Literature Review: Identifying the Effect of Competitiveness on Sales in International Markets for Gayo Coffee Products

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ABSTRACT

Indonesia is the fourth largest coffee producer in the world after Brazil, Vietnam and Colombia. However, in the period 2018-2021 the value of Indonesian coffee exports decreased in line with the low volume of Indonesian coffee exports that year when compared to the previous period so that Indonesia's position fell from fourth to fifth as a coffee exporter in the world. Therefore, it is necessary to conduct research that aims to analyze the competitiveness of Indonesian coffee in the period 2011-2021 using the Revealed Comparative Advantage (RCA) analysis, Dynamic Revealed Comparative Advantage (DRCA), and Trade Specialization Index (ISP). The results showed that there was a decline in the competitiveness of Indonesian coffee in the international market, even though Indonesia is currently at the maturity stage. One of the efforts to respond to this problem is to strengthen the development of Indonesian coffee agribusiness which is integrated and collaborates with each other between its subsystems by paying special attention to coffee farmers.

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1. INTRODUCTION

Indonesia occupies the third position as the largest coffee producer in the world and makes coffee one of the superior plantation commodities. Opportunities for the coffee industry are increasingly developing in line with the introduction of several special Indonesian coffees (specialty coffees) such as Gayo coffee, Mandailing coffee, Lampung coffee, Bajawa coffee and several other coffees. Promotion of Indonesian coffee commodities at the World Coffee Producers Forum (WCPF) has also been intensively carried out in the past five years. In 2021, the export value of Indonesian agricultural commodities recorded coffee as the 5th largest commodity after palm oil, rubber, cocoa and coconut. The value of coffee exports reached 0.85 billion USD or equivalent to a volume of 382.92 thousand tons of cocoa (Ministry of Agriculture, 2020).

Plantation is one of the agricultural subsectors that is growing positively during the world crisis which is currently experiencing an economic recession in the face of the Covid-19 phenomenon. This is proven by the world coffee commodity which shows an increase in the amount of production and consumption in the last six years (Figure 1). The growth in world coffee consumption and production has led to competition between countries in marketing their coffee on the international market. Increasing competition between competitors has an impact on the level of coffee competitiveness. The value of Indonesian coffee production in 2020 was dominated by Robusta coffee, 70.15% and 29.85% was Arabica coffee. In terms of results from smallholder

plantations (PR), the value was 98.85% with an achievement of 745.61 thousand tons of the total of 753.94 thousand tons. The potential for developing the processed and specialty coffee industry domestically and for export is very good. Judging from the level of coffee consumption of Indonesian people, the average is still 1.12 kg per capita/year. This amount is far below coffee importing countries such as the USA 4.3 kg, Japan 3.4 kg, Austria 7.6 kg, Belgium 8.0 kg, Norway 10.6 kg and Finland 11.4 kg per capita/year (Ministry Agriculture, 2020).

By being one of the largest coffee producers, Indonesia has its own challenges to improve the quality of coffee according to standards and minimize the factors that influence the decline in Indonesian coffee production and exports. With the aim that Indonesian coffee can compete with other producing countries in the world in the face of excess global coffee consumption which is increasing every year due to people's changing lifestyles at this time. Apart from that, it is important to identify problems that can reduce the performance of Indonesian coffee in the domestic and world markets (Amanda, 2023). Based on the publication of Siregar (2021), currently there are two types of coffee cultivated in Aceh, namely Gayo coffee (arabica) and Ulee Kareeng coffee (robusta). Gayo coffee itself is abundant in the highland areas of "Tanah Gayo", Southeast Aceh, and Gayo Lues with an average plantation area of around 99,500 ha at an altitude of 1200 m above sea level. Gayo is the name of an indigenous tribe that lives in Central Aceh Regency, Gayo Lues Regency and Bener Meriah Regency, where the majority of people work as coffee farmers.
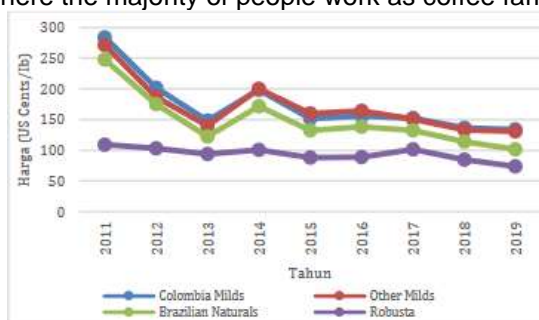

Figure 1. International Coffee Prices based on ICO Indicator Price
Source: ICO (2021)

Based on data from the International Coffee Organization (ICO), a downward trend in the price of each coffee occurred in the 2011-2019 period. Indonesia also experienced a decline in the value of exports when the amount of Indonesian production increased. Decreasing prices tend to make farmers store KPI seeds and resell them when prices rise again. This is one of the factors causing Indonesian coffee to have low quality.
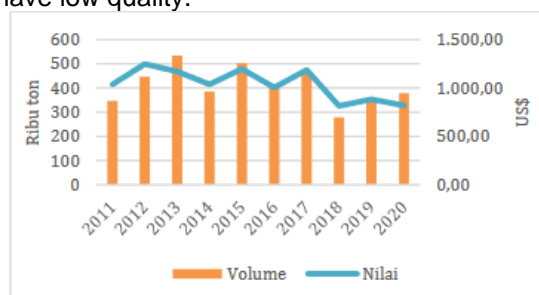

Figure 2. Volume and Value of Indonesian Coffee Exports (in thousands of bags)
Source: BPS (2021)

Apart from that, it is said that the decline in Indonesia's ranking in terms of exports was also caused by problems occurring in Indonesian coffee plantations which experienced a decline in production, volume and productivity, thus affecting the quantity of Indonesian coffee. One of the causes of the decline in Indonesian coffee productivity is that coffee plants are old and more than 25 years old so they need to be rejuvenated.

Referring to the Minister of Trade Regulation No. 10/M-DAG/PER/5/2011 concerning provisions for coffee exports, there are two groups of goods regulated in coffee exports in Indonesia,

namely the coffee bean category and the coffee processed product category. However, coffee exports in Indonesia are still dominated by raw coffee beans. This is shown by the volume of Indonesian coffee exports in 2019, eighty percent of which came from raw coffee beans (UN Comtrade, 2020).

One strategy that can be aimed at stabilizing export revenues is through diversification (Mejia, 2011). Therefore, Minister of Trade Regulation No. 46 of 2020 stipulates that one of the strategies for developing and expanding Indonesian exports is through market diversification. Export destination markets which were previously oriented towards large countries as main partners of traditional markets, are now starting to shift to a number of developing countries with potential or emerging markets (Ministry of Trade, 2013).

Emerging markets are generally not yet large, but have the potential to become new export destinations (Ministry of Trade, 2013). This is in line with the Prebisch-Singer (1950) hypothesis which states that the exchange rate of trade for exports of primary or raw goods will decrease (Ministry of Trade, 2014).

Indonesia is a leading player in the world market, accounting for at least 7% of total world coffee production and around 6% of global exports after Brazil 33%, Vietnam 18.5% and Colombia 8.7%. However, despite its success in becoming the largest exporter in the world, Indonesia still finds many obstacles as an exporter of coffee to the world market. (Canada-Indonesia Trade and Private Sector Assistance Project, 2017)

Basically, the competition that occurs in global trade as indicated by fluctuations in export value cannot be separated from the concepts of comparative and competitive advantage (Baroh et al., 2014). Rosiana et al. (2017), added that fluctuations in the volume of coffee exports in several major exporting countries in the last 15 years are thought to have an impact on a country's position in facing competition with other exporting countries.

Moreover, currently competition for markets is not only limited to how a coffee producing country competes to increase the quantity/volume of exports in the global market, but is also faced with the development of consumer orientation which leads to environmental sustainability (Oktaviana, Masyhuri, & Hartono, 2017) . Based on these conditions, the aim of this research is to analyze the identification of the influence of competitiveness on sales in the international market for Gayo Coffee products.

2.   RESEARCH METHOD
Research design
The research design used in this journal is a literature review or literature study. Literature study is research carried out by researchers by collecting various books and periodicals related to the problems faced and research objectives related to the problems faced and study objectives. The literature review method is used to explain various theories related to the problem being discussed or studied as research source material. Use publications in current journal issues as a starting point when discussing findings from research. The sources used for this literature review method are open access journals, both national and international, articles from seminar proceedings and several writing guide books.

Data Variables
The variable in this research is the identification of the influence of competitiveness on sales in the international market for Gayo Coffee products.

Data analysis
Difficulties in collecting and managing data can be overcome by identifying sources from previous authors using literature study data collections, which consist of journal articles, books, guidebooks, archives and regulations. The researchers used a literature review to obtain data for this study, using topic patterns. The thematic structure groups and analyzes sources based on their subject matter. Based on subject or theme. Research can pinpoint important types of issues and increase their focus by categorizing themes or topics. Accuracy in research is also considered because the process of compiling a literature review involves various steps, such as searching for

articles based on a topic outline and sorting them based on how relevant they are to the topic and how many years of previous research they have.

3.   RESULTS AND DISCUSSIONS

Based on research by Dita et al., (2022) entitled "The competitiveness of Indonesian coffee in the international market" it is concluded that the results of the analysis using the Indonesian Diamond Porter System have a competitive advantage with strong competitiveness as evidenced by most of the main components supporting each other. RCA method, the four largest coffee exporting countries in Indonesia have an average value of 3.89. Morocco (146.49), Georgia (105.99), Egypt (29.65), UK (18.35), Germany (10.95), Italy (8.66), Malaysia (8.29), USA (6.32), Singapore (5.26) and Japan (2.05). The ISP value is 0.90, meaning Indonesia is a coffee exporter in the international market.

Based on research by Silvi and Nia (2023) with the title "Analysis of the Competitiveness of Indonesian Coffee in Facing the World Coffee Trade" it is concluded that the results of the analysis show that the calculated value, in the 2011-2021 period, the average value is RCA, which is 5.3, which means that Indonesian coffee has competitiveness but is still categorized as low. Based on the Trade Specialization Index value, Indonesia as an exporting country is at a maturity level with an average ISP value of 0.89.

Based on Ahmad's (2019) research entitled "Competitiveness of Indonesian Coffee Exports in the Global Market" it was concluded that Indonesia's market share in periods I, II and III was 6.1%, 5% and 5.3% respectively. Indonesia has the lowest share of coffee exports compared to other major exporting countries. This condition indicates that Indonesia has a relatively lower comparative advantage. Indonesia's low comparative advantage compared to other exporting countries is also shown by the results of the RCA index. Indonesia has an RCA classification index of c, which means that the comparative competitiveness of Indonesian coffee is medium or medium. Indonesia has an average RCA index of 3.95. Meanwhile Brazil, Colombia and Vietnam have strong comparative competitiveness (class d).

Based on research by Mukhlisul and Achmad (2021) entitled "Market Diversification and Competitiveness of Exports of Indonesian Processed Coffee Products to Selected Emerging Market Countries" it is concluded that the POKI export market during the 2010-2019 period is still relatively concentrated and tends to increase every year. This shows that POKI's export market diversification during the 2010-2019 period has not been good enough and efforts need to be made to increase market diversification to potential countries other than its main partner (the Philippines). Based on RCA, EPD, and X-Model, it was found that POKI's export competitiveness to nine emerging market countries aimed at diversification was quite good with a strategic position. Of the nine emerging market countries, five emerging market destination countries were obtained that have optimistic market development potential as diversification destinations, namely Russia, Lebanon, China, Papua New Guinea and Thailand. Therefore, as an effort to develop POKI exports, the government should prioritize increasing diversification to the five countries that have optimistic development potential so that the vulnerability of POKI exports to instability can be reduced.

Based on research by Maharadi (2021) related to "Gayo Coffee Agribusiness Management in Takengon", it is stated that through strategy formulation, the development of the Gayo coffee agribusiness, namely the Development of the Gayo Coffee Agribusiness System, is directed at increasing competitiveness through fostering improvements in the quality and appearance of coffee products and their processed products. From this strategy, it is hoped that the main problems of coffee agribusiness in Central Aceh district, especially in Atu Lintang village, namely the low quality of the coffee beans produced and weak competitiveness, can be overcome with policies that will bring benefits to robusta coffee farmers and regional economic development.

Based on Rahayu's research (2019) entitled "Analysis of the Competitiveness of Indonesian Coffee in the Export Market" concluded that. The research results show that Indonesia's RCA index was around 2.8 in 2018. An RCA index value above 1 proves that Indonesia has good competitiveness in the global market. Based on this qualitative analysis, internal factors show that Indonesia has low productivity compared to the other four top exporting countries. Total demand for Indonesian coffee exports fluctuates but domestic demand shows an increasing trend. There are

only six large local companies that have added value processing to coffee. Indonesia's export destination countries have also proven to be competitive markets.

Based on research by Hadiyan and Suhaiza (2010) entitled "A Review on the Competitiveness of Global Supply Chain in a Coffee Industry in Indonesia" states that the Indonesian industry is improving quality, production and supply. From a broader perspective related to this matter, it is possible to increase competitiveness through product management and marketing.

Based on research by Fitriani., et al (2021) with the title "Indonesia Coffee Export and Its Relation to Global Market Integration" states that this research aims to explore the situation of Indonesian coffee exports related to price risks and coffee market integration between Indonesian coffee prices and coffee prices. Indonesia and international coffee prices. The data used is time series data on coffee prices from 1987 to 2014 in the Indonesian domestic market and in global trade in London. Vector Error Correction Model (VECM) is applied to test market integration based on the Ravallion equation. Based on the results of the analysis, the research results show that Indonesia's coffee exports have increased in the last decade. The export destination countries for Indonesian coffee exports are also growing widely. There is market integration in the Indonesian coffee market and global prices at the London terminal. Although not completely, the shock to international prices was felt in the Indonesian coffee market. There is enough evidence to conclude that the Indonesian coffee market is integrated with international markets in the long term. Changes in coffee prices in Indonesia and the international market will adjust in the next three years. In the short term, Indonesian coffee prices are 76% influenced by changes in international prices, but not vice versa.

Based on research by Nia., et al (2018) entitled "Dynamics of Indonesian Robusta Coffee Competion Among Major Competitor Countries" stated that in the last fifteen years, there have been fluctuations in Robusta coffee exports. Indonesia with a decreasing trend compared to its main competitor countries. The aim of the research is to analyze the dynamics of the competitiveness of Indonesian Robusta coffee exports and the level of competition between the main competing countries, such as Vietnam and India. The methods used are Revealed Comparative Advantage (RCA), Dynamic Revealed Comparative Advantage (DRCA), and Rank Spearman Correlation. This method is used to analyze changes in the level of competition in a 15 year time dimension (2000–2015) as well as to analyze relationships between competing countries that can influence the Robusta coffee market in each country. The results of the analysis show that the competitiveness of Indonesian coffee tends to increase compared to the two main competitors that export Robusta coffee in the world, such as Vietnam and India. However, the competitiveness of Indonesian coffee is still half below that of Vietnam. Competition for Indonesian coffee with Vietnam and India is not significantly correlated due to differences in markets in export destination countries. Increasing competitiveness and strength of competition in the export market can be done by improving the quality and continuity of domestic Robusta coffee in accordance with world consumer demand.

Based on research by Fadhlan and Rachmawati (2021) entitled "Export Competitiveness of Indonesian Coffee in Germany", this research aims to measure the competitive position of Indonesian coffee exports in Germany. The methods used in this research are Revealed Comparative Advantage (RCA) and Constant Market Share (CMS). The research results show that Indonesian coffee exports are not competitive in Germany and have a downward trend. The performance of Indonesian coffee exports in Germany also shows a downward trend in each period. Several things that need to be improved so that Indonesia's competitiveness and export performance can increase is by conducting outreach regarding the use of cultivation technology to increase Indonesian coffee productivity.

Based on research by Adnan., et al (2022) entitled "Competitiveness of the Commodity Indonesian Coffee Beans in the International Market" states that identifying the competitive strength and position of Indonesian coffee beans in the international market and each national market of the importing country. Panel data used for the 2010-2021 period includes 11 exporting countries and 6 importing countries, analyzed using the RCA index. The research results show that unroasted or decaffeinated coffee has strong competitiveness in the international market and national market of importing countries, and weak competitiveness for roasted and decaffeinated coffee. The competitive position of the two coffee bean commodities is in 6th position. The positive correlation between export contribution and coffee bean competitiveness indicates a positive impact from the GI program and

suggests that the competitive position be improved through the provision of adequate and affordable organic production facilities, education to farmers, as well as partnership and promotion cooperation.

4.   CONCLUSION

The competitiveness of a product can be measured using several methods such as RCA, ISP and DRCA. Sales on the international market for Gayo coffee products have not shown good results. This is due to several identified problems such as lack of product quality, no special stakeholders and a lack of understanding regarding product supply and demand so that the value of exports does not increase. Factors that influence competitiveness include: Skills or education level of workers, expertise of entrepreneurs, availability of capital, good organizational and management systems (according to business needs), availability of technology, availability of information, and availability of other inputs such as energy and goods or services.

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