

# Trade Data Analysis Project Report

Prepared by: Oliver Hall

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## 1. Executive Summary

This report provides a detailed analysis of the import-export trade data for various companies, products, and countries. The dataset was analysed to identify key players in the trade industry, the top exporting and importing countries, the most traded products, and trade trends over time.

The analysis highlights the leading importers, top countries involved in trade, and the most significant products based on HS codes. Additionally, we explore monthly trade trends to uncover patterns and fluctuations. This report presents actionable insights for business stakeholders to optimize trade strategies, improve supply chain management, and focus on high-demand products and countries.

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## 2. Objectives

The main objectives of this project were to:

- Identify the top importers and their contribution to the overall trade value.
  - Analyse the most prominent exporting and origin countries.
  - Explore the top products being traded based on HS codes.
  - Understand trade trends over time (monthly) to identify patterns or seasonal fluctuations.
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## 3. Methodology

The analysis was conducted using Python for data preprocessing and Tableau Public for visualization. Key steps involved:

- **Data Cleaning:** The dataset was cleaned, column names were standardized, and the date field was converted into a usable format for time-based analysis.
- **Exploratory Data Analysis (EDA):** We examined key metrics such as total trade value, export and origin countries, and product types (HS codes).
- **Data Visualization:** The results were visualized using Tableau Public to create interactive dashboards that enable further exploration of the data.

The following analysis sections present the results of these efforts.

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#### 4. Key Results

##### 4.1 Top Importers by Total Trade Value (USD)

The top 5 importers contributing to the total trade value were identified. This analysis reveals that:

- **VITALAC DAIRY AND FOOD INDUSTRIES LIMITED** was the largest importer with a total trade value of **\$353,876.72 USD**.
- Other notable importers include **IBCO FOOD INDUSTRIES LIMITED** with **\$59,760.00 USD**, and **BEXIMCO PHARMACEUTICALS LIMITED** with **\$31,297.06 USD**.

These top importers are key players in the industry, and their trade activities significantly influence the overall market.

**Table: Top 5 Importers by Trade Value**

Importer Name	Total Trade Value (USD)
VITALAC DAIRY AND FOOD INDUSTRIES LIMITED	\$353,876.72
IBCO FOOD INDUSTRIES LIMITED	\$59,760.00
BEXIMCO PHARMACEUTICALS LIMITED	\$31,297.06
MANJU INTERNATIONAL	\$28,800.00
SAIFUL STORE	\$21,318.00

##### 4.2 Top Exporting Countries

An analysis of the top export countries shows which nations contribute the most to the trade activity. The top 5 export countries are:

- **Belgium** was the leading export country, contributing **\$353,876.72 USD**.
- **Malaysia** and the **United Kingdom** were also significant contributors with **\$81,078.00 USD** and **\$32,140.81 USD**, respectively.

**Table: Top 5 Exporting Countries by Trade Value**

Export Country	Total Trade Value (USD)
Belgium	\$353,876.72
Malaysia	\$81,078.00
United Kingdom	\$32,140.81
Indonesia	\$28,800.00
Singapore	\$11,250.00

### 4.3 Top Origin Countries

In terms of origin countries, **Netherlands** played a major role, contributing the highest trade value of **\$355,196.42 USD**. This indicates that goods originating from the Netherlands are in high demand. Other notable origin countries include **Malaysia** and **United Kingdom**.

**Table: Top 5 Origin Countries by Trade Value**

Origin Country	Total Trade Value (USD)
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Netherlands	\$355,196.42
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Malaysia	\$81,078.00
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United Kingdom	\$32,140.81
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Indonesia	\$28,800.00
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France	\$12,060.52
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### 4.4 Top Products by HS Code

The HS code analysis reveals which products are most frequently traded. The top product, identified by its HS code, was **19019030** (likely related to food products), with a total trade value of **\$353,876.72 USD**. Other significant products include those classified under HS codes **15171010** and **22071000**.

**Table: Top 5 Products by HS Code**

HS Code	Total Trade Value (USD)
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19019030	\$353,876.72
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15171010	\$81,078.00
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22071000	\$31,297.06
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8029012	\$28,800.00
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22011000	\$12,060.52
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### 4.5 Monthly Trade Trends

To understand how trade activity fluctuates over time, a monthly analysis was conducted. The total trade value for **August 2020** was **\$529,789.75 USD**, highlighting a significant spike in trade activity during this period.

**Chart: Total Trade Value in August 2020**

- **August 2020:** \$529,789.75 USD

This peak suggests potential seasonal or cyclical trends, which could be analyzed further for demand forecasting.

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## 5. Insights and Recommendations

### 5.1 Importer Insights

The concentration of trade value among a few top importers, especially **VITALAC DAIRY AND FOOD INDUSTRIES LIMITED**, suggests opportunities for targeted partnerships and negotiations. Importers handling large volumes of goods should be key partners for supply chain optimization efforts.

### 5.2 Country-Specific Focus

- **Belgium** and the **Netherlands** are major players in the trade landscape. Strengthening ties with these countries could provide access to a stable and high-volume trade network.
- Expanding operations in **Malaysia** and the **United Kingdom** could further enhance trade diversity.

### 5.3 Product-Specific Insights

High-demand products such as those classified under **HS code 19019030** present opportunities for businesses to focus on. Companies should consider enhancing their supply chain efficiency for these products to meet market demand.

### 5.4 Trend-Based Recommendations

The trade value spike in **August 2020** suggests potential seasonal peaks. Understanding these trends allows businesses to better plan for inventory, staffing, and logistical needs during high-demand periods.

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## 6. Conclusion

This analysis provides a comprehensive overview of key trade metrics, including top importers, export and origin countries, product demand, and monthly trade trends. By understanding these patterns, businesses can make informed decisions that enhance trade efficiency and profitability.

Further analysis could focus on deeper trend analysis, the impact of specific events on trade patterns, or exploring additional dimensions such as transportation modes and trade routes.

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## 7. Appendices

- **Interactive Tableau Dashboard:**  
[https://public.tableau.com/views/LiechtensteinTradeExample/Dashboard1?:language=en-US&:sid=&:redirect=auth&:display\\_count=n&:origin=viz\\_share\\_link](https://public.tableau.com/views/LiechtensteinTradeExample/Dashboard1?:language=en-US&:sid=&:redirect=auth&:display_count=n&:origin=viz_share_link)
- **Data Source:** [Techsalerator's Import/Export Trade Data for Liechtenstein, [info@techsalerator.com](mailto:info@techsalerator.com)]