

Analysis of The Competitiveness of Lampung Robusta Coffee Bean in The Export Market

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Abstract

As one of the largest coffee producing countries in the world, Indonesia has the opportunity to become a coffee exporting country to the world. Indonesia's coffee exports have been ranked the world's top for Robusta coffee since 1984. 94% of Indonesia's coffee exports are Robusta coffee. Global coffee consumption, especially robusta coffee, continues to increase every year, reaching 166 million bags (per bag per 60 kilograms) in 2021. There are many robusta coffee producing areas in Indonesia, one of which is Lampung province. Each coffee producing area has its own characteristics that are different from other areas. This study aims to determine the competitiveness of Lampung Robusta coffee beans in the global market using Diamond Porter's theory analysis on a case study of one of Lampung's coffee exporters which is Surya Bumi Sentosa company and using the Revealed Comparative Advantage (RCA) analysis of Lampung's Robusta coffee commodity results. This study uses descriptive primary data from interviews to explain Diamond Porter's theory and secondary data to calculate the RCA index. The results of qualitative research show that the Surya Bumi Sentosa company has a high level of productivity supported by supporting factors owned by the company so that it produces quality coffee beans that are able to compete abroad. The results of the RCA study show that the average value of the Lampung RCA index in 2019-2023 is 58.96. The RCA index value above 1 proves that Lampung has good competitiveness in the global market.

Keywords: Competitive, comparative, coffee, export, market



INTRODUCTION

Currently, coffee is one of the most traded commodities between countries because coffee has become the most popular drink for people in the world. Coffee drinks are made from ripe coffee beans that are dried in the sun until completely dry. The dried beans are then roasted until they give off their distinctive aroma, ground into powder. The coffee powder is brewed to get a cup of coffee drink.

Global coffee consumption is expected to reach 166 million bags (per bag per 60 kilograms) in 2021 compared to 2019 which amounted to 164.2 million bags, this number is only 1% higher. America and Europe are in the top ranks. In 2021, the United States consumed 63.53 million bags in total with a breakdown of North America as much as 31 million bags, South America as much as 27.18 million bags, and Central America and Mexico as much as 5.36 million bags. Meanwhile, the amount of coffee consumption in the European continent, the number of bags in Europe reached 54 million bags. Asia and Oceania as much as 36.5 million bags are in the next order. Meanwhile, in last place is the African continent which only consumed 12,242 million bags throughout 2021.

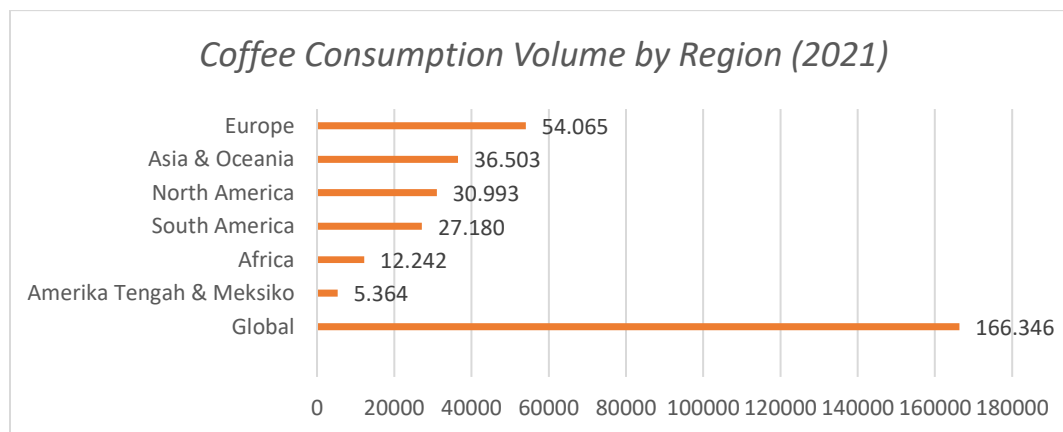


Figure 1: Coffee Consumption Volume by Region

Source : databooks (2022)

As one of the largest coffee producing countries in the world, Indonesia has the opportunity to become a coffee exporting country to the world. Indonesia's coffee exports have been ranked the world's top for Robusta coffee since 1984, while its global coffee market share is ranked third, only below Brazil and Colombia. 94% of Indonesia's coffee exports are Robusta coffee, and the remaining 4% are Arabica coffee. One of the largest

Robusta coffee producing areas in Indonesia is Lampung Province. Since long ago, Lampung Province has been one of the provinces with a very large level of coffee production. An average of 100,000 tons of dry coffee beans are produced annually with 70% of its production used to increase domestic exports. Apart from Lampung province, there are several other provinces that produce Robusta coffee, such as East Java and North Sumatra, which are also Robusta coffee exporting areas.

This study takes the case of measuring the competitiveness of Lampung Robusta coffee at the Surya Bumi Sentosa company, which is one of the companies producing Lampung Robusta green coffee beans and also one of the exporters of Robusta coffee beans in Lampung. The increasing number of coffee consumption makes the number of world coffee needs continue to increase throughout the world causing increasingly tight competition in the international coffee market from various aspects must make Surya Bumi Kencana continue to improve its competitive advantage in order to continue to compete. The benchmark for the success of export competitiveness is measured by the company's competitive advantage and the comparative advantage of Lampung Robusta coffee bean commodities.

Literature Review

Competitive Advantage

To gain a competitive advantage in an industrial environment, a company must of course strive to become more competitive in order to outperform its competitors. Competitive is an added value that a business can have because of the uniqueness of the goods and services it offers. According to Evans and Dean in (Kaswan, 2012), a company's ability to achieve market dominance over its competitors comes from its competitive advantage. The best results can be obtained by implementing a long-term and sustainable competitive advantage plan.

The level of competitiveness of a country is determined by the combined level of competitiveness of public and private institutions. This is because a country can only be said to be competitive if its industry is innovative, competitive, and able to support economic growth (Porter, 1990).

Porter (1990) specifically presents the Porter's Diamond Model. Porter's Diamond Model (1990) applies the concept of competitiveness at the level of countries, regions, industries, and individual businesses providing goods and services (Shafei, 2009). In fact, Porter's diamond model is a framework for evaluating the competitiveness of domestic firms in the global market, which in turn adds value to a country (Smith, 2010). National

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competitive advantage is determined by six factors, according to Porter's diamond model. factor conditions, demand conditions, related and supporting industries, and firm strategy, structure, and rivalry. The four characteristics of Porter's theory are explained as follows:

1. Factor condition

infrastructure needed to compete in a particular industry and the inputs used in the industrial process are known as factor conditions. Porter (1990) stated that creation and innovation are essential condition factors. Porter (1990) also explained an interesting phenomenon, namely the ability of a country to innovate and create new products can actually increase the country's competitiveness in the face of resource shortages.

2. Demand condition

According to (Gallagher, 2005), domestic demand related to a country's internal market conditions is the most interesting component because it must be related to consumer characteristics. This is an important component in increasing competitiveness because it encourages the development of high-quality products by strengthening mutually beneficial relationships between the business world and consumers.

3. Related and supporting industries

Can be interpreted as sectors related to companies that have the power to have an impact on higher levels of competitiveness. Supporting industries drive competitive industries and provide opportunities for information and technology exchange (Porter, 1998).

4. Corporate strategy, structure, and competition.

Related to tactics, market composition, and competitive dynamics in certain sectors. One of the basic indicators used to prepare a company's structure and strategy is competition (Watchravesringkan et al. 2010). Competitive patterns have an impact on the innovation process and will ultimately lead to greater success on the global stage (Tasevska, 2006).

Porter added 2 other determinants as additions, namely the role of government and the opportunity factor. The role of the government as intended is to establish laws and policies that support the development of domestic industry so as to increase the nation's competitiveness. According to (Bakan and Dogan, 2012), the opportunity factor is interpreted as internal and external conditions that occur beyond the control of the company.



Comparative Advantage

According to the theory of comparative advantage, a country can engage in international trade even though it does not have an absolute advantage by selling goods that have fewer deficiencies than other goods (Kartika Sari, 2019). The theory of comparative advantage is very important to economic theory. The theory of comparative advantage can be used to explain how international trade works. By calculating the comparative advantage value of each country, each country will be able to use this theory to choose where to invest and which country to trade their products.

According to David Ricardo's theory of comparative advantage, trade will occur between two countries if it benefits both. The strength of the domestic exchange rate shows the benefits for both parties. The Revealed Comparative Advantage (RCA) method is one method used to determine the comparative advantage of a country.

The use of RCA (Revealed Comparative Advantage) seeks to determine how competitive Lampung's Robusta coffee exports are compared to other Robusta coffee producing provinces in Indonesia within the framework of free trade. Analyzing competitiveness through comparative advantage analysis with the RCA analysis tool. The ratio of global coffee exports to destination countries and the ratio of Indonesian coffee shipments to destination countries are compared to conduct this analysis. The RCA value is determined using the following equation:

$$RCA = \frac{X_{ij}/X_j}{X_{iw}/X_w}$$

Description:

RCA = Level of competitiveness of Lampung Robusta coffee in the world

X_{ij} = Export value of Lampung Robusta coffee to the world

X_j = Total export value of Lampung to the world

X_{iw} = World coffee export value

X_w = Total export value of the world

Decision Criteria :

1. RCA > 1 then a country has a competitive advantage over other countries in a commodity.
2. RCA < 1, then a country cannot compete with other countries because it does not have a comparative advantage in a commodity.

The RCA analysis technique has the benefit of reducing the impact of government intervention, making it easier to see how the comparative advantage of a commodity



changes from year to year. However, the limitations of the RCA analysis tool lie in measuring domestic demand, market size, and development based on the RCA value. RCA cannot determine whether the current trade pattern is the best, nor can it identify future product opportunities.

RESEARCH METHODS

The type of research used in this study is a qualitative research method. Data collection in this study was carried out through interviews, observations and documentation. The data sources used in this study use primary data which is original data sourced from respondents. The subjects selected to fill this study are as follows. This study was attended by six employees of Surya Bumi Sentosa company. The research data sources are limited to qualitative research, secondary data sourced from books, theses, journals, the Central Statistics Agency (BPS), Agricultural Data and Information Systems, the United Nations Commodity Trade Statistics Database (UN Comtrade), and those related to the research being conducted in this study. The data taken from year 2019 to 2023.

RESULT

Diamond Porter Analysis

1. Factor condition

Surya Bumi Sentosa company internal factor condition has a competitive advantage. Condition factors, which is natural resources, infrastructure resources, capital resources, and science and technology resources have been fulfilled. Lampung's abundant natural resources, especially the very large Robusta coffee plantations with large production capacity, coffee plantation covering an area of 156,458 hectares. The vastness of this coffee plantation is capable of producing 124.5 thousand tons of coffee beans in 2022. Lampung Robusta coffee are able to drive sales of PT Surya Bumi Sentosa in international trade and at the same time make it an opportunity.

Strong capital resources also support the success of competitive advantages with the procurement of modern technology and production machines so that the production process becomes more effective and efficient. Strong financial capital is also able to increase purchases of raw coffee from farmers to be more. This company also has quite strong science and technology resources, as evidenced by the use of sophisticated production machines and a large number of production machines so that the production process can run smoothly.

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Each warehouse operator also has good knowledge of coffee bean production, this provision of science and technology is able to compete with other competitor companies. Infrastructure resources Surya Bumi Sentosa company has infrastructure such as an adequate logistics fleet with more than 50 trucks so that the distribution reach is much wider. Other infrastructure such as equipment and supplies such as QC equipment has also been fulfilled so that it can provide comfort for its employees. However, this company has a fairly large weakness in infrastructure resources, namely the absence of digital infrastructure such as websites and other digital media. In fact, this digital infrastructure is an important component for businesses to increase credibility and increase marketing reach.

2. Demand Condition

Surya Bumi Sentosa company has received more than 500 requests for Robusta coffee beans from various countries. Countries that import and consume the most coffee include Germany, India, Canada, France, Poland, Romania, China, Austria, England, and Belgium. The company has received orders from almost all countries in the world. The demand for coffee commodities, especially Robusta coffee, continues to increase all the time. The latest exports from August to November 2024 include exports to the Netherlands with a total of 3 40ft containers or equivalent to 114 tons, exports to Germany with a total of 20 40ft containers using a contract system or equivalent to 760 tons, exports to India with a total of 5 containers or equivalent to 190 tons, and exports to Switzerland with a total of 10 containers or equivalent to 380 tons

The problem of supply and demand, where increasing demand conditions but decreasing supply capabilities create instability so that supply prices must increase. The increase in coffee prices from farmers has forced PT Surya Bumi Sentosa to strategize and continue to analyze the world coffee market phenomenon so that they do not take the wrong steps that end in losses. Despite the poor coffee harvest, the company is still able to meet customer demand, but with more restrictions.

3. Related and supporting industries

Since its first export, Surya Bumi Sentosa company has built cooperative relationships with supporting industries that are related to exports and coffee commodities. Some of these supporting industries include AEKI, the Lampung coffee farmers association, the Lampung industry and trade office, the Ministry of Trade, and ITPC and trade attachés. The existence of good cooperative relationships between Surya Bumi Sentosa company and related supporting industries has increased competitiveness. Cooperation with supporting industries makes it easier for PT Surya Bumi Sentosa in the

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export process and marketing its products in the international market. Without cooperation, this company would have difficulty exporting.

4. Firm Strategy, Structure, and Rivalry

There are many competitors or export companies with the same products as Surya Bumi Sentosa, even its competitors are better at utilizing export marketing strategies. Coffee export companies that are equivalent to Surya Bumi Sentosa, for example Olam Kopi, Asia Makmur, Louis Dreyfus Company have a better reach of potential buyers because they are able to use websites and use various digital marketing tools.

Surya Bumi Sentosa only relies on marketing emails by sending offer emails to potential buyers abroad. However, this does not mean that this company cannot compete with its competitors. Surya Bumi Sentosa believes that marketing using email can build better personal communication with buyers, create good relationships, build closeness through more personal communication so that it is not only limited to product marketing but also building good relationships.

5. Government Role

Surya Bumi Sentosa also receives significant support from government organizations such as the Ministry of Trade and Customs in its overseas commercial ventures. ITPC (Indonesia Trade Promotion Center) and trade attachés are Indonesian trade representatives placed in several countries by the Ministry of Trade. The Ministry of Trade owns both organizations, which facilitate export procedures.

To increase marketing reach, these organizations also promote export goods from Indonesia in each country. In addition, they assist in confirming buyers in each country to reduce the possibility of fraud. The role of the government greatly assists PT Surya Bumi Sentosa in its export process. Government policies related to exports and the cooperation of Surya Bumi Sentosa with government agencies are able to encourage competitive advantages.

6. Chances

Lampung Province has 156,458 hectares of coffee plantations, making it one of the largest coffee producing provinces in Indonesia. This vast coffee plantation can produce 124.5 thousand tons of coffee beans in 2022. The unique taste and aroma of Lampung coffee, which distinguishes it from other Robusta coffee in Indonesia, has made this coffee famous both domestically and abroad, thus becoming the identity of Lampung province which is closely related to this coffee. The vast and prosperous coffee plantations in Lampung offer extraordinary opportunities for the local coffee industry to meet the needs and demands of the national and world coffee markets. The Lampung

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coffee industry finds it easier to develop its sales to the international market because this coffee has a global identity that attracts the interest of foreign consumers. In addition, the world's coffee consumption rate is also increasing every year. Finland, for example, has the highest coffee consumption rate in the world, namely 11.4 kg per capita per year, followed by the Netherlands and Norway which consume an average of 16 kg per year.

A very big opportunity for the coffee industry is the high level of coffee consumption in various countries in the world which continues to increase every year. Coffee business actors need to take advantage of this export opportunity to increase income by exporting coffee abroad. Surya Bumi Sentosa is able to take advantage of opportunities from the natural resource side by utilizing the large production capacity of Lampung coffee, as well as utilizing the identity of Lampung coffee which is known to the world by selling Lampung Robusta coffee abroad. However, this company still does not take advantage of market opportunities due to the lack of strategy

Revealed Comparative Advantage Analysis

Comparative advantage analysis was conducted using the revealed comparative advantage (RCA) analysis theory. Based on the comparison of RCA values in table 1, Lampung province has the highest average RCA value of 58.96. Followed by East Java province in second place with an average RCA value of 36.22. North Sumatra province is in last place with the lowest average RCA value of 33.58. The RCA value of Lampung province has fluctuated, a significant decline began in 2020 when the Covid-19 pandemic occurred.

Table 1 Revealed Comparative Advantage (RCA) Value Year 2019-2023

RCA Value Four Coffee Producing Provinces in Indonesia			
Year	Lampung	East Java	North Sumatra
2019	85,56	51,24	47,22
2020	54,37	49,48	40,86
2021	50,44	38,04	27,04
2022	59,84	50,04	26,23
2023	53,07	28,72	35,93
Average	58,96	36,22	33,58

Source : Data processed by researcher (2024)



Lampung Province shows a consistently higher RCA value than the other two coffee-producing provinces, indicating that Lampung has stronger competitiveness. The average RCA value of Lampung in the last 5 years, namely 2019-2023, is 58.96. Before the Covid-19 pandemic occurred in 2019, Lampung Province was able to achieve an RCA value of 85.56. However, since the Covid-19 pandemic occurred, namely starting in 2020, the RCA value of Lampung Province has decreased significantly. This is due to restrictions on international trade, lockdown policies, and the paralysis of the national and world economies due to the pandemic. In 2020-2023, Lampung's RCA value fluctuated but maintained its competitiveness. The success of Lampung Province's competitiveness is supported by its very large coffee production capacity. In addition, Lampung coffee is famous for its delicious and thick taste and very fragrant coffee aroma. However, this company still does not take advantage of market opportunities due to the lack of strategy

East Java's RCA value is second after Lampung and is still stronger than North Sumatra. 2019 was the highest RCA value for East Java province in the last 5 years, which was 51.24.

North Sumatra Province is one of the Robusta coffee producing provinces in Sumatra with an average RCA value of 33.58, ranked last compared to the other two provinces. North Sumatra had the highest RCA value in 2019 of 47.22 but was still far below Lampung and East Java. During the Covid-19 pandemic and after the pandemic, the RCA value of North Sumatra fluctuated with the lowest RCA value falling in 2022 at 33.58.

DISCUSSION

The competitiveness of PT Surya Bumi Sentosa's Robusta coffee bean products is measured by combining the results of competitive advantage and comparative advantage analysis. The competitiveness of a commodity can be assessed using comparative and competitive advantage analysis. A higher level of competitiveness can be achieved easily and has the potential to increase commodity productivity with a high level of comparative and competitive advantage stability.

The results of the competitive advantage analysis using Porter's Diamond Theory analyze the six points that influence competitive advantage, namely factor conditions, demand conditions, supporting and related industries, company strategy, structure, and competitors, government roles, and opportunities. Based on the results of the analysis, Surya Bumi Sentosa has met the six indicators of Porter's diamond theory. Each of these indicators is interrelated and influences competitive advantage in international trade. The

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relationship between these six indicators is related to the company's operations in international trade. The results of the analysis show that PT Surya Bumi Sentosa and its production, namely Lampung Robusta coffee beans, have met competitive advantage. This company has a high level of productivity supported by the supporting factors owned by the company so that it produces quality coffee beans that are able to meet the expectations of foreign buyers. In addition, it is also supported by the results of the comparative advantage analysis using the RCA indicator or revealed comparative advantage which shows the average RCA value of Lampung province is 58.96, greater than East Java and North Sumatra.

CONCLUSION

This study aims to analyze whether Lampung Robusta coffee beans are able to compete in the export market with the Surya Bumi Sentosa company as the case study. Surya Bumi Sentosa company and its products, namely Lampung Robusta coffee beans, have met competitive advantages. This company has a high level of productivity supported by supporting factors owned by the company so that it produces quality coffee beans that are able to meet the expectations of foreign buyers.

In addition, it is also supported by the results of the comparative advantage analysis using the RCA indicator or revealed comparative advantage which shows that the average RCA value of Lampung province is greater than East Java and North Sumatra. Both indicators determining international trade competitiveness conclude that Lampung Robusta coffee beans produced by Surya Bumi Sentosa company are competitive in export market.

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