ANALYSIS OF INDONESIA'S POTENTIAL EXPORT PRODUCTS AGAINST MAJOR EXPORT DESTINATION COUNTRIES

Sinta Mustika[1], Lestari Sukarniati, Indanazulfa Qurrota A'yun[2]

sinta1800010243@webmail.uad.ac.id[1], lestari.sukarniati@ep.uad.ac.id , indanazulfa.a'yun@ep.uad.ac.id [2]

Universitas Ahmad Dahlan [1,2]

Abstract.

Potential products are products that have the potential to become superior products in the future. Potential products are different from superior products, if superior products are products that have a high value compared to other products both in terms of quality and quantity, while potential products are products that have great potential and can still be developed to the stage of becoming superior products. International trade allows us to sell freely in several countries in the world. Competitiveness resulting from the opening of international trade is also one of the challenges in developing Indonesia's potential products. Competitiveness is a measure of how strong the product can compete with similar products in the market. The level of competitiveness is important because it can be used as a reference in developing potential products.

   This research is a quantitative approach that aims to determine the level of competitiveness of several potential Indonesian products in several major export destination countries. The data used is secondary data in the form of panel data using the Revealed Comparative Symmetric Advantage (RSCA) calculation method, Trade Balance Index (TBI). The results show that handicrafts, fisheries, leather and packaged food commodities have comparative advantages in several export destination countries.

Keywords: Quantitative research, TBI, RSCA, Competitiveness, Products

1. INTRODUCTION

Trade liberalization has brought the economy to a significant extent in promoting export activities so as to boost economic growth (Kurniawan & A'yun, 2022). In the last decade, the study of international trade has attracted the attention of local and international economists. For developing countries, international trade plays an important role as a representation of the ability to produce domestic producers (Subanti et al., 2019) asean 5 countries. Export activities of potential products can run optimally while maintaining domestic production capabilities.

Many factors influence the amount of international trade both internally and externally because the bigger the market, the more competition will be faced. Indonesia has an advantage because it has the advantage of strategic geographical conditions so that it has abundant natural resources. In fact, the value of exports makes an impact on state revenues. From the table below it can be seen that throughout 2022 alone exports rose from the beginning of the year to the end of the year, from an initial value of only US $ 19143.2 to US $ 23782.7 at the end of the year, despite fluctuations in the value of exports that occurred throughout 2022.

Table 1. 1. Data on Indonesia's Export Value in 2022

Month	Export Value (Million US$)
January	19143.2
February	20489.1
March	26586.7
April	27316.2
May	21493.3
June	26141.0
July	25473.4
August	27928.7
September	24764.5
October	24726.3
November	24059.1
December	23782.7

Source: BPS, processed

Potential products are products that need to be developed to become superior products, in this case potential products still only have the possibility to excel, which means they have not become superior products. With the research of potential products that have

many possibilities to be able to develop more quickly and precisely, it will produce a priority list of potential commodities that must be further developed so that they can immediately become superior products. The speed of this development will also have a positive impact on exports and national income.

Table 1. 2. Export Destination Countries of Indonesia's Potential Products

No.	Potential Commodities	Export Destination Country
1	Crafting	Australia, Canada, England, Singapore, South Korea, Belgium, German, PCA, Nigeria, Saudi Arabia, USA, French, Italy, Spain, Japan, Hong Kong, South Africa, Dutch,
2	Fishery Products	South Korea, Thailand, Australia, Japan, Singapore, Taiwan, China, Hong Kong, Malaysia,
3	Herbal medicines	Russia, Malaysia, Australia, Taiwan, French, Singapore, Japan, India, Hong Kong, China, Dutch, South Korea, Arabia, Saudi PCA, German, USA,
4	Leather Products	USA, Malaysia, Spain, Japan, United of I mirate Arabs, Vietnam, Norway, Singapore, China, Thailand, India, South Korea, Taiwan, Italy, Germany, England, Brazil, Hong Kong, South Africa, I gypt,
5	Packaged Food	Australia, Taiwan, Japan, Thailand, Malaysia, Philippine, Hong Kong, India, South Korea, Singapore, Vietnam, Cambodia.

Source: *(Ministry of Trade, processed)*

From the table, it can be seen that Australia, Japan and Singapore are the three countries that are the most export destinations for Indonesia's five potential products.

And when viewed from the amount of exports from these three countries can be seen from the following table

No.	Main export destination countries Potential	Export value in 2022 (**million US$**)
1	Australia	3.466,4

| 2 | Japan | 24.853,1 |
| 3 | Singapore | 14.349,5 |

Source : (*BPS, processed)*

From the two tables above, it can be seen that the value of exports in the three countries is quite high, while the potential commodities that are widely exported in the three countries are handicrafts, fisheries, leather products, herbal medicines, and packaged food.

International trade competitiveness can be interpreted as the level of how far a country can fulfill international market demand in producing goods or services by defending and increasing the real income of its population. According to research by Farid Ustriaji (2016), Anton Trianto (2015) and Wiwit Santi Wahyuningsih (2017) Indonesia's leading commodities such as cocoa, palm oil industry, forest products, footwear, coffee, rubber and textiles have a fairly high competitive strength in international trade. Likewise, research conducted by Laeli Rahmawati (2023) and Akhmad Jayadi (2016) which examines how much the competitiveness of Indonesia's superior products in the form of leather products is carried out with Australia and Malaysia. The results proved that Indonesian leather products have several types of commodities whose competitiveness is higher than the two countries.

Competitiveness is analyzed in order to clearly know the potential of an export product in the international market. With this information, it can be known which export products must be further improved in production and quality. When it can improve the competitiveness of the right product, exports will increase and eventually The goal is none other than the implementation of economic development, where the budget from the center is limited, then the local government can use the revenue sourced from the area to continue to finance these development activities. (Ramadhona et al., 2022). Competitiveness is one of the general concepts used in the economy, which refers to market competition in the success of trade competition in international exports. Therefore, it is necessary to analyze how much the competitiveness of each commodity against international trade in various export destination countries, so that an analysis can be produced that can be useful as a reference for increasing overall exports.

2. LITERATURE REVIEW & HYPOTHESIS DEVELOPMENT

1. International trade

International trade occurs in commercial transactions between parties located in different countries that are governed by terms agreed upon by all parties. The population in question can include individuals (either themselves or individuals and governments within countries), governments (between governments), or individuals (either with each other or in other populations). The growing number of countries joining the world trading system is a major factor in increasing GDP in many countries. Although the international trading system has been around for a long time, its influence on economic, social, and political interests is usually seen in the last few centuries. The spread of industrialization, the advancement of transportation systems, the proliferation of the internet, and the establishment of multinational corporations have all been facilitated by the international trade sector. Production, exchange and consumption are the three most basic characteristics of human existence, and international

trade is nothing but an extension of these three activities. Participants in international trade come from many countries, either as producers or consumers. Anyways Because, the exchange rate is unpredictable, it makes uncertainty about the profits to be gained, so this conditions may diminish the gain from international trade (Subanti et al., 2019).

Trade is currently defined as a series of coordinated activities that involve the buying and selling of goods and services both within and outside national borders with the aim of transferring rights to these goods and services in exchange for monetary rewards, which is contained in Law Number 7 of 2014. In addition, rapid population growth will lead to increased demand for food, energy, water, and other resources (A'yun & Khasanah, 2022).

2. Competitiveness

The standard capability of a commodity in the international market is measured using competitiveness. The capability in question is the ability of a commodity to maintain its existence in the international market. According to (Tambunan, 2004)According to Tambunan (2004), the more people are interested in a commodity, the higher the competitiveness of the commodity.

Meanwhile, according to Porter in Putri (2012), it can be interpreted as the business ability of a company in the industry and adapt to the many environments it encounters. Competition is based on the competitive advantage of a company, and is highly dependent on the relative level of resources it has, which is called competitive advantage. Porter then states that competitiveness has importance in the following three ways: (1) supporting productivity and providing increased skills, (2) able to provide increased economic capacity, either in the context of regional or quantitative economies. 7 economic actors to economic improvement, (3) the belief that mechanical markets are more efficient.

Based on (Amir, 2003) There are three aspects that should be studied in depth at the international competition level regarding the competitiveness of export products, the first is price, because exporting countries enjoy relative competitiveness if the price of their products is the same. The same or lower than competitors. Secondly, the quality of products, the products provided should fulfill or be based on consumer needs. The third is delivery time. Delays in shipping and delivery of goods can result in the inability to market the product, resulting in a reduction in appetite and interest in the product. (Manalu et al., 2022) states that there are 3 types of trade indicators used in measuring the level of export competitiveness of a product, including: Revealed Comparative Advantage (RCA) and Index of Trade Specialization (ISP). The RCA index is used to measure the relative advantage of products produced by a country compared to competing countries in the world. ISP is used in measuring competitive advantages and product positioning in a country.

3. Potential products

A product declared superior can have competitiveness so that it can face competing products in the domestic market and penetrate the export market. Criteria for superior products, namely goods that fulfill the needs of sufficient local resources, commodity links, rival positions and competitive potential. Based on these criteria we can categorize the elements below:

a. Potential commodities are regional goods that have the potential to be developed because they have comparative advantages. Comparative advantages exist, for example, because of

adequate resources, such as local raw materials, local resource skills, local production technology, and other local infrastructure.

b. Mainstay commodities are potential commodities that are seen to be able to compete with the same products in other regions, because they have comparative advantages and high business efficiency. The effectiveness of these efforts can be seen in production efficiency, labor productivity, profitability and more.

c. A leading commodity is one that has a competitive advantage, because it has won over rivals with other products in other regions. This competitive advantage can be done because of the efficiency of large-scale production due to the high bid position of both suppliers, buyers, and high competition to competitors, new entrants or substitute goods.

Some of Indonesia's potential commodity products include

a. Craft Commodities

Handicrafts based on KBBI (Kamus Besar Bahasa Indonesia) is a (small) company that makes goods that are often used, usually containing elements of art. Fishery commodities

With Indonesia's geographical condition as a maritime country, it means that there is a lot of diversity and marine natural resources in Indonesia. Fisheries is a human activity related to managing and utilizing waters. Aquatic biological resources have no strict limitations and generally include fish, amphibians, and many invertebrates.

b. Leather product commodities

The leather products industry is one of the small and medium industry sectors in Indonesia. The existence of the leather industry is currently encouraged by the Indonesian government and the existence of the Indonesian Tannery Association (APKI) has begun to develop.

c. Herbal medicine commodities

Processed medicinal plant products have great economic value. Utilization of traditional medicine (herbal medicine) in the world continues to increase yearly... The total import of phytopharmaceuticals in the international market in the last ten years was up to 500,000 tons per year and grew 8.5% per year. Traditional medicines are widely accepted in low-income to developed countries. The World Health Organization (WHO) states that 65% of the population of developed countries use herbal medicines. (Aspan, 2004; Depkes RI, 2006; Pujiasmanto, 2009).

d. Packaged food commodities

The food sector is the sector that determines the level of welfare for the off-farm working population in rural areas, which consists of farmers who own small plots of land and farm laborers, most of whom are poor (Wahyuni & Sukarniati, 2018).The Ministry of Industry considers that small and medium-sized food and beverage industries (SMEs) in Indonesia have high potential regarding the need for local markets as well as in meeting international market demand.

Indonesian businesses have a great opportunity for international exposure by exporting packaged food and beverages from Indonesia. Exports are still a major staple as well as a

major source of foreign exchange, so they are seen as an important pillar of Indonesia's economic development.

4. International Trade Theory and competitiveness

a. Theory of Comparative Advantage

The theory of comparative advantage is a theory that states that goods that have use value must also have exchange value. This theory was proposed by someone named David Ricardo. According to him, countries that do not have absolute advantages can still contribute to international trade by specializing in products produced in the country itself.

b. Ohlin hecksher theory

The Heckscher-Ohlin theory indirectly explains that a country then carries out trade with other countries if the countries have different tastes characterized by differences in the economic conditions of the countries trading, for example, developed countries will trade with developing countries. The H-O theory concludes that the cause of productivity differences is the number or proportion of factors of production owned by the country. The difference in production factors is the cause of comparative advantage.

c. Flying geese theory

Akimatsu, who has expertise in economics from Japan, developed one of the models in economics, the "Fling Geese Theory", to explain the spread of industrialization from developed to developing countries. This model aims to integrate East Asian countries into a regional integration platform, with Japan as the leader. The main tool used to facilitate Japan's penetration in Asia was to provide foreign capital assistance. Japan uses capital aid in Japan's own economic interests. The capital aid is there to rebuild Japan's industrial capacity Miyashita, 1999. The fund is a driver and strengthener of Japan's economic relations with various countries in Asia. This explains that one of the important purposes of Japanese aid to Asia is to strengthen the hierarchy of regional production networks Katada, 2001.

3. RESEARCH METHODOLOGY

The data analysis method in this study uses quantitative analysis techniques. Quantitative analysis is done by analyzing problems that are realized with data that can be explained quantitatively.

Researchers used quantitative data types in this study. Data with numbers that can produce more measurable information is called quantitative data. (Zakiyah & Lubis, 2023).. With the Trade Outcome Analysis (TOA) approach of Trade Competitiveness Diagnostic (TCD) which has various indicators, including Revealed Comparative Symmetric Advantage (RSCA) and Trade Balance Index (TBI) aims to know the diagnostic of Indonesia's potential commodity trade competitiveness in major destination countries. Data processing in the research was conducted using Microsoft Office Excel.

1. Revealed Comparative Symmetric Advantage (RSCA)

The Revealed Comparative Symmetric Advantage (RSCA) method is a development method of Revealed Comparative Advantage (RCA). The RCA method is used to identify the comparative advantage of a commodity produced by a country in the world market.

The RCA index value is above 1 or below 1, if the RCA value> 1 then the commodity produced by a country is highly competitive or has a comparative advantage. Meanwhile, if the RCA value is < 1 then the commodities in a country with weak competitiveness or have comparative advantages below the average.

2. Trade Balance Index (TBI)

The Trade Balance Index (TBI) is an index that is used to show the country's specialization, net-exporter or net-importer, of the commodity under study (Lafay 1992). The TBI value scale is between -1 and +1. The value scale shows the meaning, if a country has a negative TBI value, then the country is included in the group of net-importer countries (specialized imports). Meanwhile, if a country has a positive TBI value, then the country is a net-exporter (specialized export).

3. Product Mapping based on RSCA and TBI approach

Product Mapping was conducted to determine the comparative advantage of the commodities studied based on the Revealed Comparative Symmetric Advantage (RSCA) and Trade Balance Index (TBI) approaches (Widodo 2009). The mapping classification was designed in the form of panels so that the commodities studied could be categorized according to the research results that had been obtained as in

Commodities are classified into four group categories namely A, B, C, and D. In group A, the commodities under study already have comparative advantages and are export specialized; Group B, the commodities under study have comparative advantages but are not export specialized (import specialization); Group C, the commodities under study have no comparative advantages but are export specialized; and Group D, the commodities under study have no comparative advantages and are not export specialized (import specialization).
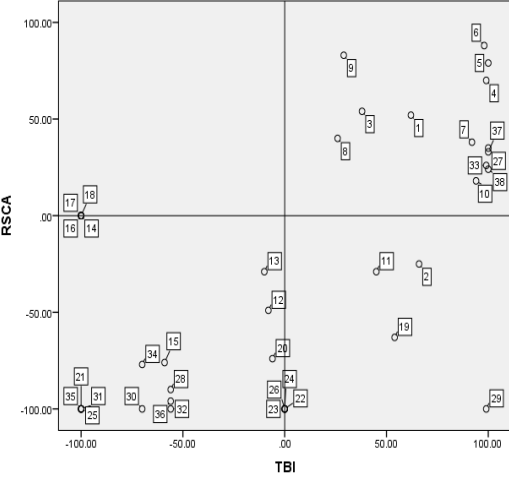
4.RESULT AND DISCUSSION

1. Product Mapping Indonesia - Japan
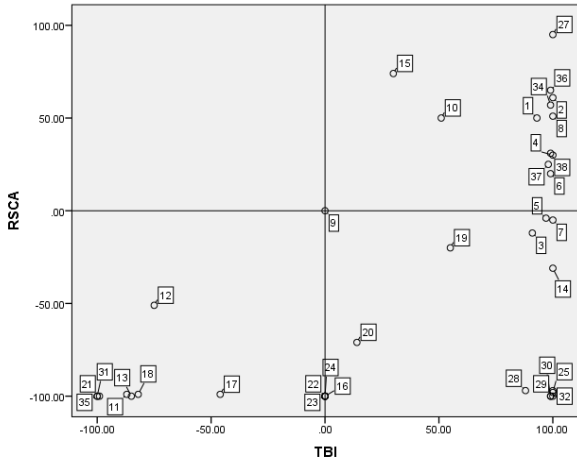
Table 4. 1. Top 10 Indonesia-Japan trade commodities

Product Mapping 2019	Product Name 2019	
	HS Code	Commodity Name
	0306	Crustaceans, skinned or not, live, fresh, chilled, frozen, dried, salted or in brine...
	0305	Fish fit for human consumption, dried, salted or in brine; Smoked fish fit for human consumption...
	0304	Fish fillets and other fish meat, whether minced, fresh, chilled or frozen
	0307	Molluscs fit for human consumption, smoked, with or without shell, live, fresh, cold,...

Product Mapping 2022	0303	Frozen fish (excluding fish fillets and other fish meat from heading 03.04)
	Product Name 2022	
	HS Code	Commodity Name
	0306	Crustaceans, with or without skin, live, fresh, chilled, frozen, dried, pickled or in brine,...
	0305	Fish that can be consumed by humans can be dried, smoked or salted; smoked fish can be consumed by humans.
	0304	Fish fillets and other fish parts cut, fresh, chilled, frozen or not
	0307	Molluscs, human edible until smoked, both shelled and unpeeled, live, fresh, cold, ...
	0301	Live Fish

1. Product Mapping Indonesia - Singapore
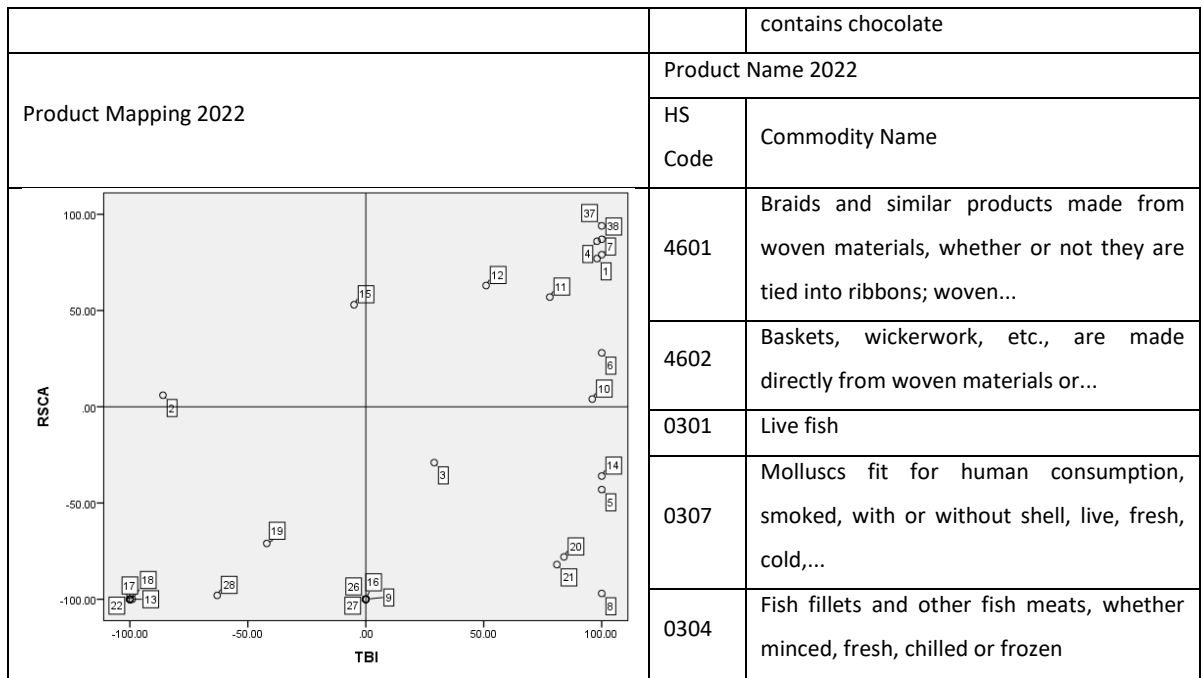
Table 4. 2. Top 10 Indonesia-Singapore trade commodities

Product Mapping 2019	Product Name 2019	
	HS Code	Commodity Name
	4106	Painted or peeled hides and skins of goats or young goats, pigs, creeping animals and other animals, without...
	4115	Leather uses a suede or leather fiber base, in the form of sheets, panels or strips, either...
	4113	Leather produced after tanning or hardening (covering leather), made from goatskin....
	0301	Live Fish
	0302	Fresh or chilled fish (excluding fish fillets and other fish meat from heading 0304)

Product Mapping 2022	Product Name 2022	
	HS Code	Commodity Name
	4106	Skins and hides of goats, trotters, pigs, reptiles or other articles coated and peeled, without...
	4115	Leather is a base material of tanned leather or leather fiber, which is in the form of sheets, panels or strips, either...
	0308	Aquatic invertebrates, excluding crustaceans and molluscs, live, fresh, chilled, frozen, dried,...
	0302	Fresh and chilled fish (excluding fish fillets or other fish meat from heading 0304)
	4601	Woven and similar products made of woven materials, whether or not they are made of strips; woven...

2. Product Mapping Indonesia-Australia

Table 4. 3. Top 10 trade commodities of Indonesia - Australia

Product Mapping 2019	Product Name 2019	
	HS Code	Commodity Name
	4601	Braids and similar products made from woven materials, whether or not they are tied into ribbons; woven...
	4602	Baskets, wickerwork, etc., made directly from upholstery materials or...
	0304	Fish fillets and other fish meats, whether minced, fresh, chilled or frozen
	0307	Molluscs fit for human consumption, smoked, with or without shell, live, fresh, cold,...
	2105	Ice cream and other edible ice, even if it

			contains chocolate
Product Mapping 2022		**Product Name 2022**	
		HS Code	**Commodity Name**
		4601	Braids and similar products made from woven materials, whether or not they are tied into ribbons; woven…
		4602	Baskets, wickerwork, etc., are made directly from woven materials or…
		0301	Live fish
		0307	Molluscs fit for human consumption, smoked, with or without shell, live, fresh, cold,…
		0304	Fish fillets and other fish meats, whether minced, fresh, chilled or frozen

5. CONCLUSION AND RECOMMENDATION

From the results of the above assessment of the competitiveness of Indonesia's leading commodities in several major export destination countries from 2019 to 2022, the following conclusions can be drawn:

a. From the results of product mapping we can see commodities that fall into category A, namely having comparative advantage and specialized exports and can see the 10 most potential commodities. For trade relations between Indonesia and Japan, the most superior commodities are fishery commodities with HS Code 0301, 0304, 0303, 0305, 0306, 0307. For trade relations between Indonesia and Singapore, there are several superior commodities with HS codes 0301, 0302, 0308, 4106, 4113, 4115, 4601. For trade relations, Indonesia and Australia have several superior commodities, namely commodities with HS Code 2105, 0301, 0304, 0307, 4601, 4602.

b. Indonesia's trade relationship with Singapore has more commodity product differentiation in 2019 and 2022, namely there are 7 top commodities with 3 types of commodities, namely fishery commodities, leather products and handicrafts. While the other two countries only have 3 types of commodities and 6 top products for the relationship between Indonesia and Australia, and one commodity for the trade relationship between Indonesia and Japan. The more differentiation of potential commodities, the wider the scope of products that can be developed to become superior products.

IMPLICATION/LIMITATION AND SUGGESTIONS

a.Of the five leading products, four of them, namely handicrafts, fisheries, leather and packaged food commodities, have comparative advantages in several export destination countries. This can be used as a basis by the government and the general public to further increase the quantity and quality of these commodity products so that eventually these commodities can become the main export products and increase overall export production.

b. The most potential export destination country in terms of exports, where Indonesia has high competitiveness is Singapore with products with HS codes 0301, 0302, 0308, 4106, 4113, 4115, 4601, so it is expected that these potential products can be prioritized to be developed to become superior products.

c.Some efforts that can be made to increase comparative advantage include improving the ability of human resources both in quantity and quality, including business owners (entrepreneurial skills) and providing an increase in the competitiveness of the commodity supply chain (supply chain) from upstream to downstream.

d. Suggestions for future researchers are to increase the breadth of research both in terms of time, types of commodities and main export destination countries so that more extensive information can be generated.

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