

Eight analyses that can be undertaken with Australian Import or Export statistics

The purpose of using trade statistics is to answer key questions of value for firms. Key questions like:

- assess a firm's performance relative to the total market
- monitor market conditions
- monitor competitors, new entrants, and retirements from a market and
- to search for new sales opportunities.

TradeData have spent more than 20 years assisting firms answer these sorts of questions using detailed Australian import and export statistics. This paper lists 8 different analyses that can be undertaken with Australian import or export data.

ANALYSIS 1. Market Share

Firms often want to measure how well they are performing relative to competitors or other operators in the marketplace. Market Share analysis enables firms to track their performance relative to others. Is the market increasing or decreasing and is my share of the market increasing or decreasing? These are key questions for firms.

TradeData are expert in assisting firms measure market share. Three examples are list below:

- The Australian export and import data lists trade on a Port to Port (and Country) basis. For example:
 - Exports of red wine from Western Australia into the USA, via New York; or
 - Imports of a product from China shipped from Dalian (China) into Melbourne (Australia)

An individual firm can subtract their export or import sales from the total port to port (or country) exports/imports shipments to calculate their own market shares over time. Combining a firm's own export or import transactions with total shipments sourced from TradeData, enable market shares to be calculated.

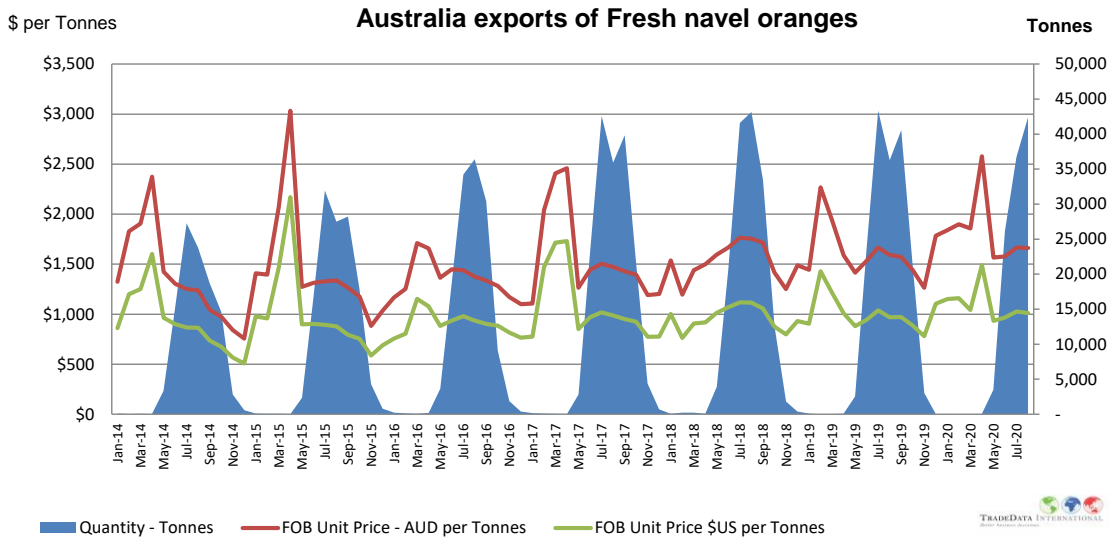
- Market Shares can be measured across different dimensions like firms, countries, ports, or States within Australia. For example, when considering Olive Oil imports into Australia, you may want to measure the import share of Italian Olive oils compared to oils from Spain.
- Another example, you may be a West Australian red wine exporter and you are currently exporting to China. Initially you may want to measure Western Australian Red wine exports against exports from other States. This is easily achieved as Australian export data is classified by which state the red wine originates from. If in this example you combined Australian exports of Red Wine to China with Chinese imports statistics of red wine, then you can measure the market share of Western Australian red wine in the Chinese import market. If you further combine this with your own company's exports to China, you then have a measure of your own exports as a share of the Chinese import market for red wine. This could be further broken down into different regions across China using the Port of Discharge dimension

TradeData are expert in combining export and import data from different countries to expand the market share analyses that can be undertaken. Likewise, firms can add their own exports and imports to measure their own market shares.

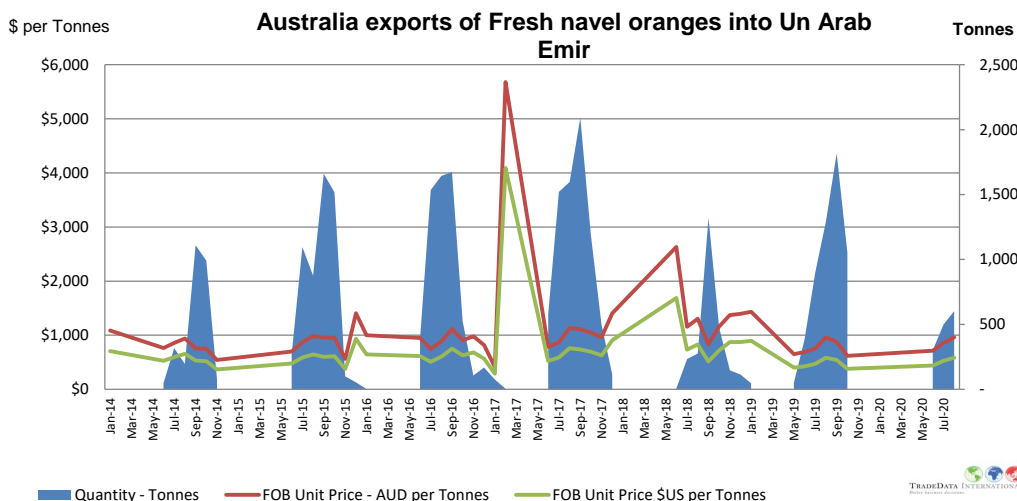
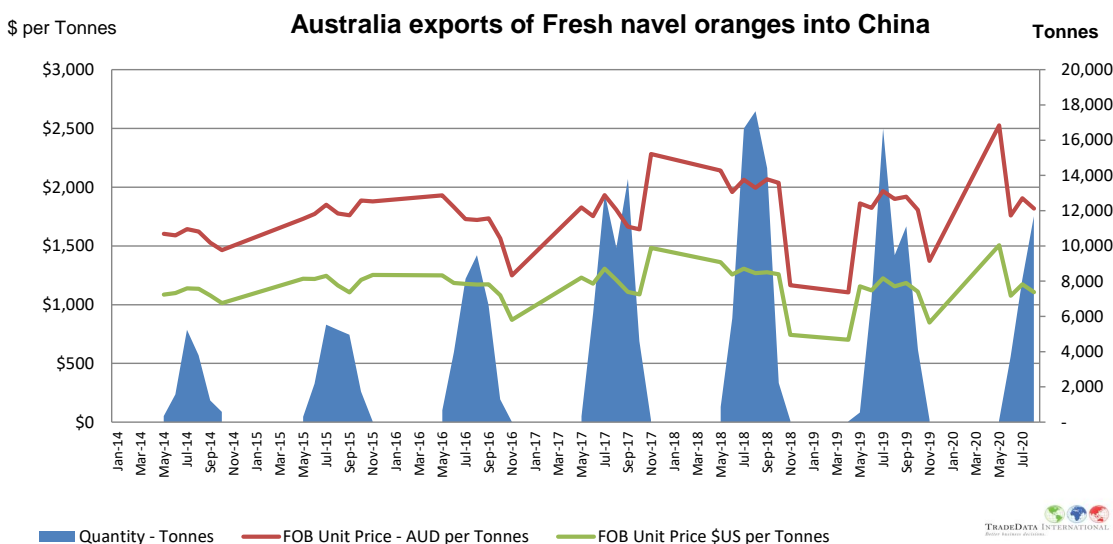
ANALYSIS 2. Monitor Market Size and Growth/Decline Characteristics by Country

TradeData's standard excel file enables firms to quickly monitor the size of an export or import market and whether it is static, growing, or declining. The following chart comes from TradeData's standard excel file and lists Australian exports of Fresh navel oranges. This shows:

- Export volumes to be highly seasonal with volumes increasing steadily over time
- Exports occur mostly over the May to November period each year; and
- Prices received are highly seasonal and peak season prices increased during the 2018 season then declined slightly in 2019.



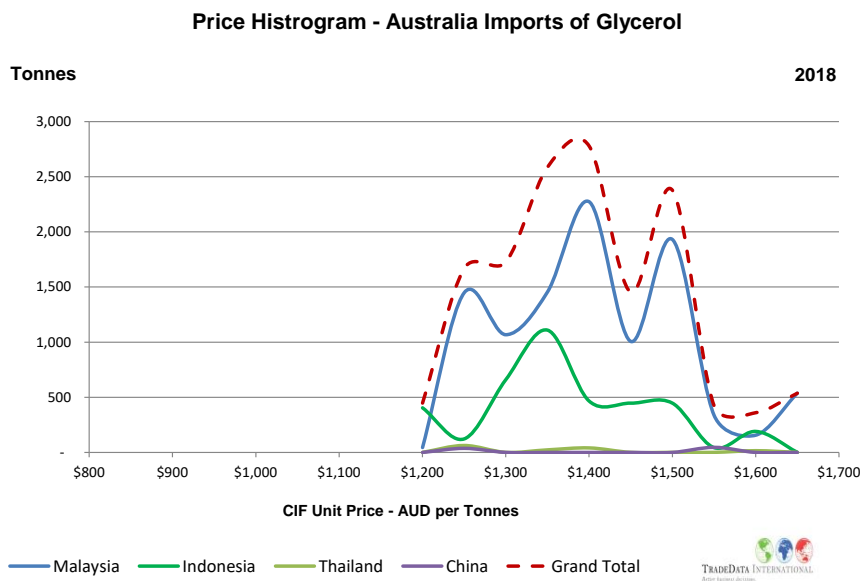
The next two charts contrast Australian exports to China with exports to the United Arab Emirates (UAE). Exports to China are increasing strongly whereas exports to UAE declined substantially in 2018. In addition, the average price for exports to China were double those received for exports to the UAE. Thus, China is a fast-growing high price market for Australian navel oranges, and the UAE a sometimes declining, smaller and lower price market. These sorts of analyses are easily undertaken with TradeData’s standard Excel file report.



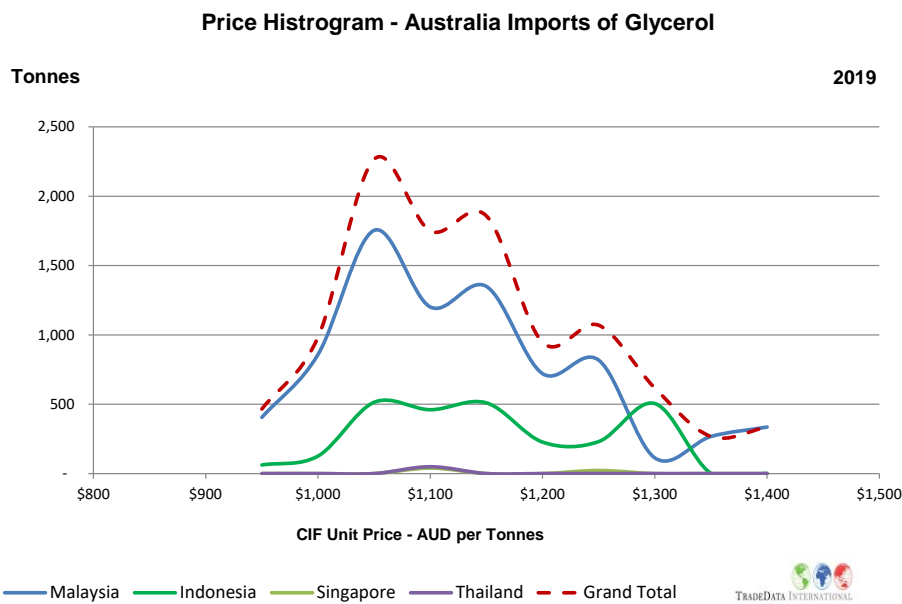
ANALYSIS 3. Monitor Competitor Activities and Identify New Potential Sales Opportunities

A Price Histogram is a useful chart for as it measures at a point in time, the volume of export or imports at different price points. This is particularly useful for identifying market segments.

The following two charts list for 2018 and 2019, a Price Histogram of Australian imports of Glycerol. The 2018 chart shows there are two major supply countries which are Malaysia and Indonesia. Malaysia supplies at prices between \$AU 1,250 and \$AU 1,500 per tonne, with most sales in the range of \$AU 1,400 and \$AU 1,500. Indonesia is a lower volume supplier and supplies mostly at prices between \$AU 1,350 and \$AU 1,500 per tonne. Thus, the bulk of Malaysia exports to Australia are at prices above Indonesian exports in 2018.



However, this price and volume pattern changed markedly in 2019. Both countries have lowered their prices and Malaysia more so than Indonesia. Malaysia now directly competes on price with Indonesia at prices mostly between \$US 1050 and \$US 1250 per tonne. Malaysia relative to Indonesia has lowered its price of Glycerol exports to Australia and has gained an increased share of the market.

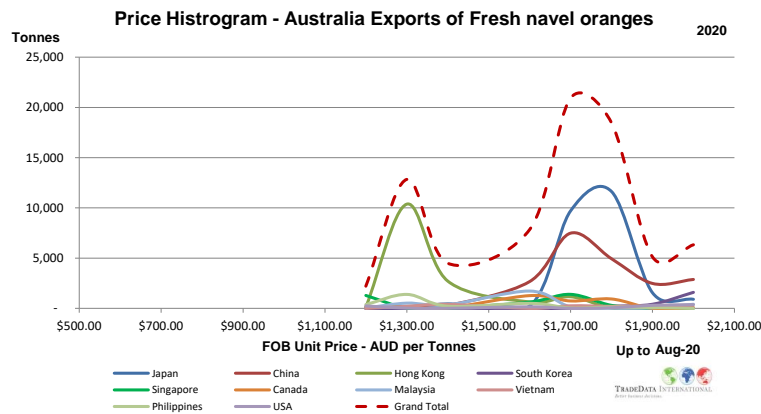


ANALYSIS 4. Market Segmentation

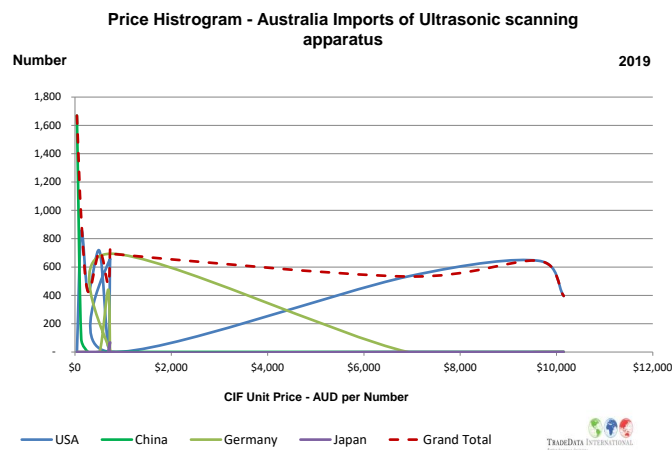
At its core, trade market segmentation is research that divides export or import transactions into subsets of similar transactions (products) that might be found in one HS code.

By understanding market segments, firms can target more precisely their sales, marketing strategies, competitors and so on. The charts below list an export example of market segmentation by price. The chart lists a price histogram of Australian exports of Fresh Navel Oranges. Exports are sold at two major price points. The first at around \$AU 1,300 a tonne and these are sold to Hong Kong and to a lesser extent the Philippines. The second, and much larger price segment, is at prices around \$AU 1,800 per tonne, and these are sold to Japan, China and to a much lesser extent Singapore.

The larger and higher price markets are Japan and China. Exports of these oranges must have certain quality attributes that enable them to be sold at a substantial price premium than exports to Hong Kong and the Philippines. When analyzing these export sales much can be gained by separating export transactions into the two distinct market segments. In fact, if you do not segment the transactions your analysis will produce an average export price around \$AU 1,500 per tonne where, few export sales occur. The failure to segment the data into discrete segments can be misleading.



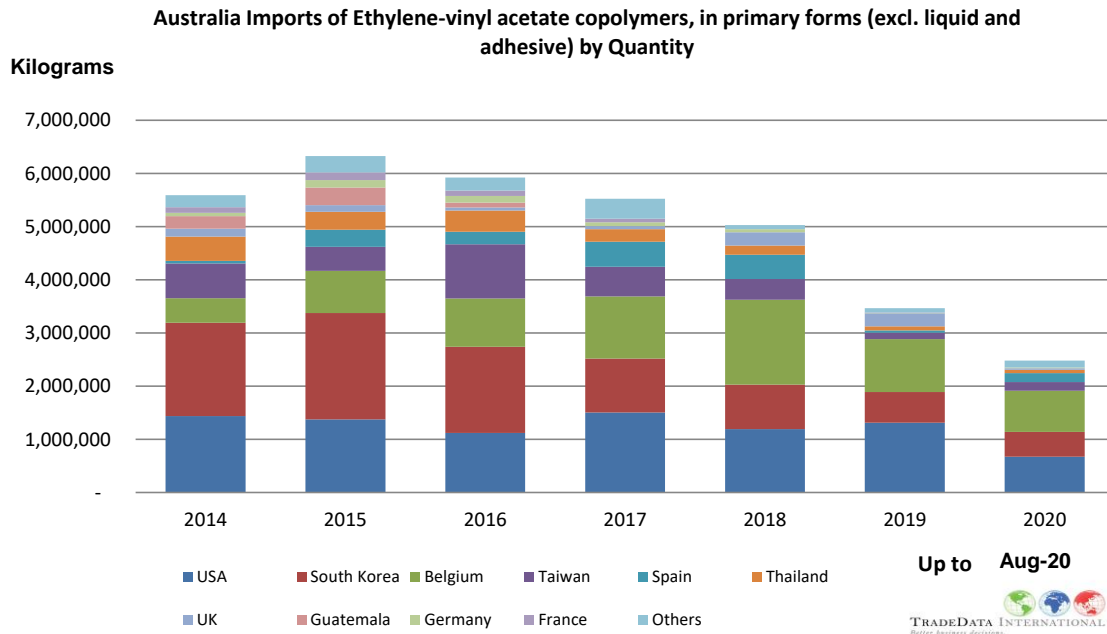
The next chart lists a price histogram of Australian imports of Ultrasonic scanning apparatus and this lists an extreme example of segmentation. The largest volume of imports is sourced from China at \$AU 40 per machine and from the USA at prices between \$AU 130 and \$AU 700 per machine. However, there are also imports from the USA at prices between \$AU 7,000 per machine and over \$AU 10,000. Obviously, machines priced over \$AU 7,000 are different from those around \$AU 500. By segmenting observations into these separate price segments, the analysis is far more insightful. In fact, by not undertaking this segmentation, the analysis would be quite misleading.



TradeData are expert in market segment analysis and are happy to advise when undertaking these analyses. Contact us for assistance.

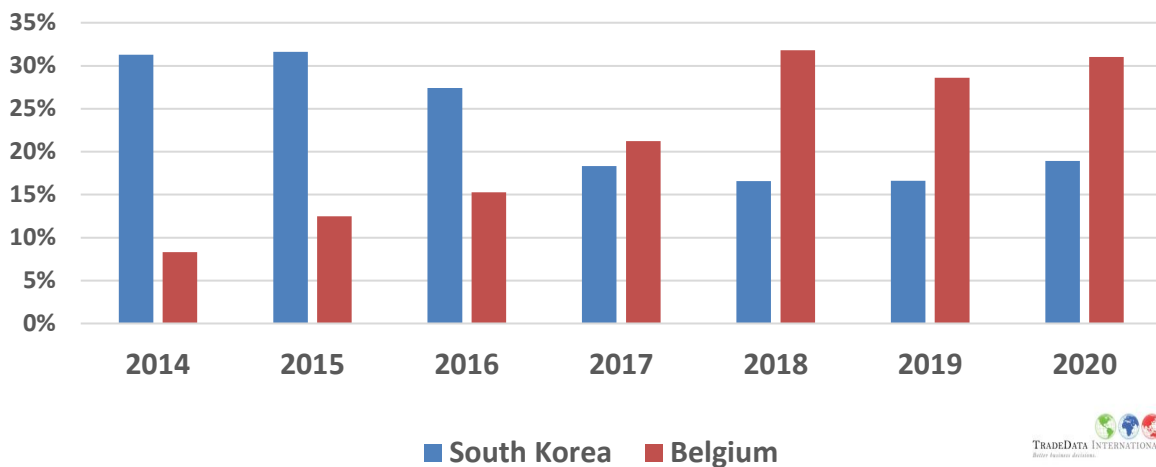
ANALYSIS 5. Identify New Entrants into an Import/Export Market or a Change in Market Structure

Markets are dynamic. New entrants come and go as circumstances change. The chart below lists the top ten supply countries to Australian of Ethylene-vinyl acetate copolymers, in primary forms (excl. liquid and adhesive). In 2015, South Korea and the USA are the largest two supply countries yet by 2019, Belgium has taken away much of their dominance in the trade.



The structure of the market has changed substantially over the 6 years to 2019 and into early 2020. The next chart shows this by comparing the percent of the Australian import market held by South Korea with that of Belgium. South Korea's market share falls by half between 2015 and 2019. Belgium's share of the market increases from below 10% in 2014 to more than 30% in 2018 and thus far in 2020.

Imports of Ethylene-vinyl acetate copolymers, in primary forms (excl. liquid and adhesive) from South Korea and Belgium



TradeData's standard excel file enables efficient analysis of the structure of Australia import or export statistics.

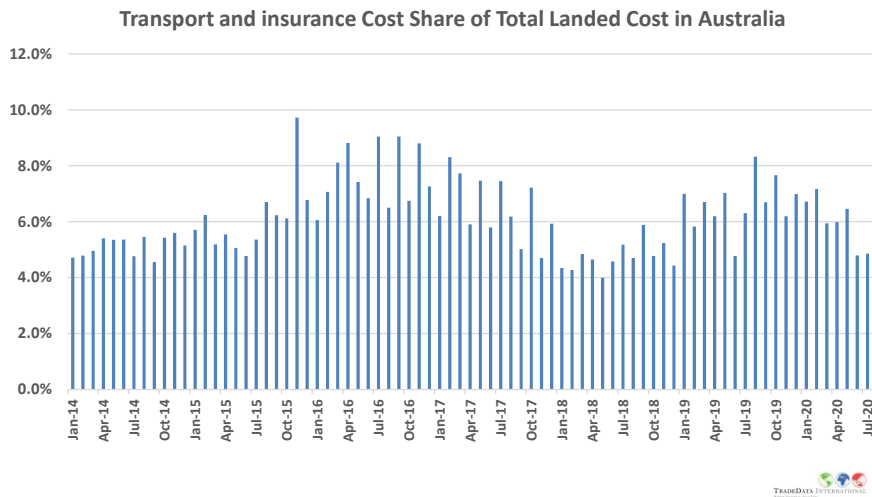
ANALYSIS 6. Identify Transport and insurance Costs and Initial Purchase Prices

Adhering to an international convention, Australian import data lists values both on a:

- **Free on Board (FOB)** basis – this is the actual import purchase value with no insurance or transport costs included and
- **Cost Insurance and Freight (CIF)** basis – this is the initial **Cost** of the item plus includes **Insurance** and **Freight**. This represents the cost to purchase and have the product arrive at an Australian port.

Exports statistics by convention are expressed in FOB value terms. Likewise, import statistics are expressed in CIF values. However, one unique feature of the Australian import data is that it also includes the FOB value. Thus, the difference between the CIF and FOB values are the implied transport and insurance cost to ship the product to Australia.

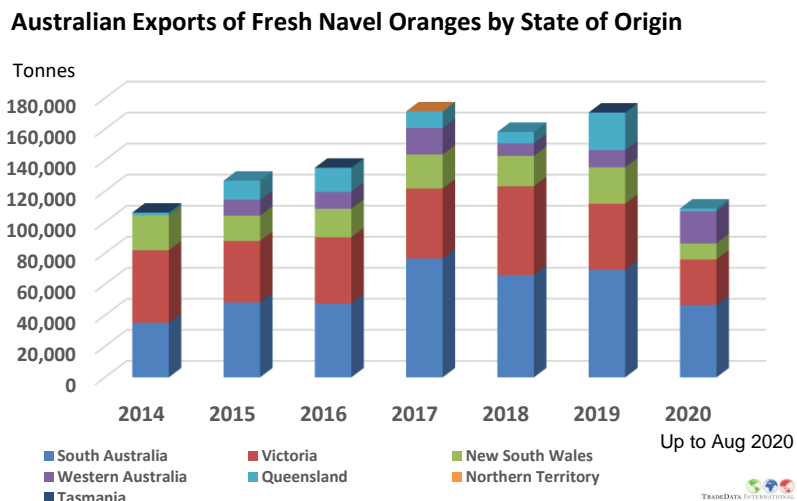
The chart below lists the total transport and insurance costs for importing Glycerol into Australia over time. These costs comprised between 6% and 9% of the total CIF value throughout 2016 and most of 2017. These costs then fell throughout most of 2018 to below 5% and have subsequently increased again to above 6% in 2019. They have declined again thus far in 2020.



TradeData are expert in advising clients on the makeup of purchase values, transport and insurance costs in international trade.

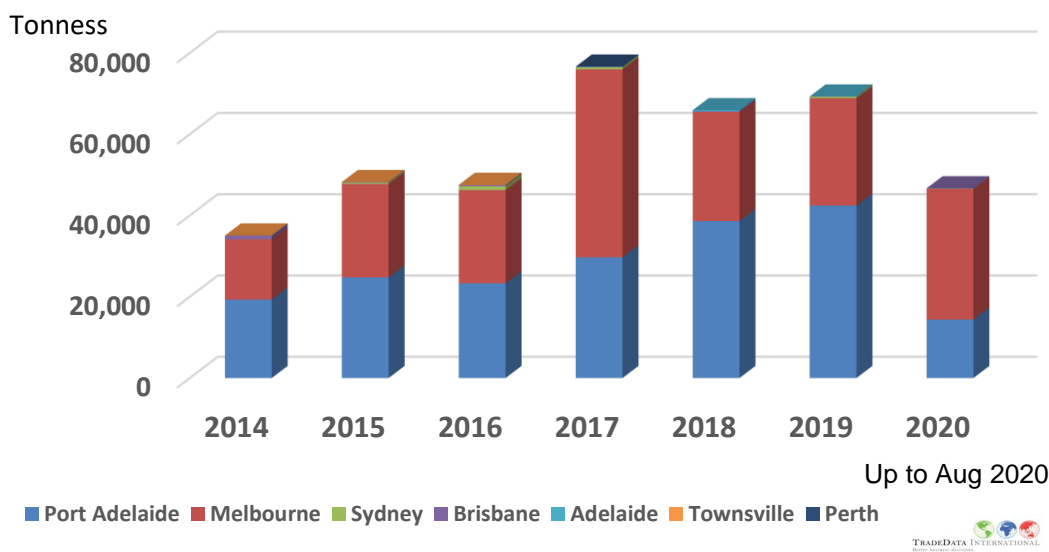
ANALYSIS 7. Analyze Australian Trade Data Regionally.

Another unique feature of Australian exports statistic is that they list the State of Origin for exports. That is the State in which exports are produced. The chart below lists this dimension for Navel Orange exports and clearly shows that South Australia, Victoria and to a much lesser extent New South Wales dominate orange exports.

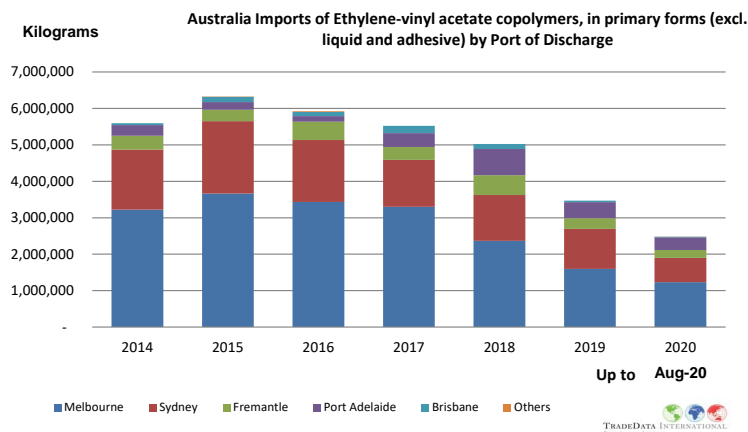


The next charts list Navel Orange exports that originate in South Australia and shows that a major proportion of these exports cross into the State of Victoria and are exported through the Port of Melbourne.

South Australian Exports of Fresh Navel Oranges by Port of Loading



Regional details found in Australian import statistics are seen in the Port of Discharge dimension as list in the chart below. In most years more than half of Australian imports of Ethylene-vinyl acetate copolymers, in primary forms (excl. liquid and adhesive) are discharged in Melbourne. The ports of Sydney, Fremantle, Port Adelaide, and Brisbane make up the remaining discharge ports.



ANALYSIS 8. Analyze Port to Port Trade movement and Transshipment Trade

One key aspect of Australian Import and Export data are the Port to Port details. All Australian Ports are linked to the overseas ports from which the goods arrive from (imports) or go to (exports). The overseas (non-Australian) port details are:

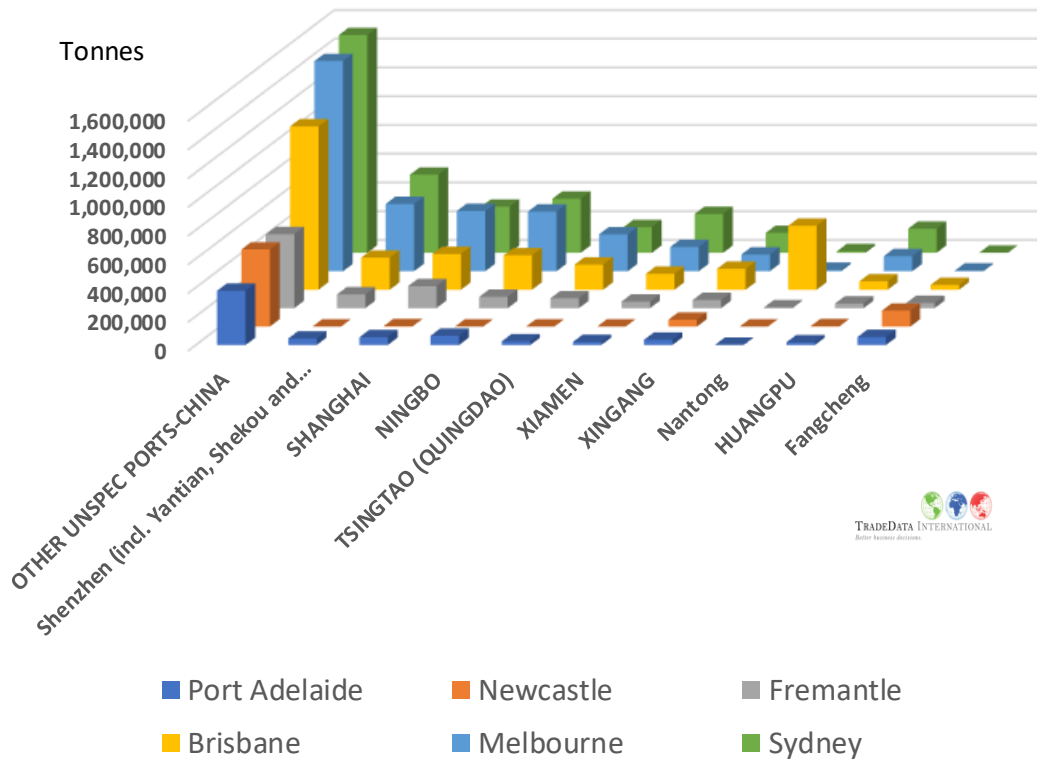
- For imports, the last port of loading before arriving in Australia; and
- For exports, the first port of discharge after leaving Australia.

These details allow for two types of analysis.

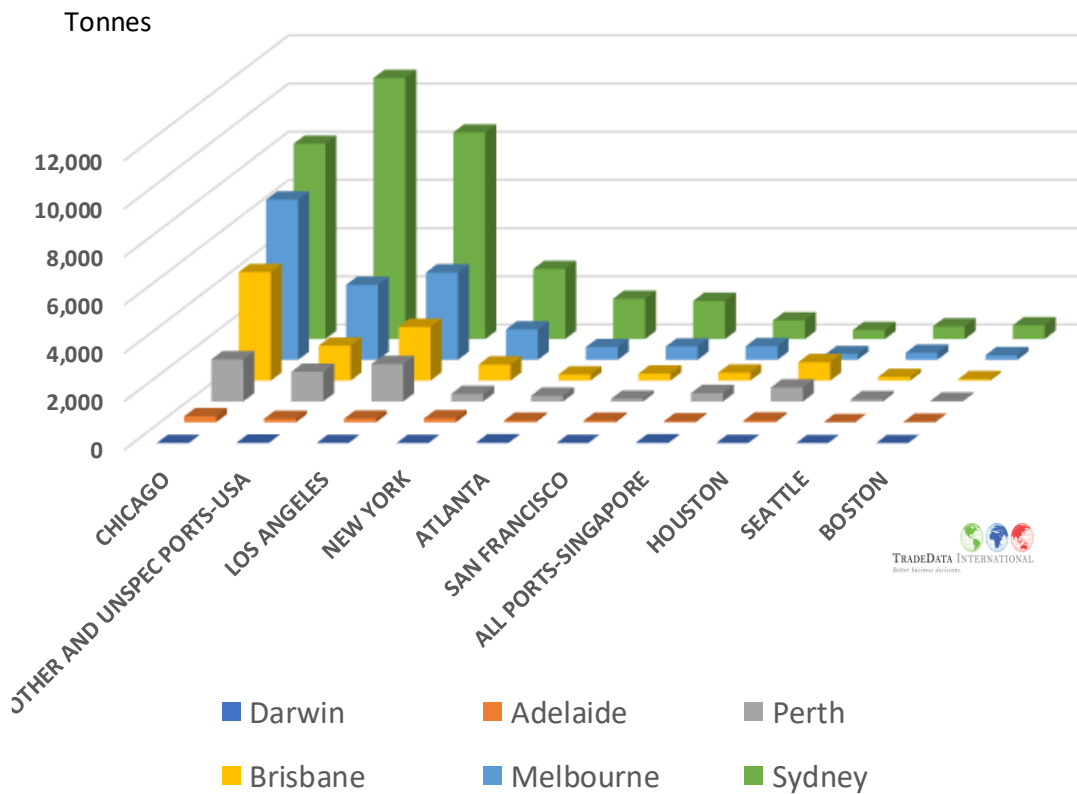
1. Port to Port Analysis

Export or Import volumes (and values) between two selected ports can be analyzed. The following two charts list an example of Sea Transport imports from China, and Air Transport imports from the USA – both for 2018 – only the larger port transactions are listed.

Australian Imports by Sea - Major Port to Port volumes in 2018 - China to Australia



Australian Imports by Air - Major Port to Port volumes in 2018 - USA to Australia



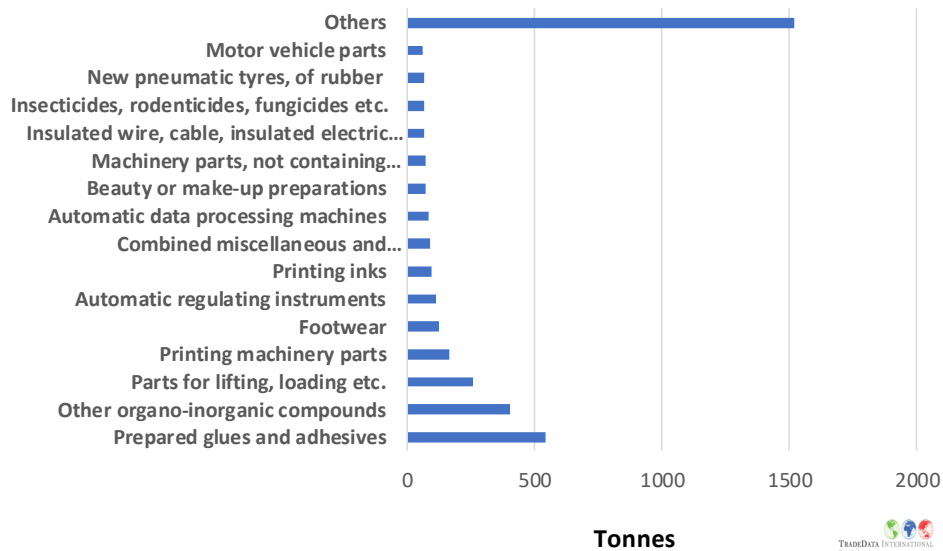
TradeData are expert at advising clients on Port to Port analyses using Australian import and export data.

2. Transshipment Analysis

Transshipment occurs where the overseas port (export or import) is not located within the country of origin (imports) or country of final destination (exports). Two examples are listed below.

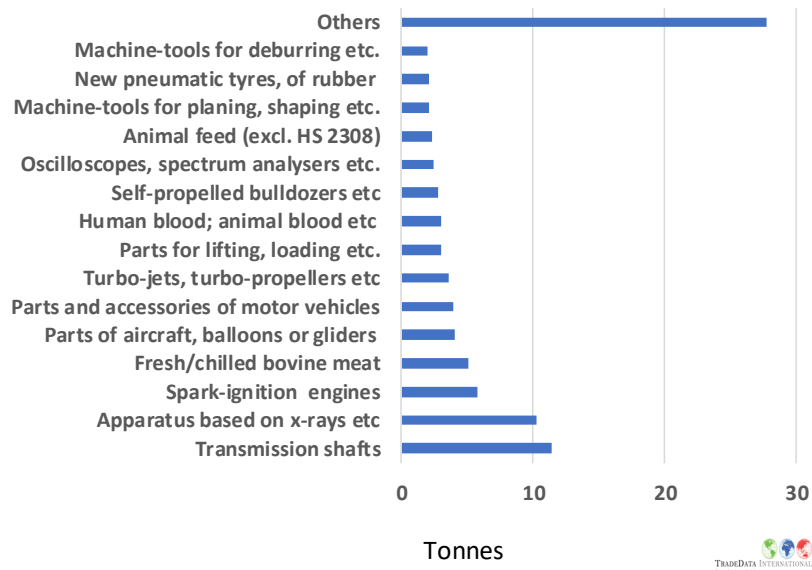
In the first example, the last port of loading was Singapore Sea Port, but the country of origin was China.

Australian imports from China by Sea, Transhipped via Singapore in 2018



In next example the last Port of Loading was also Singapore, but this time Singapore Airport and the Country of Destination was the USA.

Australian exports to US by Air, Transhipped via Singapore in 2018



Conclusion

TradeData are expert in analysing Australian import and export statistics. TradeData delivers the trade statistics in a standard excel file that enables the user to obtain the maximum amount of commercial information from the data. TradeData offers a Free Initial Design/Analysis consultation or advise. Contact us for more details.