2	153.4
Mutton, boneless, frozen	$148,177,010	$304,262,408	172.6	159.1
Milk and cream, >6% fat	$11,021,185	$282,314,124	4.8	37.9
Fresh cheese, curd	$30,465,786	$241,100,047	10.2	16.4
Boneless beef	$63,762,192	$240,232,827	5.0	7.1
Honey	$6,291,247	$223,532,538	6.1	51.3
Animal guts and stomachs	$78,080,963	$219,784,319	22.3	19.7
Whole fish, frozen, nes	$62,455,641	$211,767,250	12.7	12.3
Casein glues and derivatives	$95,689,958	$210,473,594	91.1	120.0
Aluminium, unwrought, alloy	$78,029,680	$209,620,269	3.4	3.3
Chem wood pulp, sulphate, conifer, bleached	$125,100,400	$205,076,642	4.1	5.3
Mutton, boneless	$23,036,069	$198,203,977	140.4	190.2
Milk, 1-6% fat	$6,060,076	$193,419,566	1.2	18.2
Crawfish	$62,918,435	$190,010,258	75.5	98.2
Cheese, grated or powdered	$4,184,043	$186,909,045	4.7	40.8
Malt extract	$27,271,355	$180,356,358	6.5	11.2
Degreased shorn wool	$415,250,056	$177,100,743	142.4	169.1
Fish fillets, frozen	$216,770,129	$176,613,253	21.2	5.5
Greasy shorn wool	$164,164,820	$173,926,490	29.0	26.5
Molluscs, shellfish nes, preserved	$34,625,843	$163,869,481	12.1	9.8
Bone-in beef, frozen	$41,363,428	$159,365,557	30.7	40.1
Chem wood pulp, sulphate, conifer, unbleached	$67,020,502	$144,464,479	35.1	48.6
Albumins, nes	$37,956,060	$134,070,507	116.6	55.2
Mechanical wood pulp	$113,822,810	$122,869,866	64.0	152.9
Bovine meat, not livers, preserved	$20,268,044	$119,200,854	5.9	24.3
Meat and offal, nes	$83,223,673	$117,246,734	89.0	88.2
Semi-chemical wood pulp	$9,265,622	$115,698,059	4.0	25.9
Flour, meal of meat, for animal feed	$11,880,497	$106,120,281	10.1	26.7
Cheese processed	$27,656,485	$104,907,981	8.3	17.9

Sheep carcasses, frozen	$35,040,994	$99,366,850	209.0	234.2
Paper, multi-ply, clay	$21,986,096	$98,671,566	2.9	5.3
Horses, not pure-bred	$46,076,176	$97,083,232	32.0	35.1
Paper, Kraftliner, unbleached, uncoated	$26,839,407	$89,817,995	2.8	7.6
Peptones, proteins, nes	$20,212,547	$87,524,485	12.2	15.3
Buttermilk, cream	$40,534,696	$86,665,733	33.0	21.5
Non-food animal products	$16,226,549	$85,341,697	12.0	23.9
Bovine offal, frozen	$21,683,053	$82,970,231	14.3	17.2
Bovine, sheep fats	$60,891,119	$79,889,160	19.9	30.9
Mixed condiments, seasoning, sauces nes	$27,658,541	$70,143,299	6.6	3.4
Avocados	$6,357,110	$69,355,783	8.8	5.7
Shaped coniferous wood	$31,914,120	$68,741,632	13.3	15.6
Potatoes, prepared, frozen	$8,362,997	$68,386,050	1.9	4.5
Carpets, wool/hair, tufted	$24,834,172	$64,469,395	21.4	52.3
Germination, bee-keeping plant	$6,323,221	$62,219,430	3.5	10.1
Onions and shallots	$62,254,062	$60,629,308	21.1	8.7
Aluminium waste	$13,001,617	$59,244,243	1.5	2.1
Panels, laminated wood, nes	$3,590,634	$58,647,522	2.7	8.1
Seed, vegetable, nes	$5,915,507	$58,396,574	2.8	6.1
Machines for cleaning, sorting, grading eggs/fruit	$1,353,979	$53,265,575	3.9	25.8
Sheep & equine offal, frozen	$25,300,058	$46,555,503	155.0	127.1
Whole fish, nes	$38,772,276	$45,136,150	8.6	5.6
Sweetened milk powder, >1.5% fat	$33,967,661	$43,590,317	31.6	35.5
Cherries, fresh	$3,478,625	$42,054,807	3.7	6.5
Whalebone & horns	$28,854,892	$40,985,168	93.9	117.8
Soups & broths	$4,992,150	$40,337,046	2.5	7.4
Vegetables, nes	$46,311,214	$39,388,006	19.6	4.5
Peas, frozen	$20,111,725	$39,014,698	34.7	40.2
Ice cream	$22,806,203	$38,592,098	7.0	4.4
Wood carpentry, nes	$27,603,941	$36,955,544	6.2	2.3
Sheepskin with wool, raw	$4,136,741	$36,250,402	3.1	37.3
Seed, rye grass, for sowing	$6,719,710	$34,875,227	18.8	43.4
Lactose	$15,795,261	$33,203,763	23.5	14.2
Ply sheet, coniferous <6mm	$5,302,693	$32,841,174	6.7	23.5
Commercial equipment, heating food	$8,304,890	$32,778,526	2.7	2.8
Plastic goods for packing	$7,221,444	$32,280,891	1.6	1.9
Flour, meal of fish, for animal feed	$9,457,697	$31,010,783	1.7	3.3
Newsprint	$135,345,150	$31,006,937	4.4	1.5
Single fruit, veg juice	$4,633,433	$30,341,670	2.8	5.5
Whey	$9,259,558	$28,451,028	5.0	4.5
Hydraulic power engine, nes	$3,166,586	$27,536,051	1.3	2.8
Bulbs and others, dormant	$5,459,383	$27,534,404	2.7	13.1
Other milk and cream	$3,324,862	$26,104,697	3.1	11.2
Electro-magnets, nes	$7,582,778	$25,518,615	3.2	4.2
Extracts, juices of meat, fish	$2,171,156	$25,419,377	7.7	46.2
Wood particle board	$35,543,191	$24,944,795	3.8	1.3
Lamb carcasses, frozen	$127,835,578	$24,919,949	311.4	130.3
Vaccines, veterinary	$6,606,900	$24,680,963	4.1	3.2
Parts of milking/dairy machines	$10,373,495	$24,374,381	6.4	12.0
Refrigerator cabinets	$16,821,277	$23,880,025	3.6	1.9
Num controlled tools to bend, fold metal	$10,010,955	$22,995,451	6.7	4.6

Rowing boats, canoes	$2,843,764	$22,469,394	1.2	4.4
Cranberries	$1,374,465	$22,030,362	6.8	3.3
Jams, jellies, pastes	$8,030,459	$22,021,984	4.7	4.0
Parts of agricultural, bee-keeping machines	$1,334,226	$21,887,796	1.4	7.4
Bovine tongue, frozen	$11,926,949	$21,063,261	16.8	34.0
Beans, shelled	$3,757,797	$20,297,490	8.8	14.3
Mixes/doughs for bread, pastry	$5,063,730	$19,603,728	2.9	2.5
Peas, dried	$14,818,633	$19,111,117	7.0	4.9
Plywood, softwood <6mm	$36,089,369	$18,214,952	9.3	2.9
Mussels (frozen/salted/dried)	$39,908,537	$18,155,340	196.8	141.2
Vegetables, nes, dried	$3,310,319	$18,007,524	2.2	5.7
Tanned furs, whole, nes	$28,937,923	$17,869,746	15.6	14.5
Toilet paper	$15,774,022	$16,882,139	5.8	2.1
Potatoes	$7,878,428	$16,375,957	1.6	2.5
Dairy machinery	$9,160,736	$15,752,833	10.2	11.7
Milking machines	$1,727,821	$15,639,154	14.9	15.5
Vegetable mixtures, frozen	$14,502,968	$15,596,335	26.8	8.4
Horses, pure-bred	$7,526,223	$15,058,978	5.2	4.4
Wood chips, coniferous	$42,241,935	$14,872,589	19.7	7.1
Degreased wool, nes	$52,805,593	$14,736,500	105.9	49.7
Sweet corn, frozen	$13,399,621	$14,550,126	34.0	16.1
Pasta, not uncooked/stuffed	$4,225,528	$14,351,775	3.6	2.2
Fish, in pieces, preserved	$11,898,983	$14,097,572	5.0	2.8
Seed, clover	$10,827,526	$13,992,152	67.9	43.2
Sheepskin no wool, pickled	$189,385,179	$13,765,624	118.3	68.4
Paper labels, printed	$9,212,378	$13,762,873	2.7	1.8
Drilling tools, not rock	$3,697,586	$13,714,226	1.1	1.6
Weighing machine parts	$1,280,615	$13,667,011	1.1	6.9
Waste of iron or steel industry	$1,427,782	$13,633,190	3.2	12.6
Fish oils except liver	$1,506,334	$13,326,524	1.4	3.6
Sailboats	$25,085,711	$11,684,215	13.3	2.6
Worked fibreboard, 0.5-0.8 g/mc2	$20,999,999	$11,209,765	30.9	8.2
Milk, <1% fat	$1,368,638	$11,144,139	1.4	7.5
Hop cones, ground, & lupulin	$3,049,433	$10,975,849	4.9	8.6
Crawfish, frozen	$6,967,778	$10,897,094	4.0	9.7
Sails, synthetic fibre	$423,788	$10,764,328	3.4	27.7
Fuel pumps, filling stations	$1,822,423	$10,296,605	1.5	6.2
Paper waste, mechanical pulp	$4,946,807	$9,886,040	2.3	2.7
Other fish meat, frozen	$14,406,811	$9,855,069	4.8	1.8
Tuna, nes	$3,073,470	$9,833,534	2.7	9.4
Aquatic invertebrates, nes	$5,353,322	$9,750,944	2.6	4.6
Fish roes & livers, frozen	$5,249,528	$9,419,761	2.2	4.5
Apple juice	$12,149,547	$9,418,920	3.9	1.9
Seed, forage plants, nes	$4,711,991	$9,094,775	10.9	8.0
Animal fats, oils, hydrogenated	$36,365,199	$8,983,788	86.1	19.1
Pears	$10,585,334	$8,528,413	3.9	1.6
Mackerel, frozen	$1,516,893	$8,476,366	1.1	1.8
Yarn of carded wool, >85% wool	$16,182,453	$8,418,856	14.0	11.2
Albacore, frozen	$9,380,504	$7,823,193	13.9	9.6
Hake, frozen	$7,692,480	$7,622,851	11.4	7.2
Bovine livers, frozen	$6,243,790	$7,164,684	15.1	14.5
Bones, simply or unworked nes	$23,906,904	$7,057,872	50.7	14.3
Ester gums	$3,693,920	$6,883,983	9.3	8.3
Calendars	$2,230,835	$6,701,266	2.6	6.1

Goat meat	$3,378,020	$6,591,039	29.4	10.5
Protein concentrates	$8,149,784	$6,504,373	9.0	1.4
Weighing machinery, cap 30-5000kg	$2,441,052	$6,388,313	6.7	4.7
Oysters	$6,724,924	$6,180,163	11.8	10.1
Safety headgear	$1,789,710	$6,162,526	1.2	1.0
Frozen fruits and nuts	$4,324,811	$6,154,701	3.3	1.1
Hay mowers & cutter bars, tractor mounting	$1,821,581	$6,079,126	1.4	2.3
Gelatin, animal glues, nes	$6,044,925	$6,015,294	2.8	1.6
Other edible animal products	$784,447	$5,873,764	2.2	4.0
Beans, frozen	$3,136,693	$5,473,628	6.1	6.8
Carrots and turnips	$3,277,464	$5,427,809	3.4	1.8
Ambergris, civet, pharmaceutic use	$2,556,540	$5,414,960	7.2	8.2
Seed, fruits and spores, nes	$1,663,436	$5,359,012	3.9	6.3
Kaolin	$10,221,708	$5,182,905	2.8	1.4
Bovine semen	$628,943	$4,547,263	1.7	5.3
Leather, nes	$2,861,154	$4,485,997	5.2	8.1
Electrical insulators, non-glass/ceramics	$3,055,826	$4,367,259	2.0	1.5
Mussels	$2,940,911	$4,179,058	8.1	5.5
Electrodes for arc welding, metal	$2,895,709	$3,970,770	2.1	1.7
Other meat, offal & blood, preserved	$1,432,989	$3,953,425	6.1	4.5
Paper, kraft, 150-225 g/m2, unbleached,uncoated	$1,094,208	$3,814,023	2.3	3.1
Gland extracts, therapeutic	$3,177,587	$3,812,769	4.8	6.8
Squid (frozen/salted/dried)	$74,149,389	$3,532,937	22.3	2.3
Seed, fescue	$262,863	$3,517,306	1.3	9.1
Lamb carcasses	$5,171,391	$3,449,584	3.2	1.7
Other raw hides	$5,509,662	$3,383,386	8.7	8.1
Shark	$536,503	$3,193,082	4.8	42.5
Flatfish, frozen	$3,402,349	$3,095,810	8.1	2.8
Inflatable pleasure craft	$1,441,992	$3,072,917	4.1	3.2
Sweet corn	$5,775,845	$3,061,699	6.0	1.5
Terpenic oils, nes	$2,613,698	$3,034,336	39.2	15.1
Sheep carcasses	$7,639,789	$2,836,833	24.5	3.4
Non-food fish and crustaceans	$4,097,217	$2,538,347	8.9	1.8
Twine ropes, polyethylene, nes	$1,875,507	$2,393,638	2.9	1.3
Pipes, copper-zinc alloy	$6,447,842	$2,354,406	6.1	1.9
Weighing machinery, nes	$2,085,022	$2,346,644	6.9	4.6
Paper enveloped	$3,824,374	$2,323,754	3.3	1.5
Rennet	$3,082,522	$2,212,894	12.4	5.9
Vegetable products nes	$7,574,160	$2,068,751	21.5	1.3
Hosiery nes, of wool/hair, knit	$1,131,642	$2,025,636	2.7	4.2
Apricots, fresh	$2,621,010	$1,974,785	5.4	2.0
Flatfish	$1,344,843	$1,905,905	2.3	2.2
Tall oil	$665,876	$1,847,315	2.6	3.6
Sharks, frozen	$1,393,249	$1,826,885	5.9	3.8
Carbonized wool	$9,642,209	$1,816,025	18.6	5.5
Fencing, iron or steel, light, nes	$660,853	$1,700,396	2.5	1.7
Yarn of wool,fine hair, >85%, retail	$2,413,240	$1,597,397	13.0	4.8
Eels, frozen	$4,361,813	$1,527,564	39.7	16.2
Not worked fibreboard, 0.5-0.8g/mc2	$100,364,718	$1,517,194	54.2	1.9
Chem wood pulp, sulphite, conifer unbleached	$2,984,615	$1,445,029	7.2	26.1
Seashells, coral, etc.	$667,583	$1,329,526	1.9	4.1

Tall oil fatty acids	$1,726,080	$1,316,671	5.6	2.3
Greasy wool, nes	$29,485,876	$1,240,229	51.8	4.8
Metallised yarn	$787,505	$962,966	1.9	1.9
Fencing wire	$1,071,725	$711,250	3.2	1.6
Sheepskin no wool, raw	$7,312,284	$609,855	35.1	9.9
Sole, frozen	$1,666,012	$553,533	4.1	2.7
Carded wool	$11,617,752	$520,398	61.1	5.0
Fish flours, meals, and pellets	$901,884	$421,058	18.7	2.0
Waste of wool or fine hair, nes	$1,236,866	$301,617	7.8	4.9
Combed wool, fragments	$7,212,189	$140,184	29.5	1.7
Waste of coarse hair, not garnetted	$81,096	$132,423	8.9	109.7
Total	**$9,229,878,689**	**$29,095,357,382**		

Appendix 2: 'Emerging advantages': Export product lines that gained comparative advantage (RCA>1) over the decade to 2018

HS 6-digit product description	Export value 2008 $USD	Export value 2018 $USD	RCA for 2018	10-year CAGR
Worked fibreboard, >0.8g/mc2	$1,929,426	$197,444,086	10.2	58.9%
Bovine leather, pre-tanned	$421,164	$138,427,395	10.5	78.5%
Turbo-jet engine, > 25 KN	$22,338,538	$119,191,348	1.1	18.2%
Cigarettes	$7,608,049	$95,341,574	1.9	28.8%
Make-up, nes	$21,385,843	$89,896,967	1.1	15.4%
Aquatic invertebrates, nes (frozen/preserved)	$8,219,899	$76,224,363	5.4	25.0%
Residues of petroleum oils	$61,384	$64,566,220	23.5	100.5%
Plastic kitchen ware	$10,798,048	$62,771,239	2.8	19.3%
Flat rolled iron/non-alloy steel, zinc coated, w>.6m	$30,521,870	$62,536,661	1.2	7.4%
Salmon	$17,753,585	$46,569,387	1.6	10.1%
Motorboats	$43,789,008	$39,314,675	1.9	-1.1%
Domestic fowl meat, frozen	$4,630,483	$31,005,559	1.2	20.9%
Ferro-vanadium	$0	$25,035,924	5.7	N/A
Fowl, duck, goose, not live, preserved	$4,803,795	$24,964,407	1.4	17.9%
Chemical pulps, other	$8,593	$22,428,994	21.2	119.6%
Packing or wrapping machinery nes	$8,871,447	$22,264,805	1.1	9.6%
Bovine leather, nes	$3,697,770	$19,496,611	3.0	18.1%
Vegetables nes & mixes	$2,660,951	$18,242,224	2.2	21.2%
Fish meat, not liver or roe	$5,399,252	$17,396,450	1.3	12.4%
Unbleached kraft waste	$7,915,899	$16,701,437	1.7	7.8%
Lumber, non-coniferous, nes	$17,498,910	$16,318,520	1.1	-0.7%
Heparin, therapeutic	$3,033,251	$13,722,029	1.8	16.3%
Alloy steel waste/scrap, not stainless	$12,901,608	$13,644,383	2.6	0.6%
Articles of copper, nes	$5,297,229	$13,355,524	1.8	9.7%
Maize (corn) seed	$629,490	$13,259,322	2.1	35.6%
Hot rolled iron/non-alloy steel, coil, w>600 t 4.75-10mm	$19,383,850	$13,107,617	1.0	-3.8%
Ply sheet, not coniferous <6mm	$800,813	$12,171,810	2.0	31.3%
Aluminium containers, collapsible	$767,330	$11,327,288	12.3	30.9%
Ice, potable water	$781,225	$10,966,865	4.0	30.2%
Cold metal rolling mills	$1,731,450	$10,126,997	10.6	19.3%
Reaction initiators, accelerators, etc.	$351,219	$9,929,386	1.2	39.7%
Chocolate, filled, >2k	$12,359,682	$9,691,843	1.0	-2.4%
Dentrifices	$822,834	$9,612,479	1.2	27.9%
Vegetables nes, frozen	$6,413,200	$9,240,433	1.2	3.7%
Vitamins, doses	$13,139,410	$8,874,490	1.0	-3.9%
Ketchup, other tomato sauces	$1,255,110	$8,866,968	2.4	21.6%
Mineral & aerated waters	$4,970,425	$8,450,281	1.5	5.5%
Hydraulic presses for working metal	$736,923	$8,398,677	3.5	27.6%
Construction equipment, self-propelled nes	$3,153,884	$8,214,008	3.6	10.1%
Machines for working metal wire	$6,465,065	$8,206,211	6.6	2.4%
Worked iron/steel waste	$1,001,535	$8,205,071	1.3	23.4%
Continuous goods conveyor or elevator belt	$13,455,490	$7,804,577	1.0	-5.3%
Chewing gum	$2,697,854	$7,763,356	4.0	11.2%
Vegetable fats, oils nes	$2,050,016	$7,734,521	1.9	14.2%
Fire fighting vehicles	$307,719	$7,637,718	2.7	37.9%
Electrical measurement recording instruments	$2,302,101	$7,521,165	1.4	12.6%
Industrial machinery for food/drink prep	$3,462,788	$7,490,966	1.3	8.0%
Flat rolled iron/non-alloy steel, electro plate/zinc, w>.6m	$31,018,472	$7,392,793	1.3	-13.4%
Copper alloys, unwrought	$4,092,674	$6,954,965	6.8	5.5%

Machine parts for food/drink prep	$4,964,336	$6,931,693	1.0	3.4%
Paper office supplies, nes	$1,958,862	$6,791,658	11.2	13.2%
Remelting scrap ingots, of iron/steel	$3,425,560	$6,753,118	24.4	7.0%
Unsaturated acyclic hydrocarbons, nes	$3,066,011	$6,614,140	1.3	8.0%
Polyester paint, non-aqueous	$3,471,799	$6,531,567	1.1	6.5%
Copper-tin alloys, unwrought	$6,875,596	$6,527,785	6.9	-0.5%
Whole domestic fowls, frozen	$2,390,851	$6,508,206	1.1	10.5%
Rusks, toasted bread	$208,090	$6,405,229	3.7	40.9%
Cured meat and offal	$824,151	$6,285,310	3.0	22.5%
Fermented ciders	$1,227,528	$5,973,956	1.9	17.1%
Machines to agglomerate, shape mineral/fuel	$1,898,089	$5,921,679	1.3	12.1%
Pacific salmon, frozen	$5,956,913	$5,854,177	1.4	-0.2%
Pneumatic mattresses, textile material	$129,039	$5,712,188	11.4	46.1%
Cans, iron/steel, <50L, nes	$11,892,312	$5,342,164	1.1	-7.7%
Play/fairground, circus, theatre equipment	$1,886,142	$5,247,989	1.5	10.8%
Flat rolled iron/non-alloy steel, coat/zinc, corrugated, w>.6m	$3,557,119	$5,235,766	3.2	3.9%
Smoked salmon	$5,730,849	$5,151,480	1.2	-1.1%
Forage products, roots	$780,683	$5,044,858	1.0	20.5%
Stone or other mineral articles	$1,166,968	$4,858,296	1.2	15.3%
Mattress supports	$171,562	$4,855,877	2.1	39.7%
Ground-nuts, otherwise preserved	$132,250	$4,829,380	1.1	43.3%
Harvesting machinery, nes	$1,968,088	$4,505,992	1.3	8.6%
Maize (corn) starch	$1,219,193	$4,327,924	2.0	13.5%
Automatic electric plasma arc welding equipment	$1,764,381	$4,255,465	1.2	9.2%
Electric transformers, >500KVA	$2,279,377	$4,204,501	1.2	6.3%
Sheep leather, nes	$3,380,585	$4,112,614	2.8	2.0%
Breathing appliances & gas masks	$14,888,102	$4,080,576	1.1	-12.1%
Straw or fodder balers	$835,253	$3,876,810	1.5	16.6%
Paper, kraft, >225g/m2,chemical pulp,bleach/uncoat	$61,188	$3,855,723	7.0	51.3%
Paper, kraft, <150g/m2, unbleached, uncoated	$2,885,347	$3,851,287	1.4	2.9%
Glues and adhesives, nes, > 1kg	$1,762,827	$3,718,072	1.2	7.8%
Pipes, copper alloys nes	$2,616,530	$3,712,328	4.5	3.6%
Metal shaping presses, nes	$3,110,483	$3,684,248	1.2	1.7%
Yarn, polyester, single, untwisted	$0	$3,594,133	1.2	N/A
Fishing vessels & factory ships	$13,810,737	$3,547,987	1.1	-12.7%
Furskin articles, not clothing	$5,211,357	$3,512,689	4.4	-3.9%
Lead waste	$1,261,266	$3,498,134	2.5	10.7%
Centrifuge parts, nes	$1,621,981	$3,366,114	1.6	7.6%
Printing ink, black	$2,351,020	$3,279,244	1.1	3.4%
Hot rolled iron/non-alloy steel, flat, w>600 t 3-4.75mm	$3,465,531	$3,253,382	1.4	-0.6%
Automatic circuit breakers for 1-72.5kV	$483,977	$3,171,689	1.5	20.7%
Aircraft propellers, rotors	$2,265,230	$3,158,772	1.1	3.4%
Pipes, alloy steel, welded, nes	$166,576	$3,118,384	2.0	34.0%
Urea, thiourea resins	$351,814	$3,108,325	1.4	24.3%
Machines for cocoa/chocolate manuf	$261,527	$3,051,484	1.3	27.9%
Titanium oxides	$331,689	$2,915,673	1.5	24.3%
Parts of electric signal & traffic controller	$370,864	$2,843,046	1.4	22.6%
Parachutes	$104,423	$2,783,054	4.3	38.9%
Cereal flour, nes	$222,832	$2,779,998	2.7	28.7%
Frozen rasp-, mul-berries, etc	$10,412,002	$2,766,264	1.5	-12.4%
Electric signal & traffic controls	$635,241	$2,634,309	1.3	15.3%
Vinegar	$540,353	$2,588,016	1.8	17.0%
Salts of formic acid	$0	$2,578,067	2.7	N/A
Oils, terpenic	$497,717	$2,533,570	1.2	17.7%
Crispbread	$324,186	$2,426,955	2.2	22.3%

Winches or capstans nes	$1,039,992	$2,272,914	1.2	8.1%
Weighing machinery cap <30kg	$1,255,051	$2,213,472	1.4	5.8%
Densified wood	$4,848,521	$2,209,565	3.4	-7.6%
Scrapers, self-propelled	$104,986	$2,196,465	8.0	35.5%
Rubber pharmacy items, not contraceptives	$584,282	$2,160,428	2.0	14.0%
Plastic tanks, <300 L	$616,873	$2,109,487	1.1	13.1%
Articles of copper, moulded	$3,133,373	$2,100,723	2.2	-3.9%
Cyclic alcohols, nes	$918,677	$2,077,347	2.3	8.5%
Gold/silversmith wares, clad precious metals	$354,852	$1,905,795	1.5	18.3%
Hormones, not contraceptive, formulated, nes	$329,636	$1,871,454	1.2	19.0%
Articles of cellular rubber	$57,980	$1,862,570	1.0	41.5%
Railway locomotive parts, nes	$138,560	$1,833,605	1.0	29.5%
Parts/accessories of shotguns/rifles	$296,646	$1,814,339	1.9	19.9%
Cane molasses	$45,744	$1,806,684	1.7	44.4%
Yarn of combed wool, <85% wool	$2,645,444	$1,795,505	2.7	-3.8%
Ship/boat propellers & blades	$6,728,848	$1,770,610	1.1	-12.5%
Paper, cigarette, tubes	$85,530	$1,722,366	1.1	35.0%
Potato starch	$1,316,641	$1,719,963	1.0	2.7%
Vitrifiable enamels	$12,307	$1,584,532	1.0	62.6%
Ingots, primary forms of alloy steel	$694,018	$1,583,052	1.2	8.6%
Bulldozers, wheeled	$581,917	$1,424,760	1.4	9.4%
Paper, clay, nes	$1,812,644	$1,387,182	1.1	-2.6%
Photogrammetrical surveying instruments	$135,565	$1,364,176	3.8	26.0%
Molasses, not cane	$50,462	$1,345,335	1.7	38.9%
Manure spreaders, fertilizer distributors	$721,678	$1,338,465	1.3	6.4%
Dryers for wood, paper	$1,085,923	$1,329,721	1.3	2.1%
Glass cullet, waste, in the mass	$1,368,982	$1,327,673	1.5	-0.3%
Maize (corn) meal	$910,661	$1,321,465	1.4	3.8%
Rifles for sporting/hunting	$128,716	$1,313,093	1.2	26.1%
Electric transformers, 1-16 KVA	$163,202	$1,289,191	1.1	23.0%
Linseed oil, crude	$63,997	$1,258,784	5.0	34.7%
Plasters	$979,543	$1,258,463	1.2	2.5%
Electro-chem/electron/plasma arc machine tools	$1,931,891	$1,246,806	1.8	-4.3%
Cameras, single lens, roll film <=35mm	$36,044	$1,218,959	15.9	42.2%
Vending machines, non-food	$889,137	$1,208,801	1.2	3.1%
Vermiculite, perlite, chlorites, unexpanded	$344,327	$1,166,772	2.4	13.0%
Punching, notching machine tools, nes	$177,881	$1,106,403	1.7	20.1%
Potatoes, frozen	$1,234,565	$1,088,305	1.7	-1.3%
Carbon dioxide	$199,940	$1,063,318	1.2	18.2%
Articles nes of asbestos/cellulose fibre cement	$59,555	$1,058,609	2.9	33.4%
Linseed oil, refined	$295,206	$1,057,382	4.2	13.6%
Iron liquid fuel appliances, not cooking	$845,446	$1,050,131	3.6	2.2%
Oil seed or fruit flour or meal	$149,419	$1,038,486	2.6	21.4%
Cyclohexanols	$0	$1,009,214	3.1	N/A
Squid	$98,125	$963,684	1.7	25.7%
Other poultry > 185 g	$51,469	$947,006	1.7	33.8%
Brakes, non-air, for railway	$655,128	$909,068	1.4	3.3%
Methylamine, salts	$2,570	$889,876	1.4	79.5%
Penicillins or streptomycins, formulated	$6,321,755	$873,847	1.0	-18.0%
Foliage for bouquets (not fresh)	$55,487	$857,822	1.3	31.5%
Cut slabs of stone nes	$611,153	$837,105	1.0	3.2%
Gingerbread	$18,845	$821,308	1.1	45.9%
Cherries, preserved	$0	$818,171	4.4	N/A
Yarn of other synth fibres & cotton	$1,428	$811,292	3.2	88.6%
Metal cutting shears	$111,480	$798,618	1.8	21.8%
Yarn of wool, fine hair, <85%, retail	$197,716	$785,327	1.9	14.8%
Argon	$22,850	$780,007	1.5	42.3%
Chem wood pulp, sulphite, conifer bleached	$333,521	$779,869	1.4	8.9%

Wood tar, tar oils, etc.	$474,064	$774,028	2.1	5.0%
Scales for cont weighing of goods on conveyors	$860,841	$769,935	2.3	-1.1%
Quinones, not anthraquinone	$1,683	$764,734	1.0	84.4%
Yarn of carded wool, <85% wool	$2,814,966	$744,136	1.0	-12.5%
Paper, kraft, >225g/m2, uncoated, nes	$639,341	$696,379	1.6	0.9%
Strawberries, otherwise preserved	$165,172	$693,256	1.2	15.4%
Bituminous or oil shale	$9,056	$690,508	3.4	54.3%
Mustard seeds	$587,192	$689,119	1.3	1.6%
Celery	$266,707	$686,408	1.2	9.9%
Amino-aldehydes, ketones and quinones, salts	$31,872	$680,362	1.5	35.8%
Special use cameras: underwater, aerial	$115,112	$657,410	1.5	19.0%
Wadding, not sanitary, nes	$213,767	$643,967	4.8	11.7%
Pointed non-coniferous poles	$854,507	$640,267	2.3	-2.9%
Projection screens	$143,063	$631,627	1.2	16.0%
Stone mosaic tiles	$92,491	$624,879	1.1	21.1%
Time of day recorders, nes	$462,223	$618,654	1.6	3.0%
Paper, hand-made, uncoated	$5,140	$597,434	2.2	60.9%
Waterproof footwear, metal toe cap	$161,492	$595,849	1.0	14.0%
Agar-agar	$387,828	$580,533	1.0	4.1%
Wine lees & argol	$0	$565,895	14.8	N/A
Travel sets, toilet/sewing/shoe	$203,216	$538,772	1.1	10.2%
Coffee husks and skins	$0	$517,735	2.2	N/A
Woven fabric <85% artif &cotton, unbl/bleached	$0	$498,781	3.1	N/A
Tufted textile, not carpets	$95,339	$489,532	5.0	17.8%
Mobile drilling derricks	$5,288,648	$450,061	1.3	-21.8%
Polishes, creams for woodwork	$30,100	$437,677	1.3	30.7%
Oxygen	$38,007	$434,731	1.1	27.6%
Beeswax	$665,355	$406,282	1.2	-4.8%
Gloves, wool/hair, knit	$140,129	$402,563	1.4	11.1%
Copper washers	$407,624	$397,225	1.9	-0.3%
Preserved fruits and nuts	$15,674	$395,567	1.3	38.1%
Womens trousers & shorts, wool/hair, knit	$180,897	$362,774	1.6	7.2%
Tin waste	$1,639,345	$329,086	1.3	-14.8%
Sheep and equine offal	$364,918	$316,702	4.2	-1.4%
Homogenized preparations of meat, preserved	$488,014	$309,620	1.1	-4.5%
Apricots, otherwise preserved	$72,797	$303,285	1.1	15.3%
Lard stearin, oleostearin	$118,790	$274,128	1.6	8.7%
Bed linen, of material nes, printed, not knit	$59,033	$237,598	1.3	14.9%
Ceramic troughs, pots	$36,938	$232,584	1.0	20.2%
Cameras for 35mm roll film	$416,332	$226,918	1.6	-5.9%
Cotton fabric, >200g/m2, print, nes	$506,031	$216,055	1.3	-8.2%
Photo plate, film exposed, undeveloped	$30,046	$156,192	1.4	17.9%
Vermouth, > 2l pack	$28,597	$153,531	1.3	18.3%
Woven fabric <85% artif &cotton, printed	$9,878	$134,884	1.6	29.9%
Musical instruments etc nes	$30,416	$129,116	1.1	15.6%
Coin/disc-operated record-players	$0	$115,180	1.3	N/A
Fabric with metal threads, nes	$49,891	$109,382	1.6	8.2%
Plain weave,<85%, fibre,>200g,yarn dye	$33,233	$84,546	1.2	9.8%
Cotton fabric, >200g/m2, unbleach, nes	$2,605	$82,544	2.6	41.3%
Tanned furskin pieces	$17,115	$82,155	2.9	17.0%
Eels	$29,905	$72,571	2.4	9.3%
Yarn of artificial fibres, retail	$0	$70,495	1.5	N/A
Photo color film rolls, width >35mm	$20,788	$26,344	1.5	2.4%
Shrimps	$46,827	$24,755	1.3	-6.2%
Red and orange lead	$0	$17,689	5.2	N/A
Total	**$586,082,142**	**$1,816,019,744**		**12.0%**

Appendix 3: 'Declining advantages': Export product lines that lost a previously held comparative advantage (RCA>1) over the decade to 2018

HS 6-digit product description	Export value 2008 $USD	Export value 2018 $USD	RCA for 2018	10-year CAGR
Gold in unwrought forms	$295,373,622	$414,521,580	0.96	3.45%
Blood	$4,672,789	$107,653,293	0.35	36.85%
Bituminous coal	$170,648,969	$84,632,020	0.44	-6.77%
Coal except anthracite or bituminous	$160,516,287	$54,202,450	0.87	-10.29%
Instruments for medical science, nes	$53,132,302	$51,915,065	0.47	-0.23%
Electrical machines, nes	$27,059,413	$34,391,185	0.43	2.43%
Animal feed preparations	$44,320,726	$29,726,111	0.88	-3.92%
Herbicides	$43,195,065	$24,969,250	0.93	-5.33%
Articles of iron/steel, nes	$65,899,665	$24,935,230	0.28	-9.26%
Washing prep, retail	$45,365,590	$20,183,085	0.52	-7.78%
Hot rolled iron/non-alloy steel, coil, w>600 t<3mm	$44,197,218	$18,548,563	0.47	-8.32%
Bags of ethylene polymers	$28,875,008	$18,525,757	0.78	-4.34%
Bars, aluminum alloy	$14,560,754	$18,417,428	0.79	2.38%
Electric lamps, fittings, nes	$21,917,291	$17,303,271	0.40	-2.34%
Articles of aluminum, nes	$19,950,561	$15,122,398	0.43	-2.73%
Bovine leather, full	$37,047,913	$12,733,000	0.74	-10.13%
Stainless steel waste/scrap	$20,449,299	$12,674,023	0.85	-4.67%
Grape wines, sparkling	$14,309,662	$12,238,862	0.84	-1.55%
Hydraulic/pneumatic power engine, parts	$13,106,437	$11,816,552	0.71	-1.03%
Chocolate/cocoa prep, nes	$21,920,213	$11,566,383	0.39	-6.19%
Flowers for bouquets (fresh)	$22,536,487	$11,334,469	0.69	-6.64%
Chem wood pulp, sulphate, non-conifer, bleached	$29,436,739	$10,599,121	0.27	-9.71%
Fittings for buildings, metal	$15,959,198	$10,183,357	0.67	-4.39%
Electric conductors, <80V, no connectors	$7,415	$10,046,494	0.17	105.68%
Plastic tube fittings	$8,869,342	$10,029,679	0.74	1.24%
Fruit, otherwise preserved	$7,454,572	$9,956,053	0.86	2.94%
Parts for mineral sort, screen machines	$15,585,839	$9,576,189	0.68	-4.75%
Plastic bags, not ethylene polymers	$15,232,040	$9,344,987	0.95	-4.77%
Non-alcoholic beverages, not fruit/veg juices	$28,604,883	$9,291,763	0.42	-10.64%
Flat rolled iron/non-alloy steel, plastic coated, w>600mm	$16,235,408	$9,083,569	0.37	-5.64%
Hot rolled iron/non-alloy steel, coil, w>600, t 3-4.75mm	$22,066,396	$8,985,180	0.44	-8.59%
Eggs, in shell	$3,312,576	$8,817,272	0.99	10.29%
Helicopters >2,000kg	$6,841,990	$7,981,567	0.66	1.55%
Worn clothing	$5,701,648	$7,559,453	0.87	2.86%
Freezing equipment, parts	$25,060,109	$7,288,669	0.55	-11.62%
Acrylic paint, aqueous	$3,634,338	$7,078,780	0.96	6.89%
Fixed wing aircraft, 2,000-15,000 kg	$9,622,215	$7,038,686	0.31	-3.08%
Aluminum casks, <300L	$9,877,956	$6,978,357	0.73	-3.42%
Fish nes, preserved	$7,329,907	$6,788,195	0.92	-0.76%
Pipe fittings, copper alloys	$6,648,164	$6,474,387	0.80	-0.26%
Electrical control & distribution boards, >1kV	$14,028,585	$6,395,530	0.50	-7.55%
Bovine, not pure-bred	$13,905,035	$6,394,811	0.37	-7.47%
Articles, iron/steel, forged	$10,350,240	$6,391,333	0.73	-4.71%
Trailers nes for goods transport	$31,507,835	$6,280,143	0.27	-14.89%
Machines to crush stone, ores, minerals	$23,939,641	$6,043,042	0.94	-12.86%
Toilet paper, >36cm	$14,049,061	$6,006,677	0.67	-8.15%
Medical, dental furniture, nes	$3,068,984	$5,427,876	0.74	5.87%
Foil, aluminum, backed <0.2mm	$9,396,223	$4,874,229	0.66	-6.35%

Cast articles of iron/steel nes	$9,134,109	$4,627,242	0.57	-6.57%
Cold rolled iron/non-alloy steel, coil, w>600 t 1-3mm	$12,066,221	$4,595,530	0.39	-9.20%
Machinery for temperature change	$9,591,667	$4,403,496	0.26	-7.49%
Chocolate/cocoa prep > 2k	$37,217,754	$4,262,663	0.43	-19.48%
Mixtures of juices	$10,523,861	$4,098,745	0.95	-9.00%
Soaps for toilet, solid	$1,463,281	$3,913,848	0.56	10.34%
Precious, semi-precious stones, worked, not set	$1,113,583	$3,633,512	0.74	12.55%
Fixed wing aircraft, >15,000kg	$132,437,020	$3,522,165	0.01	-30.42%
Plastics waste, nes	$11,670,762	$3,317,699	0.87	-11.82%
Wool tops, not combed	$7,508,871	$3,276,366	0.97	-7.96%
Office furniture, metal	$6,508,407	$3,243,912	0.57	-6.73%
Parts for cultivation machinery	$2,999,871	$3,177,625	0.53	0.58%
Electric conductors, >1,000V	$10,537,292	$3,083,507	0.20	-11.56%
Mens jackets & blazers, wool/hair, not knit	$2,768,803	$2,963,814	0.84	0.68%
Navigational instruments and appliances nes	$18,158,432	$2,902,716	0.79	-16.75%
Radio remote control apparatus	$1,980,541	$2,770,557	0.37	3.41%
Vegetables nes & mixes, frozen	$7,658,406	$2,687,983	0.84	-9.94%
Flat rolled iron/non-alloy steel, aluminium coated, w>.6m	$12,992,796	$2,621,709	0.30	-14.79%
Trailers, semi-trailers nes	$1,662,257	$2,621,069	0.80	4.66%
Sawing machines	$3,726,643	$2,545,767	0.58	-3.74%
Aluminum doors, windows	$3,501,598	$2,522,980	0.29	-3.22%
Vitamins, nes	$2,820,712	$2,507,726	0.62	-1.17%
Polyethylene waste	$8,640,218	$2,489,592	0.98	-11.70%
Non-farm animals	$2,775,006	$2,479,303	1.00	-1.12%
Room perfuming	$2,321,237	$2,477,988	0.46	0.66%
Warships, lifeboats	$12,221,613	$2,437,191	0.17	-14.89%
Plants, for pharmacy, insecticide	$1,164,393	$2,408,612	0.42	7.54%
Transmission for radio, telephone, TV	$4,024,939	$2,338,212	0.36	-5.29%
Sausages	$4,778,700	$2,318,314	0.22	-6.98%
Machinery for meat/poultry prep	$3,943,072	$2,298,896	0.50	-5.25%
Parts/accessories for optical/electric instrument	$9,634,752	$2,289,749	0.40	-13.38%
Paper, corrugated	$10,710,955	$2,261,961	0.69	-14.40%
Electricity supply, calibration meters	$2,689,033	$1,996,328	0.27	-2.93%
Turbo-propeller engine, > 1100 kW	$1,078,583	$1,928,880	0.34	5.99%
Winches or capstans, electric motor	$2,853,919	$1,896,332	0.78	-4.01%
Mens trousers & shorts, wool/hair, not knit	$1,670,043	$1,894,181	0.95	1.27%
Carpets, nylon, tufted	$7,850,045	$1,872,468	0.29	-13.35%
Sanitary ware, iron	$3,266,863	$1,866,527	0.56	-5.44%
Polyvinyl chloride tube, rigid	$4,499,178	$1,848,004	0.61	-8.51%
Mens suits, wool/hair, not knit	$5,171,680	$1,840,173	0.49	-9.82%
Bars, copper alloy nes	$9,996,260	$1,829,183	0.85	-15.62%
Garments nes, of manmade fibres, knit	$2,390,727	$1,765,283	0.24	-2.99%
Paper dishes, cups	$4,860,048	$1,658,979	0.33	-10.19%
Carpets, nes	$1,183,319	$1,637,193	0.50	3.30%
Refrigerator with freezer, two-door	$29,171,511	$1,635,453	0.06	-25.03%
Machine tools for wood, cork or hard plastic	$1,377,152	$1,625,949	0.39	1.67%
Num controlled punch, notch machines	$4,757,006	$1,510,592	0.68	-10.84%
Animal or vegetable fertilizers, > 10kg	$1,439,611	$1,412,842	0.84	-0.19%
Cooking, grilling equipment, electric	$14,561,448	$1,366,545	0.06	-21.07%
Plastic tube, rigid	$4,041,634	$1,344,087	0.28	-10.42%
Cast iron waste/scrap	$6,747,048	$1,292,097	0.36	-15.23%
Electrical circuit protectors, <1kV	$6,590,876	$1,261,931	0.14	-15.24%
Mattresses, stuffed, spring interior	$1,905,227	$1,188,554	0.23	-4.61%
Flight simulators	$14,027,140	$1,178,698	0.34	-21.94%
Buoys, beacons, pontoons	$977,140	$1,175,291	0.72	1.86%

Boring/sinking machinery	$7,363,816	$1,146,140	0.22	-16.97%
Lawn mowers, powered, horizontal cutting device	$2,864,462	$1,121,535	0.12	-8.95%
Live eels	$1,311,687	$1,110,572	0.69	-1.65%
Cereals, not prepared, nes	$3,012,760	$1,105,855	0.44	-9.54%
Spark-ignition engine, aircraft, parts	$2,377,498	$1,100,157	0.69	-7.42%
Paper, kraft, >95% chem pulp, >150g, bleach, clay	$4,657,725	$1,098,743	0.38	-13.45%
Plastic bathroom wares, nes	$2,146,309	$1,080,017	0.31	-6.64%
Maize (corn) flour	$2,791,380	$1,032,622	0.95	-9.47%
Springs, helical, iron	$1,906,966	$1,025,797	0.15	-6.01%
Fruits, dried nes	$757,220	$1,015,299	0.47	2.98%
Yarn of combed wool, >85% wool	$12,638,416	$1,009,544	0.38	-22.33%
Catalysts, nickel	$988,363	$999,112	0.37	0.11%
Inductors, electric	$6,611,417	$992,800	0.05	-17.27%
Ethyl alcohol & spirits, denatured	$795,005	$947,934	0.23	1.77%
Electrical insulators of ceramics	$1,794,315	$920,808	0.57	-6.45%
Hydrometer, pyrometer	$1,172,788	$895,017	0.39	-2.67%
Upright freezers, < 900 L	$10,010,300	$887,840	0.28	-21.51%
Wooden boxes	$462,998	$842,461	0.48	6.17%
Agricultural trailers	$1,795,717	$831,946	0.54	-7.41%
Automatic washing machines, cap<10kg	$6,997,456	$825,594	0.05	-19.24%
Granules of granite, sandstone	$685,918	$818,109	0.72	1.78%
Oil seeds & oleaginous fruits, nes	$926,860	$774,610	0.32	-1.78%
Hop extract	$3,467,320	$743,487	0.90	-14.27%
Inflatable rafts	$488,163	$729,834	0.76	4.10%
Dish washing machines, domestic	$42,847,617	$723,107	0.08	-33.51%
Bulbs and others, in growth	$1,159,954	$718,591	0.45	-4.68%
Fabric, >85% comb wool/fine hair, >300g/m3	$4,811,895	$706,626	0.67	-17.46%
Scythes, sickles	$412,291	$686,741	0.83	5.23%
Lucerne (alfalfa) meal and pellets	$1,901,927	$684,700	0.80	-9.71%
Residues containing copper	$405,547	$680,829	0.54	5.32%
Twine ropes, other synthetic fibre	$3,537,212	$664,743	0.35	-15.39%
Electric hoists	$2,274,703	$651,894	0.30	-11.75%
Goats	$4,112	$628,245	0.94	65.35%
Monofilament, nes	$4,013,144	$627,334	0.13	-16.94%
Homogenised jams, jellies	$1,263,408	$621,687	0.54	-6.85%
Logs, Keruing/Ramin/Kapur/Teak/Jongkong/Merbau	$4,374,415	$568,816	0.10	-18.45%
Parts of vending machines	$264,229	$553,261	0.37	7.67%
Mixtures of edible nuts & fruits	$3,822,720	$548,375	0.71	-17.65%
Reaction engines, not turbo-jet	$568,890	$542,724	0.63	-0.47%
Sugars	$154,187	$534,502	0.26	13.24%
Quicklime	$5,798,782	$531,981	0.30	-21.25%
School books	$2,101,142	$528,006	0.50	-12.90%
Flat rolled iron/non-alloy steel, <600mm, zinc coated	$6,575,241	$526,960	0.12	-22.31%
Worked fibreboard, nes	$1,058,154	$518,596	0.67	-6.88%
Chest freezers, < 800 L	$8,692,103	$518,367	0.16	-24.57%
Photographic cameras	$664,754	$513,772	0.54	-2.54%
Seed, flower	$343,713	$510,871	0.73	4.04%
Machine-tools for metal/carbides, nes	$1,607,674	$493,578	0.23	-11.14%
Garments nes, of cotton, knit	$2,760,681	$483,801	0.11	-15.98%
Tin articles nes	$3,221,579	$478,520	0.55	-17.36%
Footwear, nes, uppers leather	$872,725	$457,497	0.28	-6.25%
Carpets, wool/hair, woven pile, madeup	$6,198,484	$454,798	0.99	-22.99%
Sardines, frozen	$1,162,366	$446,551	0.32	-9.12%
Sheet/tile of asbestos cement, non-corrugated	$2,628,238	$420,894	0.21	-16.74%

Postage, ticket-issuing machines	$1,536,573	$415,047	0.36	-12.27%
Pile-drivers & pile-extractors	$1,516,372	$414,089	0.30	-12.17%
Residues containing hard zinc spelter	$581,099	$411,473	0.65	-3.39%
Life jackets, textile material	$373,484	$403,699	0.40	0.78%
Mattresses of cellular rubber/plastic	$3,566,079	$396,990	0.07	-19.71%
Artist colors, small packs, nes	$151,587	$396,958	0.42	10.11%
Fuel wood	$198,120	$394,658	0.43	7.13%
Asparagus	$2,617,052	$390,548	0.12	-17.32%
Industrial furnaces, nes	$1,104,315	$387,338	0.15	-9.95%
Flexible plastic tube, with fitting	$1,549,793	$384,824	0.17	-13.00%
Bovine leather, tanned	$110,399,233	$378,612	0.92	-43.31%
Bakery ovens, non-electric	$2,611,875	$373,859	0.35	-17.67%
Babies garments, of cotton, knit	$8,213,808	$372,710	0.03	-26.60%
Pointed coniferous poles	$1,077,700	$369,328	0.92	-10.16%
Lawn mowers, powered, nes	$1,434,516	$367,620	0.34	-12.73%
Articles of lead, nes	$367,513	$365,179	0.51	-0.06%
Carboxylix acids	$1,440,508	$352,943	0.23	-13.12%
Drying machines, cap<10kg	$945,860	$336,414	0.06	-9.82%
Wire, iron/non-alloy steel, zinc plated/coated <.25%C	$1,483,288	$333,399	0.06	-13.87%
Knit, wool/hair, nes	$5,534,116	$328,395	0.83	-24.61%
Ventilating hoods, <120cm	$5,494,785	$318,244	0.07	-24.79%
Tuna, frozen, nes	$4,257,308	$303,016	0.18	-23.22%
Lobsters, frozen	$2,819,368	$301,581	0.17	-20.03%
Hair & other toilet brushes	$67,632	$293,686	0.15	15.82%
Alkyd resins	$2,591,217	$290,916	0.15	-19.64%
Articles of precious, semi-prec, artif stone	$1,424,201	$290,601	0.12	-14.70%
Lecithins and other phosphoaminolipids	$1,198,658	$279,398	0.15	-13.55%
Cathode-ray oscilloscopes/graphs	$729,761	$275,738	0.17	-9.27%
Fabric, >85% card wool/fine hair, >300g/m2	$226,317	$273,575	0.39	1.91%
Foil, aluminum, not backed <0.2mm	$10,037,643	$272,091	0.04	-30.29%
Image projectors, except slide/microform	$1,158,600	$269,470	0.39	-13.57%
Circular saw blades	$2,837,433	$269,443	0.12	-20.98%
Unit construction machines, metalwork	$70,090	$268,254	0.83	14.36%
Salmon, preserved	$914,834	$262,021	0.17	-11.75%
Residues containing zinc, not spelter	$186,349	$258,359	0.16	3.32%
Felt, coated, etc.	$502,110	$257,893	0.53	-6.45%
Animal carving articles, nes	$459,146	$257,428	0.86	-5.62%
Yeasts, inactive	$1,090,910	$256,719	0.15	-13.47%
Womens jackets & blazers, wool/hair, knit	$707,906	$249,757	0.97	-9.89%
Paper, copying, nes	$545,524	$248,234	0.42	-7.57%
Mens bathrobes, fibre nes, knit	$156,927	$248,154	0.48	4.69%
Paper tableclothes	$5,537,582	$241,595	0.09	-26.89%
Cured beef	$3,040,847	$238,045	0.41	-22.49%
Office equipment, metal	$821,513	$236,175	0.34	-11.72%
Footwear, uppers of leather, metal toe-cap	$388,496	$228,986	0.04	-5.15%
Parts of machines for treating textile fabrics	$5,852,515	$225,085	0.12	-27.81%
Other legumes, frozen	$601,909	$224,312	0.38	-9.40%
Parts/accessories of weapons, nes	$290,329	$221,742	0.10	-2.66%
Industrial/lab electric furnaces & ovens	$2,262,658	$221,597	0.13	-20.73%
Polystyrene waste	$1,157,798	$221,006	0.58	-15.26%
Plastic baths and basins	$870,122	$215,140	0.07	-13.04%
Cod, frozen	$13,748,382	$212,822	0.06	-34.09%
Planing/milling machines for wood	$723,224	$211,380	0.13	-11.57%
Direction finding compasses	$3,239,976	$207,824	0.41	-24.02%
Flat rolled iron/non-alloy steel, clad/plated/coated, w>.6m	$1,135,156	$205,885	0.07	-15.69%
Camping goods nes, textile material	$1,136,560	$205,651	0.21	-15.71%
Machinery for producing/prep textile yarn, nes	$2,849,862	$204,735	0.30	-23.15%

Furnishing goods, material nes, not knit	$252,481	$203,804	0.21	-2.12%
Water gas generator producer, parts	$250,487	$202,775	0.41	-2.09%
Hand drying apparatus, electro-thermic	$381,860	$201,622	0.80	-6.19%
Paper, wax	$8,147,392	$200,657	0.19	-30.95%
Wickerwork, non-vegetable	$130,595	$200,426	0.22	4.38%
Cinematographic projectors for film of w >16mm	$998,116	$198,056	0.46	-14.93%
Paper, greaseproof	$805,879	$193,732	0.16	-13.29%
Pipe nes, iron/steel, welded >406mm	$1,520,991	$192,934	0.17	-18.66%
Cutting machines for pulp, paper or paperboard	$1,652,602	$191,320	0.07	-19.40%
Refined lead, unwrought	$11,820,946	$191,320	0.02	-33.79%
Circular saw blades, steel	$11,882,395	$190,343	0.15	-33.86%
Melamine resins	$809,387	$188,523	0.13	-13.56%
Fish-hooks	$453,814	$178,059	0.28	-8.93%
Machinery for fruits, nuts, vegetables prep	$2,231,800	$177,941	0.10	-22.35%
Parts of washing machines	$22,074,249	$175,187	0.06	-38.35%
Babies garments, cotton, not knit	$5,289,485	$173,198	0.06	-28.96%
Binders	$904,772	$171,074	0.11	-15.34%
Pipe-cutters	$250,668	$167,126	0.36	-3.97%
Peel of citrus, fruit	$63,209	$167,042	0.78	10.21%
Postcards, greeting cards	$1,855,952	$162,411	0.06	-21.62%
Tents, textile material	$287,723	$161,618	0.24	-5.60%
Zinc flakes	$194,117	$161,356	0.38	-1.83%
Beans nes	$761,305	$161,214	0.23	-14.38%
Knotted netting, manmade fibres, not fishing	$1,463,541	$160,992	0.08	-19.81%
Pipe fittings, refined copper	$5,785,894	$158,981	0.09	-30.19%
Curtains, material nes, woven	$343,372	$156,077	0.26	-7.58%
Sealed beam lamp units	$480,839	$150,194	0.16	-10.98%
Buckwheat	$77,912	$149,428	0.76	6.73%
Citrus fruits, nes	$2,352	$149,285	0.59	51.45%
Womens bathrobe, material nes, knit	$256,604	$149,003	0.89	-5.29%
Other starches, nes	$204,419	$145,177	0.29	-3.36%
Presses, crushers for wine, juice, beverage	$129,080	$144,607	0.22	1.14%
Woven plain <85% polyester&cotton, >170g/m2 dyed	$319,933	$144,287	0.54	-7.65%
Mens dressing gowns, material nes, not knit	$92,663	$135,375	0.46	3.86%
Selenium	$66,749	$135,170	0.30	7.31%
Plastic sheet, acrylic nes	$197,995	$129,349	0.13	-4.17%
Vulcanised rubber rods, cellular	$73,025	$126,300	0.28	5.63%
Baby carriages	$8,549,081	$121,366	0.03	-34.65%
Axes	$95,310	$121,341	0.29	2.44%
Lead, unwrought, mostly antimony	$4,356,158	$117,415	0.06	-30.33%
Saw blades, for metal	$153,632	$109,266	0.29	-3.35%
Sweet potatoes	$204,689	$108,750	0.08	-6.13%
Pile, wool/hair, >30cm	$458,312	$106,643	0.70	-13.57%
Woven products, iron/steel nes	$615,449	$103,592	0.24	-16.32%
Electric conductors, 80-1,000V, no connectors	$52,868,755	$103,336	0.01	-46.41%
AC generators, 375-750 kVA	$491,429	$90,917	0.14	-15.53%
Rags, textile material, not sorted	$289,724	$88,063	0.17	-11.23%
Warp knit, manmade, nes	$2,485,682	$83,745	0.01	-28.76%
Cereals, rolled/flaked grains, nes	$1,574,601	$82,318	0.20	-25.56%
Carpets, wool/hair, woven pile, not madeup	$87,042	$80,876	0.10	-0.73%
Clothes dryer, centrifugal	$63,814	$80,561	0.71	2.36%
Particle board, not wood	$1,341,753	$78,589	0.14	-24.70%
Sodium dichromate	$54,485	$76,596	0.25	3.46%
Yellowfin tuna	$62,384	$75,491	0.11	1.93%
Mens jackets & blazers, wool/hair, knit	$33,157	$72,625	0.39	8.16%

Woven fabric <85% artif fibre, yarn dyed	$1,030,489	$71,757	0.19	-23.39%
Knit, other materials, nes	$94,665	$69,690	0.04	-3.02%
Agglomerated cork articles	$1,429,455	$69,128	0.26	-26.13%
Rolling machine parts, nes	$105,345	$65,141	0.16	-4.69%
Parts of machinery for preparing tobacco	$4,169	$63,492	0.05	31.30%
Tanned furskin, assembled	$509,561	$61,144	0.61	-19.11%
Womens skirts, wool/hair, knit	$85,011	$61,017	0.49	-3.26%
Paper rolls for instruments	$298,719	$58,829	0.16	-15.00%
Polishes for coachwork	$653,461	$53,493	0.07	-22.14%
Fabric, card wool/hair with filament	$39,128	$52,322	0.45	2.95%
Plant cuttings	$372,933	$51,859	0.05	-17.90%
Ties, manmade fibres, not knit	$533,834	$50,371	0.14	-21.03%
Boxes, moulding, for metal foundry	$63,881	$49,913	0.13	-2.44%
Plain weave , <85%, fibre, >200g, prin	$35,413	$49,667	0.82	3.44%
Sailboards	$504,357	$48,425	0.27	-20.89%
Unglazed ceramic tiles, <7cm wide	$41,403	$45,654	0.05	0.98%
Womens overcoats, material nes, knit	$190,650	$44,835	0.12	-13.48%
Fabric, >85% card wool/fine hair, <300g/m3	$39,614	$44,205	0.13	1.10%
Welding machinery, not gas-operated	$635,879	$43,279	0.07	-23.57%
Ties, material nes, not knit	$79,523	$40,608	0.33	-6.50%
Wood shuttering	$341,731	$39,866	0.04	-19.33%
Clocks, with hands nes	$39,080	$39,550	0.40	0.12%
Knit, <30cm, nes	$304,145	$34,584	0.05	-19.54%
Babies garments, of synthetic fibres, knit	$1,411,499	$33,152	0.02	-31.28%
Chloride oxides of metals, not copper	$29,872	$31,412	0.05	0.50%
Swords	$336,594	$30,578	0.24	-21.33%
Horse meat	$1,475,329	$30,377	0.03	-32.18%
Liquorice extract	$0	$29,851	0.07	N/A
Woven nes <85% polyester&cotton, >170g/m2 printed	$2,292	$29,195	0.40	28.98%
Articles of pearls	$235,890	$26,720	0.06	-19.57%
Letterpress printing machinery nes	$158,073	$24,930	0.18	-16.86%
Felt, not needleloom, wool/hair, not coated	$142,719	$24,315	0.12	-16.22%
Salts of oxymetallic acids, nes	$5,663	$22,947	0.00	15.02%
Signal pistols, humane killers, etc	$1,098,590	$21,574	0.08	-32.50%
Zinc dust	$24,890	$21,396	0.03	-1.50%
Babies garments, synthetic fibre, not knit	$1,055,286	$20,366	0.02	-32.62%
Cotton thread <85%, not retail	$16,043	$19,504	0.34	1.97%
Manganese oxides	$0	$18,838	0.05	N/A
Binder twine, polyethylene	$4,304,199	$17,652	0.03	-42.28%
Water wheels, <1000kW	$68,396	$16,713	0.09	-13.14%
Parts and accessories of image projectors, non-cine	$119,667	$13,711	0.06	-19.48%
Cutlery, not sets, precious metals	$99,914	$12,376	0.09	-18.85%
Super-heated water boilers	$363,458	$11,394	0.02	-29.27%
Dental drill engines	$1,540,871	$11,145	0.01	-38.92%
Thread rolling machines for working metal	$2,258	$9,954	0.04	15.99%
Salted fish, nes	$1,341,593	$9,775	0.03	-38.87%
Carpets, manmade yarn, woven, madeup	$1,148,721	$9,598	0.01	-38.03%
Lead foil, <2mm	$2,941,141	$9,178	0.11	-43.84%
Pearls, natural	$90,183	$9,105	0.06	-20.49%
Tapioca	$50,975	$9,013	0.04	-15.91%
Converters for metallurgy/foundry	$9,043	$8,978	0.05	-0.07%
Hydrogen peroxide	$6,723,104	$8,531	0.00	-48.67%
Durum wheat	$0	$7,754	0.00	N/A
Rosin, resin acid salts	$689,382	$6,698	0.06	-37.09%
Cameras for roll film w<35mm	$3,007	$5,913	0.19	7.00%
Steam turbines, nes	$6,219,308	$5,813	0.00	-50.22%
Nickel-iron electric accumulators	$62,743	$5,701	0.03	-21.32%

Woven fabric <85% artif &manmade fil, printed	$130,812	$5,535	0.04	-27.11%
Sheet-fed office offset printers, sheet<22x36cm	$80,654	$5,086	0.03	-24.15%
Asparagus, preserved	$722,943	$4,465	0.01	-39.87%
Polyvinyl chloride waste	$5,461,566	$4,396	0.01	-50.96%
Lobsters	$5,965,571	$4,200	0.00	-51.61%
Photo instant print, flat	$5,076	$2,638	0.00	-6.34%
Hot rolled stainless steel flat, w>600 t 3-4.75mm	$7,420	$2,448	0.00	-10.50%
Typewriters, electric, >12kg	$0	$2,425	0.49	N/A
Metal shaping or slotting machines	$10,695	$1,610	0.01	-17.25%
Woven fabric >85% acrylic, unbl/bleached	$61,467	$1,395	0.01	-31.52%
Gluconic acid, salts, esters	$15,113	$1,374	0.00	-21.32%
Multi-station transfer machines, metalwork	$4,480,074	$1,372	0.00	-55.47%
Parts of electronic valve & tubes	$717,370	$1,221	0.00	-47.14%
Paper crepe, kraft	$1,611,277	$989	0.00	-52.27%
Disodium sulphate	$0	$936	0.00	N/A
Sea bass, frozen	$106,200	$473	0.00	-41.81%
Total	**$2,664,387,605**	**$1,419,145,236**		**-6.10%**

New Zealand Government