Australian International Trade

Dataset

The dataset used for this is the Australian international trade dataset, this dataset was extracted from ABS Statistical data and it contains data from over 30 years. The data set has the following dataset properties:-

1) Import and Export Data

2) 10 main categories

3) 67 sub categories

These properties detail us multiple industries performance and their subcategories performance over the years.

From the initial export and import datasets, we created these following dataset for our further analysis

1) Combined $ data

2) Combined Statistical data

3) Combined Analytical data

Process of creating and the reasoning

Combined $ data

From our given dataset we combined the numerical values of export and import in the same dataset and   multiplied the data from 1,000,000
to get a clear   reflection of the actual values

The formula used -

Dataset sample

Time	Trade	0 Food and live animal	00 Live animals (excl	01 Meat and meat pre
Y1988	Export	$7,903,000,000.00	$322,000,000.00	$2,423,000,000.00
Y1989	Export	$9,487,000,000.00	$244,000,000.00	$2,639,000,000.00
Y1990	Export	$9,726,000,000.00	$163,000,000.00	$3,090,000,000.00
Y1991	Export	$9,311,000,000.00	$182,000,000.00	$3,239,000,000.00
Y1992	Export	$10,585,000,000.00	$226,000,000.00	$3,669,000,000.00
Y1993	Export	$12,435,000,000.00	$289,000,000.00	$3,958,000,000.00
Y1994	Export	$13,394,000,000.00	$359,000,000.00	$3,799,000,000.00
Y1995	Export	$13,073,000,000.00	$576,000,000.00	$3,539,000,000.00
Y1996	Export	$15,804,000,000.00	$659,000,000.00	$2,892,000,000.00
Y1997	Export	$17,197,000,000.00	$743,000,000.00	$3,442,000,000.00
Y1998	Export	$15,152,000,000.00	$567,000,000.00	$3,911,000,000.00
Y1999	Export	$15,878,000,000.00	$698,000,000.00	$4,163,000,000.00
Y2000	Export	$18,974,000,000.00	$798,000,000.00	$5,038,000,000.00
Y2001	Export	$21,988,000,000.00	$1,030,000,000.00	$6,369,000,000.00
Y2002	Export	$21,146,000,000.00	$1,168,000,000.00	$5,952,000,000.00
Y2003	Export	$16,388,000,000.00	$969,000,000.00	$5,309,000,000.00
Y2004	Export	$20,435,000,000.00	$829,000,000.00	$6,552,000,000.00
Y2005	Export	$18,738,000,000.00	$817,000,000.00	$6,860,000,000.00
Y2006	Export	$20,065,000,000.00	$881,000,000.00	$7,084,000,000.00

fx ='Export-Dataset'!C4*1000000

Combined Statistical Data

From the combined $ dataset we used 2 formulas for categories and subcategories, to get the ratio of sub category to its category and the ratio of the category to its total

Formulas used:-

fx ='Combined $s'!D2/'Combined $s'!$C2 fx ='Combined $s'!C2/'Combined $s'!CB2

Dataset sample

Trade	Time	0 Food and live animals;	00 Live animals (excl	01 Meat and meat pre	02 Dairy products an	03 Fish (excl. marine
Export	Y1988	18.65%	4.07%	30.66%	6.69%	8.39%
Export	Y1989	20.19%	2.57%	27.82%	7.19%	6.81%
Export	Y1990	19.11%	1.68%	31.77%	6.95%	6.95%
Export	Y1991	17.34%	1.95%	34.79%	8.52%	7.94%
Export	Y1992	18.13%	2.14%	34.66%	9.04%	8.63%
Export	Y1993	19.82%	2.32%	31.83%	9.40%	8.51%
Export	Y1994	20.68%	2.68%	28.36%	10.62%	8.15%
Export	Y1995	18.24%	4.41%	27.07%	11.44%	8.87%
Export	Y1996	20.53%	4.17%	18.30%	11.14%	6.64%
Export	Y1997	20.29%	4.32%	20.02%	10.66%	7.00%
Export	Y1998	17.03%	3.74%	25.81%	14.14%	7.77%
Export	Y1999	18.27%	4.40%	26.22%	13.91%	8.74%
Export	Y2000	17.19%	4.21%	26.55%	14.36%	8.91%
Export	Y2001	17.94%	4.68%	28.97%	13.87%	7.78%
Export	Y2002	17.70%	5.52%	28.15%	13.65%	7.69%
Export	Y2003	15.18%	5.91%	32.40%	12.64%	8.24%
Export	Y2004	17.35%	4.06%	32.06%	11.63%	6.02%

Combined Analytical Data

From the combined $ dataset we divided the value from the year prior to find out the percentage change from one year to the next to get values to compare the changes over the years.

Formula used fx ='Combined $s'!D3/'Combined $s'!D2

Sample Dataset

Trade	Time	0 Food and live animals;	00 Live animals (excl	01 Meat and meat pre	02 Dairy products an	03 Fish (excl. marine	04 Cereals and cereal	05 Vegetables and fr	06 Sugars, sugar prep
Export	Y1988	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Export	Y1989	120.04%	75.78%	108.91%	128.92%	97.44%	154.76%	85.10%	131.32%
Export	Y1990	102.52%	66.80%	117.09%	99.12%	104.64%	94.04%	113.04%	97.61%
Export	Y1991	95.73%	111.66%	104.82%	117.31%	109.32%	79.99%	112.05%	69.48%
Export	Y1992	113.68%	124.18%	113.28%	120.68%	123.55%	101.58%	126.73%	116.08%
Export	Y1993	117.48%	127.88%	107.88%	122.15%	115.88%	126.66%	110.55%	136.26%
Export	Y1994	107.71%	124.22%	95.98%	121.73%	103.21%	107.67%	101.54%	138.18%
Export	Y1995	97.60%	160.45%	93.16%	105.06%	106.23%	80.51%	99.46%	112.26%
Export	Y1996	120.89%	114.41%	81.72%	117.73%	90.52%	214.24%	117.70%	87.85%
Export	Y1997	108.81%	112.75%	119.02%	104.20%	114.57%	104.88%	106.64%	104.49%
Export	Y1998	88.11%	76.31%	113.63%	116.79%	97.92%	83.04%	98.18%	10.45%
Export	Y1999	104.79%	123.10%	106.44%	103.13%	117.74%	97.31%	105.02%	91.11%
Export	Y2000	119.50%	114.33%	121.02%	123.31%	121.85%	110.73%	122.48%	127.44%

Tableau

After creating all the datasets we uploaded them all to tableau

Then we connect the datasets by using trade and time as the connecting measures, we are able to further analyse and visualise the data.

In this analysis many different ways of visualisations were used

- Line charts
- Polygon area chart
- Treemaps
- Bar chart
- Area Chart
- Sankey Chart

Storyboards

storyboards are tools that help convey complex data narratives in a structured and engaging manner. They play a crucial role in data-driven storytelling:

Sequence: Storyboards allow data analysts to arrange visualisations in a logical sequence, guiding the audience through the data story step by step.

Visualization Planning: They help in planning which types of charts, graphs, and data representations should be used to effectively communicate insights and trends.

User Engagement: Storyboards enhance user engagement by providing a visual roadmap, making it easier for viewers to follow and understand the data story.

For this project we created 2 types of storyboards

1) For the category 0 comparing it to its subcategories
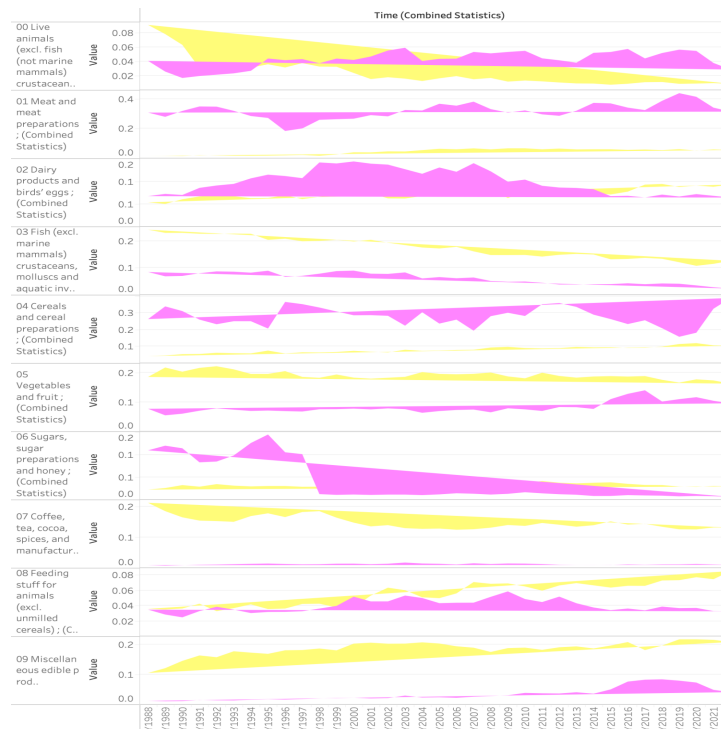2) To compare all the categories from its total
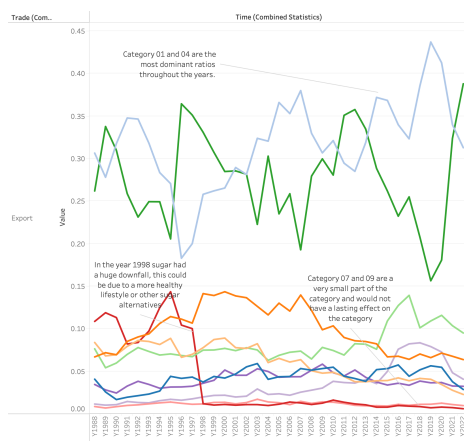
Story of category 0

From the first graph, this graph shows us the time series analysis of all the subcategories, this graph can concisely show us how these subcategories have changed over the years, taken from the combined statistics data. We can see which had a higher relation to the total, throughout the years, all the different colours represent the different subcategories.

Interpretation - Subcategory 1 and 4 are the biggest part of the category 0, we also see the downfall of sugar in 1998, which can be due to healthy alternatives.

From the second graph, we use a polygon area chart which gives us the comparison of import and export over the years for every subcategory in the category 0.

This chart gives us detailed trends and patterns for category 0 and its subcategories and different their import and export differentiated over the years.This chart was made from the statistical dataset Interpretation :- Subcategory 02 had a huge export boom in the 90s but it settled down in the 2010s, subcategories 07 and 09 were mostly responsible for import.

In the next graph we use the polygon area chart to compare the total of the category 0 to the total of all the categories, we use the analytical data for this dataset as they show a ratio between the categories change over the time.
Interpretation:- we can see the trends over time are quite similar which denotes that the category is quite market dependent and follows the upturns and downturns of the market as a whole, this can be due to the necessity of the food market.

On to the next graph, this line graph compares the import and the export of the whole market and the category 0, for this line graph we use the combined $ dataset, the numerical values make it much easier to comprehend the amount of money put into export and import. Interpretation:- the overall dataset is quite balanced with import and export but a category 0 had very low import till 2012 and a comparatively much higher export.
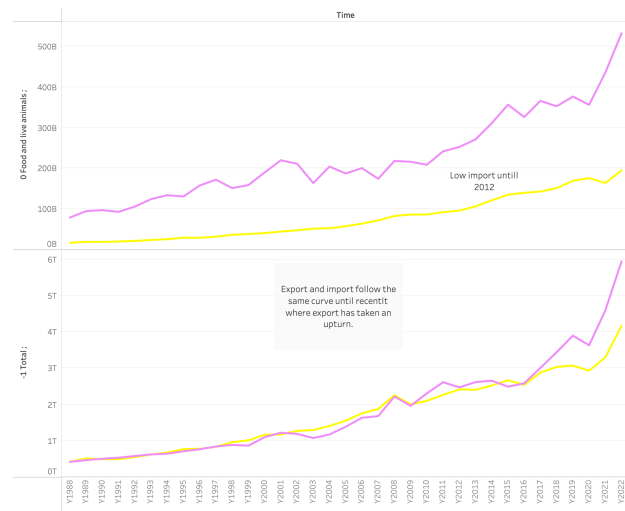
After that we go on to our treemap, the treemap detains all the subcategories statistical data to show its total ratio of export and import in the subcategory, the treemap uses colour to denote the categories and the size to show their ratio, we see categories 01 and 04 being the strongest subcategories for export and 05,09 and 03 being the biggest subcategories for import.

Recommendations for live animals

- Compared to the industry, category 0 has really low import, although the trend has started increasing, measures can be taken to increase import, one big issue might be the relatively low life of most products in this category.
- Fish has had a decreasing trend for import and export over the years, even with the health benefits its becoming less popular. There should be better focus on increasing its popularity in Australia.
- Coffee has had barely any export in the international market, we should focus on improving the brand image of Australian coffee and increase its export.

Sankey Chart for Category 0

Describing the graphical method

A Sankey chart is a type of flow diagram or visualisation used to represent the flow of data, energy, resources, or any other quantity from one point to another. It uses a series of interconnected arrows or bands of varying widths to show the magnitude of flow between different nodes.

We used the total data for category 0 to compare its subcategories and the difference between their export and import. We needed to create this table for this visualisation. We used the Combined $ dataset for this analysis.
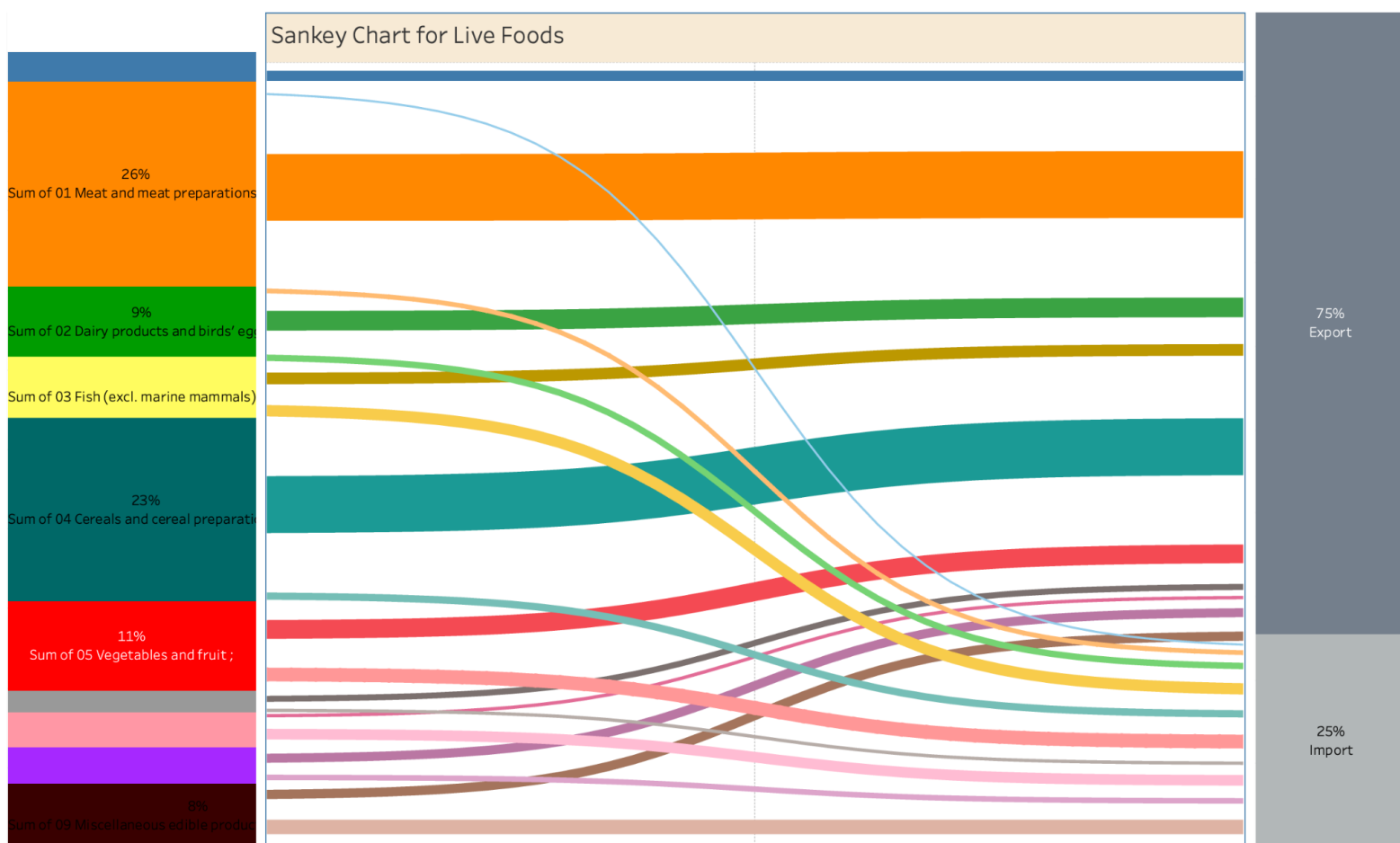
Cat no.	Trade	Category	Values	Total
1	Export	0 Food and liv	Sum of 00 Live animals (excl. fish (not marine mammals) crustaceans, molluscs and aquatic invertebrates of SITC Division	35094000000
2	Export	0 Food and liv	Sum of 01 Meat and meat preparations ;	2.57936E+11
3	Export	0 Food and liv	Sum of 02 Dairy products and birds' eggs ;	73028000000
4	Export	0 Food and liv	Sum of 03 Fish (excl. marine mammals) crustaceans, molluscs and aquatic invertebrates, and preparations thereof (excl.	41183000000
5	Export	0 Food and liv	Sum of 04 Cereals and cereal preparations ;	2.19128E+11
6	Export	0 Food and liv	Sum of 05 Vegetables and fruit ;	69292000000
7	Export	0 Food and liv	Sum of 06 Sugars, sugar preparations and honey ;	19393000000
8	Export	0 Food and liv	Sum of 07 Coffee, tea, cocoa, spices, and manufactures thereof ;	9051000000
9	Export	0 Food and liv	Sum of 08 Feeding stuff for animals (excl. unmilled cereals) ;	31118000000
10	Export	0 Food and liv	Sum of 09 Miscellaneous edible products and preparations ;	32035000000
11	Import	0 Food and liv	Sum of 00 Live animals (excl. fish (not marine mammals) crustaceans, molluscs and aquatic invertebrates of SITC Division	3918000000
12	Import	0 Food and liv	Sum of 01 Meat and meat preparations ;	14251000000
13	Import	0 Food and liv	Sum of 02 Dairy products and birds' eggs ;	20808000000
14	Import	0 Food and liv	Sum of 03 Fish (excl. marine mammals) crustaceans, molluscs and aquatic invertebrates, and preparations thereof (excl.	40159000000
15	Import	0 Food and liv	Sum of 04 Cereals and cereal preparations ;	24267000000
16	Import	0 Food and liv	Sum of 05 Vegetables and fruit ;	49449000000
17	Import	0 Food and liv	Sum of 06 Sugars, sugar preparations and honey ;	8616000000
18	Import	0 Food and liv	Sum of 07 Coffee, tea, cocoa, spices, and manufactures thereof ;	37511000000
19	Import	0 Food and liv	Sum of 08 Feeding stuff for animals (excl. unmilled cereals) ;	17341000000
20	Import	0 Food and liv	Sum of 09 Miscellaneous edible products and preparations ;	52599000000

For the visualisation, we created 2 separate charts to denote the axis as different colours, the first bar chart shows all the categories and the second showing the export and import. Then we went on to create the Sankey chart.

Key features of a Sankey chart:

1) Flow Representation: It visualises the flow of quantities from one set of categories or nodes to another. The width of the bands or arrows is proportional to the quantity being represented.

2) Nodes and Links: Nodes are represented by rectangles or columns, and the flow between these nodes is shown by connected bands or arrows. The nodes often represent different stages, categories, or entities, and the links show the flow or transfer of data/quantities between them.

3) Direction and Proportional Representation: The direction of flow is typically from one node to another, and the width of the links is used to show the magnitude or quantity of the flow. Thicker or wider links indicate a larger quantity, while thinner ones represent smaller amounts.

4) Visual Clarity: Sankey diagrams are used to effectively visualize complex systems or processes, making it easy to understand the relative contributions or transfers between different categories or stages.

Sankey Chart for Live Foods

26%
Sum of 01 Meat and meat preparations

9%
Sum of 02 Dairy products and birds' eggs

Sum of 03 Fish (excl. marine mammals)

23%
Sum of 04 Cereals and cereal preparati

11%
Sum of 05 Vegetables and fruit ;

5%
Sum of 09 Miscellaneous edible produc

75%
Export

25%
Import

<u>Explaining our Sankey chart</u>

For the Sankey chart, we created a dashboard to represent the values in a more comprehensive way, we used colours to denote the sub categories and then to see tier flows we had lighter and darker shades of those colours to denote its trade type (export being dark

and import being light), using the other axis to denote the light and dark to show export and import. The flow shows the categories sum towards its trade, the thickness of its lines show the volume of the trade(thicker lines denoting the total amount on the trade) .

Interpretation:-

- We can see the difference in export and import lines for every category and category 01 and 04 having very strong lines, showing their volume of trade being very high for export.
- We can also see the total import and export from the bar graph.
- We can also see the distribution of the subcategories from the first axis.
- We can see smaller sub categories having much higher import than export which gives us a more comprehensive look as to show the division of export and import.

Recommendations

- Similar to the storyboards.

Analysis of Category 2

Graphical method used:-

Polygon shaped line chart, it's a line chart with a shape to denote the changes over time between 2 categories, using the analytical data to show the difference of the ratio over time.

We made a dashboard of graphs to show the difference of the trajectory of the category with the total and all the subcategories overtime.

Explaining category 2

In our first graph we compare the total with the category 2, we can see the trend and the ending position in completely different, although the whole of the market has seen an upward trend, category 2 has decreased overtime, although the category has the highest export value, information we get from later graphs, there has been a downward trend with many export spikes and import troughs.

Form the second visualisation, we have compared all of the subcategories, we see the difference over the years, Interpretations:-

- Subcategory crude fertilisers have had a huge upturn over the years for export.
- Oil seeds have had a huge upturn in the last 20 years for export while maintaining constant imports.
- Hides and corks are the only subcategories which have had a higher import upturn than export.
- Metalifers have had a downturn for both export and import.
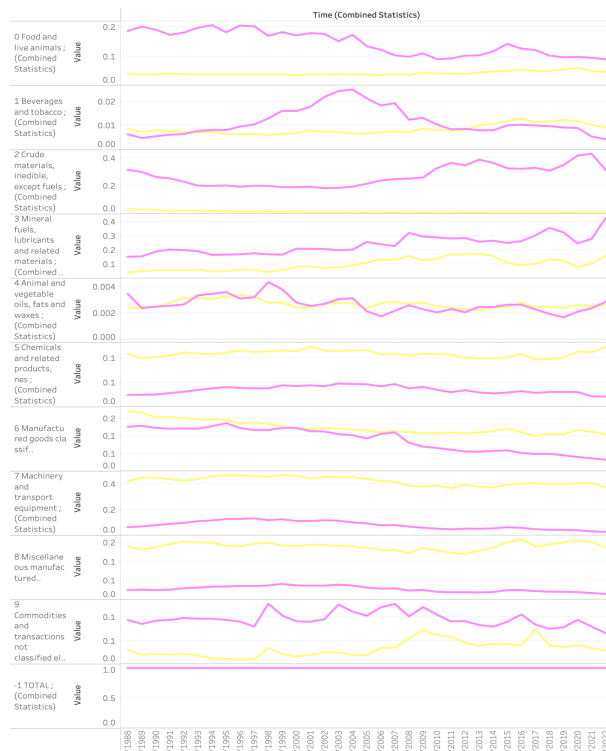
Recommendations for Crude oils

For export

1. Infrastructure Development: Invest in infrastructure for exploration, production, and transportation to make operations more efficient and cost-effective. Improved facilities and logistics can increase export capabilities.

2. Technological Innovation: Adopt advanced technologies for exploration, drilling, and extraction processes to enhance productivity while maintaining environmental and safety standards.

3. Market Diversification: Seek new markets for crude oil exports to reduce reliance on existing trade partners and to tap into emerging markets with growing demand for energy resources.

For Import

1. Strategic Partnerships: Establish favourable trade agreements and partnerships with oil-producing countries to ensure a stable supply of crude oil imports at competitive prices.

2. Diversification of Supply Sources: Expand the sources of imported crude oil to avoid reliance on a single supplier or region. This helps mitigate geopolitical risks and ensures a consistent supply chain.
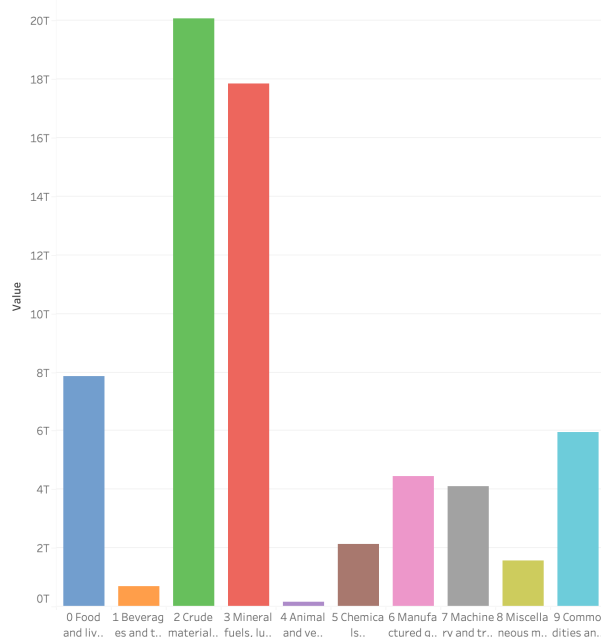
Studying all categories over the years

Comparing all categories

First we compare all the categories statistical data to create line charts over the years, here we created line graphs for every category and we can see that some categories focus on import and some on export by their colour, we also have time on the x axis to show the changes over time, Interpretation - Category 4 has the most consistent relationship between its imports and exports, Category 6 had a huge downturn in 2007, and it has been going down since then.Almost no import for crude materials.
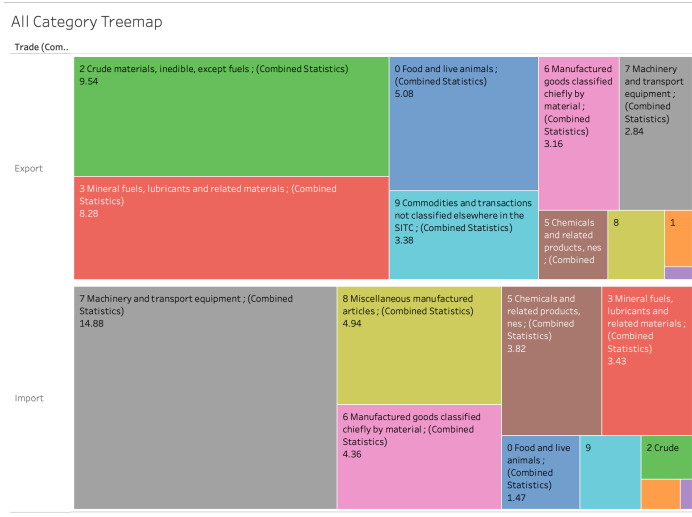
Next we try to get a more comprehensive view with the help of a bar chart, to compare all the categories which are in denoted colours, using the combined $ dataset to get a better understanding of the difference of the categories. Interpretation - Category 2 and Category 3 are the biggest contributors to our dataset, and category and 4 are the least important with the lowest volume.

1

All Category Treemap

Trade (Com..

Export

2 Crude materials, inedible, except fuels ; (Combined Statistics)
9.54

0 Food and live animals ;
(Combined Statistics)
5.08

6 Manufactured goods classified chiefly by material ;
(Combined Statistics)
3.16

7 Machinery and transport equipment ;
(Combined Statistics)
2.84

3 Mineral fuels, lubricants and related materials ; (Combined Statistics)
8.28

9 Commodities and transactions not classified elsewhere in the SITC ; (Combined Statistics)
3.38

5 Chemicals and related products, nes ; (Combined

8

1

Import

7 Machinery and transport equipment ; (Combined Statistics)
14.88

8 Miscellaneous manufactured articles ; (Combined Statistics)
4.94

5 Chemicals and related products, nes ; (Combined Statistics)
3.82

3 Mineral fuels, lubricants and related materials ; (Combined Statistics)
3.43

6 Manufactured goods classified chiefly by material ; (Combined Statistics)
4.36

0 Food and live animals ;
(Combined Statistics)
1.47

9

2 Crude

Next we use a tree map, this treemap denotes all the categories with different colours to show their ratio for their specific trade, Interpretation - we can see category 4 being very unimportant in both export and import, we can also see the category 7s dominance in the import category.

Next we have the circle view chart, the colours denoting the categories and their labels showing if they are import of export, we can gauge an interrelationship between all the categories in a more comprehensible way compared to the tree map hence them being in a dashboard together.Using the combined $ dataset it is easy to see their volume.

Interpretation - Category 1 and 4 have similar import and export volume, category 2 is mostly focused on export while category 7 is mostly focused on import.
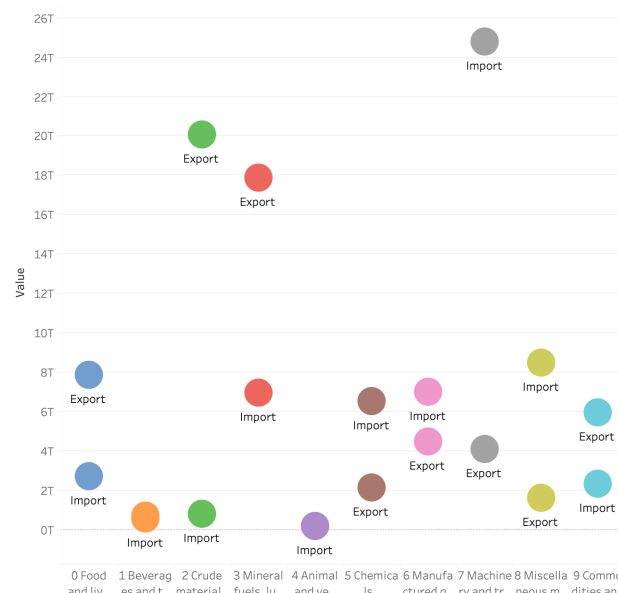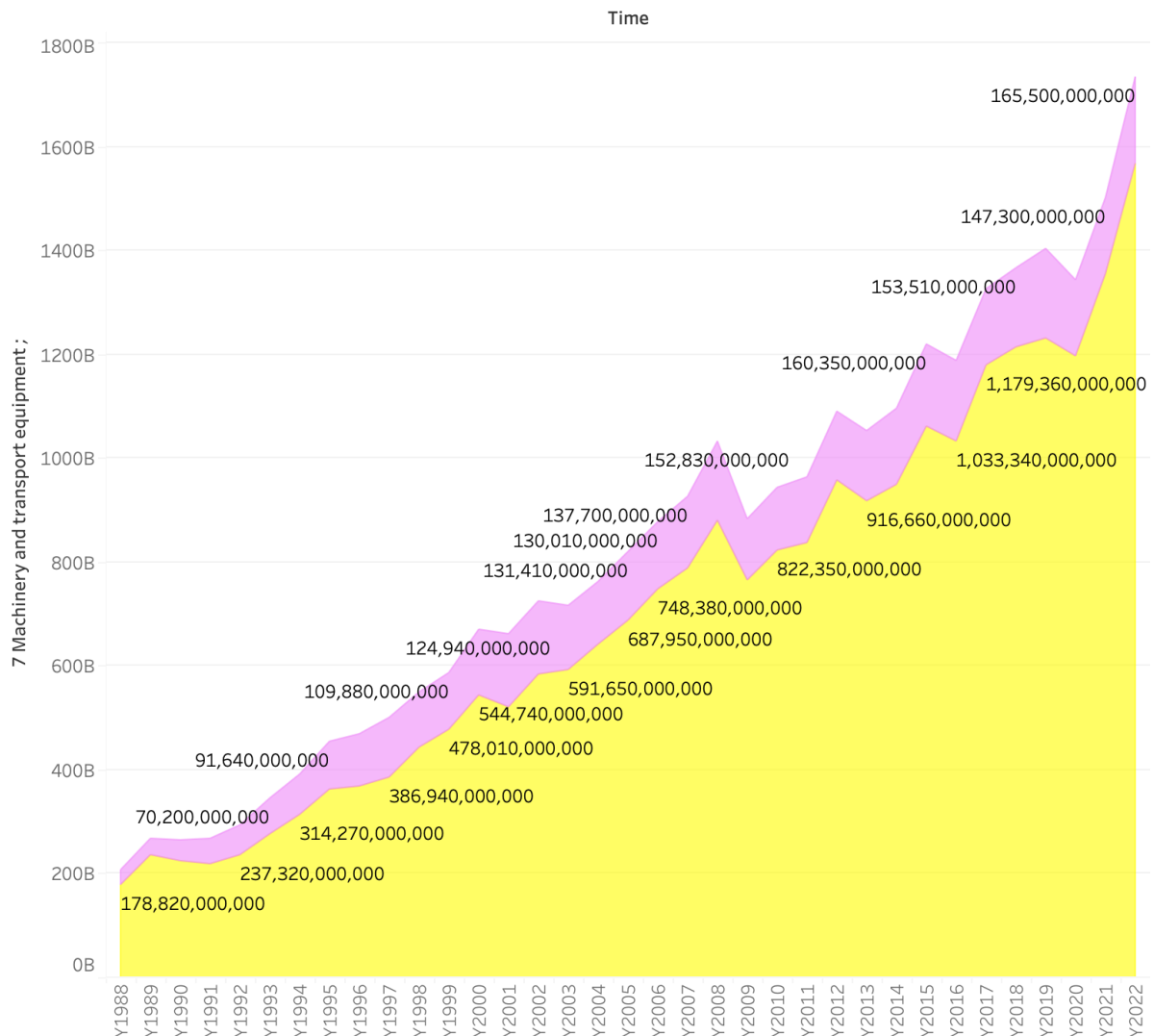

Next we will focus on some the important after analysing them

Analysing Category 7

After the overall dataset we can see that category 7 has been an outlier.

We are gonna be using an area chart to further study the category, the colours denoting export and import. We will be using the combined $ dataset for this project.


From the chart we can see the category is majorly following the same trend for export and import. We can visualise the major influence of the import in the category, the export being 1/10th of the import throughout the years, with a recent spike since covid 19.

Recommendation for category 7

- Improve the quality of the products to increase the export,
- Create more items in the country to decrease the need to spend a heavy budget into importing transport equipments

Analysing Category 3

For the next step, we study category 3 which is the second highest for export and relatively high for import in the Australian trade market. We use the statistical data to analyse the ratio of the total of the category to the total of the whole market. We used a line chart to denote export and import by different colours. Having time on X axis we can see the changes over time.
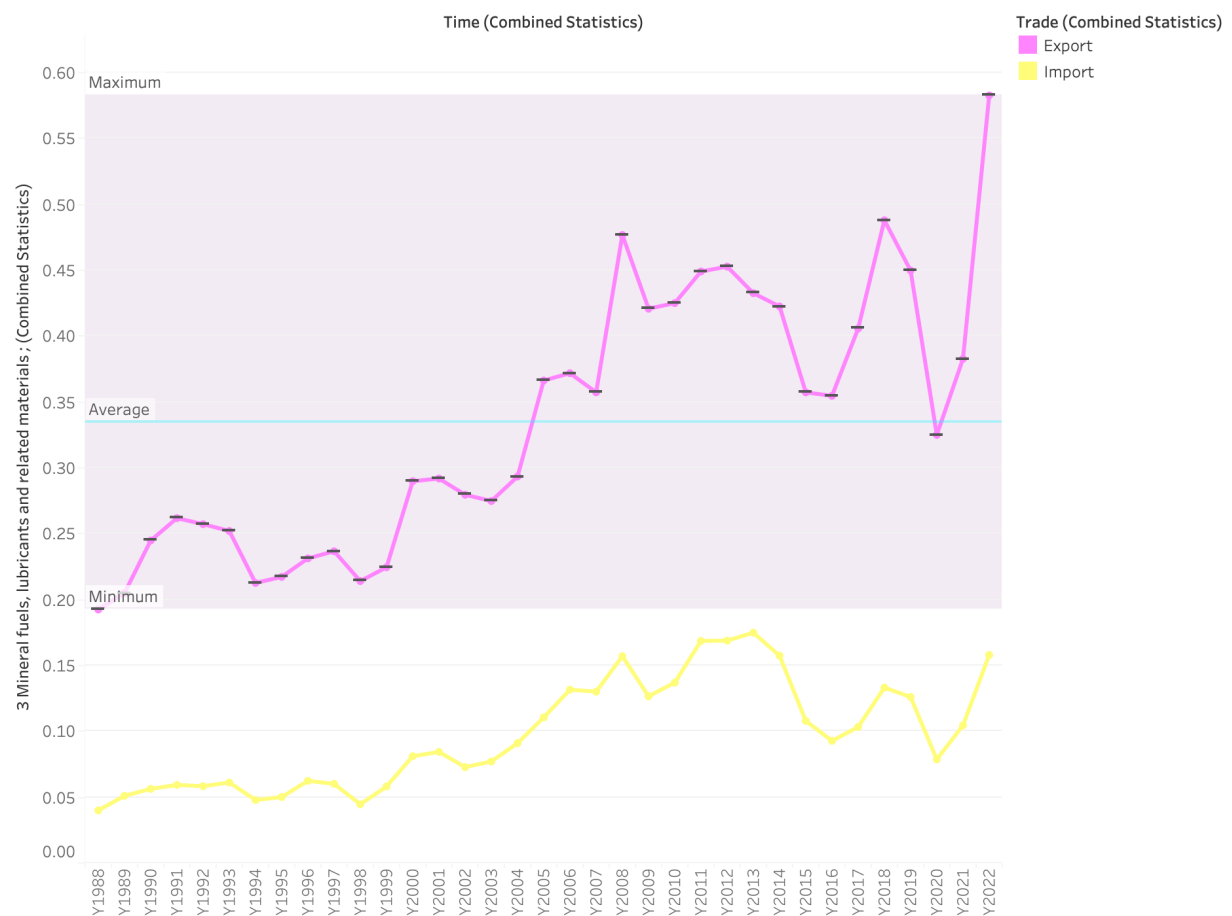
Interpretation - We can see the changes over time for both import and export have been the same there have been no discernible differences, except for the spike in the last couple of years.

Recommendations for category 3

For export

1. Diversification of Export Markets: Explore new markets and expand the export base beyond existing trade partners. Identifying emerging markets with a growing demand for mineral fuels can reduce dependency on specific markets.

2. Investment in Infrastructure: Develop and modernise infrastructure for extraction, refining, and transportation to make the process more efficient and cost-effective. Upgrading ports and transport facilities can streamline the export process.

For Import

1. Diversification of Suppliers: Broaden the sources of imported mineral fuels to reduce dependency on a single supplier or region. This strategy can help mitigate geopolitical risks and ensure a stable supply chain.
2. Environmental Considerations: Prioritise imports from countries that adhere to environmental and quality standards, reducing the ecological impact and promoting sustainability.
3. Investment in Alternative Energy Sources: Encourage research and development in alternative energy sources to decrease reliance on mineral fuels in the long term.

Recommendation for all categories

- Trade Agreements and Partnerships: Negotiate favourable trade agreements and partnerships with various countries to reduce trade barriers, promote exports, and ensure competitive import conditions.

- Investment in Innovation and Technology: Encourage R&D, innovation, and technological advancements across industries to enhance productivity, product quality, and operational efficiency.

- Infrastructure Development: Improve infrastructure such as transportation, ports, and logistics networks to facilitate smoother trade operations and reduce costs.

- Skilled Workforce Development: Invest in education and skills training programs to ensure a highly skilled and adaptable workforce that can meet the needs of diverse industries.

- Sustainable Practices: Encourage sustainability across industries, aiming for environmentally friendly practices to meet global standards and consumer expectations.

Dashboards

A dashboard is a visual interface that displays key information, data, metrics, and performance indicators in a consolidated and easily comprehensible format. It provides users with a quick, at-a-glance overview of important insights or analytics relevant to a particular objective, business process, or operation. Dashboards are commonly used in various industries and contexts, including business, finance, healthcare, and technology, among others.

Dashboard Methodology

Advantages:

1. Concise Information: Dashboards provide a condensed view of data, allowing for quick comprehension of complex information at a glance.
2. Real-Time Monitoring: Enables real-time or near-real-time data updates, aiding in prompt decision-making.
3. Customization: Users can often customise dashboards to display the most relevant information to their specific needs.
4. Interactivity: Allows for interactive exploration of data, enabling users to drill down into specific areas for detailed analysis.
5. Efficiency: Improves operational efficiency by offering a central location for data visualisation, reducing the time needed to gather information from multiple sources.

Disadvantages:

1. Information Overload: If poorly designed, dashboards can overwhelm users with excessive data, making it challenging to focus on critical insights.

2. Design Complexity: Developing effective dashboards requires a balance between displaying essential information and maintaining simplicity; this design can be challenging.

3. User-Specific Needs: Designing a dashboard that caters to every user's specific needs can be difficult, and the dashboard may not suit everyone's requirements.

4. Data Integration Challenges: Integrating diverse data sources into a single dashboard can be complex and might require significant resources and technical expertise.

5. Maintenance and Updates: Regular updates and maintenance are necessary to ensure relevance and accuracy, which can be time-consuming and resource-intensive.

<u>Storyboards</u>

storyboards are tools that help convey complex data narratives in a structured and engaging manner. They play a crucial role in data-driven storytelling:

<u>Storyboard Methodology</u>
Advantages:

1. Narrative Structure: Offers a structured narrative flow, presenting data in a sequential, storytelling format that can aid in conveying a clear message or argument.

2. Engagement: Storyboards can engage audiences effectively, as they guide users through a logical sequence of data, enhancing understanding.

3. Contextualization: Provides context to data, helping users comprehend the data's significance within a broader context or story.

4. Flexibility: Enables users to follow their preferred path through the data, allowing for non-linear exploration and varied interpretations.

5. Storytelling and Insights: Allows for the inclusion of annotations, commentary, and context that provide more in-depth insights into the data.

Disadvantages:

1. Subjectivity: The storytelling format might introduce bias or subjectivity in the interpretation of data, potentially leading to misinterpretation or missing critical insights.

2. Time-Consuming: Building comprehensive storyboards can be time-consuming, especially if there's a need for extensive narrative development.
3. Less Interactivity: Compared to dashboards, storyboards might offer limited interactivity, reducing the depth of data exploration for users.
4. Difficulty in Data Integration: Integrating various data sources or complex datasets within a structured narrative can be challenging.
5. Lack of Real-Time Updates: Storyboards may lack real-time data updates, as they often present a fixed sequence, limiting their use for dynamic and ever-changing data.

Conclusion:

The analysis and visualisation of the Australian international trade dataset have provided a comprehensive understanding of trade patterns, market behaviours, and performance trends. The utilisation of various graphical methods allowed for a detailed assessment of each industry's performance, providing valuable insights for strategic decision-making.

The interconnected relationships between categories and subcategories, market dependencies, and trade imbalances were identified, providing a clear understanding of the market dynamics. The utilisation of dashboard methodologies, combined with storytelling through storyboards, facilitated a structured and engaging analysis of complex trade data.

The recommendations provided in the report are aimed at improving trade performance, promoting sustainability, and expanding market reach. By addressing the identified trends and leveraging the insights derived from the data, industries can make informed decisions to enhance their global trade operations.

Summary

Highlights of Trends and Breakthrough Analyses:

Category-Level Analysis:

- Identified various categories' behaviours and their relationships to the overall market trend.
- Notable trends were observed in categories such as Category 0 and Category 2.

Subcategory-Level Insights:

- Provided detailed insights into subcategories, illustrating their performance in export and import over time.
- Noteworthy subcategories, like sugar and crude fertilisers, demonstrated significant changes and patterns.

Importance of Storyboards:

- Storyboards proved beneficial in presenting the sequential data narrative.
- Comparing subcategories and categories against their total and entire market performance provided a clear and structured understanding of their role in the trade.

Sankey Chart Analysis:

- Sankey charts effectively displayed the flow and magnitude of trade among subcategories.
- Highlights included the dominance of certain subcategories in export/import and the overall market impact of these flows.

Key Trends and Breakthrough Insights:

- Trade Trends Over Time: Significant fluctuations and turning points were noted in various categories and subcategories, providing insights into market volatility.
- Subcategory Contributions: Certain subcategories stood out for their strong impact on the overall category and market, while others showed significant deviations.
- Trade Balances: Import-export imbalances were observed in certain categories and subcategories, indicating market dependencies and influencing factors.