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The Competitiveness of Indonesian Cashew Nuts in The Global Market

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Abstract

Indonesia is one of the best quality cashew nut producers and exporters with a 1.2% share in the global market. This is very far from being compared to Vietnam as the world's main exporter of cashew nut controlling 34.07% of the global export market. This study aims to determine the competitive and comparative advantages of cashew nuts from Indonesia and Vietnam in the international market at 2009-2018. The various differences between the two countries make the products produced and distributed vary in quality and quantity. Competitive advantage is analyzed using Porter's diamond theory which consists of four factors to see the competitive advantage of an industry/country. Meanwhile, to determine the comparative advantage of cashew nut trading activities, the Revealed Comparative Advantage (RCA) and Trade Specialization Index (ISP) were calculated. Based on the results of the analysis, it can be seen that Indonesia has an advantage in producing cashew nuts, but has not been able to process it optimally, such as Vietnam which applies special technology and standards in producing cashew nuts. The RCA calculation shows that Vietnam's cashew nut exports have much greater competitiveness than Indonesia, and the ISP calculation results show that both exporters are still importing to maintain the economy and ensure the availability of industrial raw materials in the global market. Trade-related policies need to be considered in order to increase export profits and benefit domestic business actors.

Key words: Comparative Advantage, Cashew Nut Export, International Agribusiness

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INTRODUCTION

Trade is an activity of buying and selling goods and services carried out with the aim of transferring goods/ services accompanied by a reward or compensation. According to Law No. 7 of 2014 concerning Trade, based on region, trade is divided into 3 categories, namely domestic trade within the scope of the Unitary State of the Republic of Indonesia, foreign trade which includes export and import activities of goods/ services that exceed national borders, and border trade which is a transaction carried out by Indonesian citizens who live on the border with residents of neighboring countries in fulfilling their needs (Supardi, 2019). The existence of trade regulations aimed at protection, considering that trade is the main driver of national economic development (Sahban, 2018).

According to Diphayana (2019)international trade is business transactions between parties of more than one country, such as export activities, investment in factory construction in foreign countries, imports of raw materials, and other factors. In the current era of globalization and free trade, bilateral, regional and international economic relations are considered important to fulfill needs. In addition, various developments in the field of communication and logistics, as well as trade liberalization facilitate transactions will between countries.

There are several factors that encourage a country to conduct international trade (Sukirno, 2008) including natural potential factors, fulfillment of domestic goods and services, the desire to gain profits and increase state revenue, differences in the mastery of science and technology, requiring a market for excess domestic products, the existence of various differences that cause differences in production results, there are similarities in tastes, a desire to work together, and globalization that makes a country unable to stand alone (Bustami & Hidayat, 2013).

Exports and imports are transactions in and out of goods/ services from one country to another. Export is an activity of removing goods from the customs area. The purpose and benefits of exports are to grow domestic industry because international trade activities are one of the stimuli to domestic demand that boost industrial productivity, control product prices due to abundant production, and increase foreign exchange. Meanwhile, import is an activity of buying goods from abroad into Indonesian to circulation ensure the fulfillment consumption and industrial needs and to maintain economic balance.

One sector that plays a role in international trade is the agricultural sector. The diversity of existing natural resources makes Indonesia a rich country and one of the largest exporters of several commodities such as coffee, tea, palm oil, etc. Expanding the market for agricultural products is expected to be able to provide welfare to farmers, develop domestic business potential, and improve national economic conditions, given that agriculture is a sector that dominates in GDP and absorption of labor. The hope is that the agricultural business internationally will be able to benefit domestic parties.

Cashew nut or cashew nut (*Anacardium occidental L.*) is one of the export commodities which should be able to become a leading commodity because of its good adaptability of plants in tropical soils. The large number of cashew varieties that can be grown in Indonesia causes the resulting quality to vary from size, color, taste, and yield of nuts. Two parts of the cashew plant that can be used are guava as false fruit and cashew nuts as true fruit. Zahir and Sanawiri (2018) and Mulyono (2007) state that cashews are the main crop of high value crops.

Vietnam is a cashew nut producer originating from Southeast Asia. Vietnam is the largest cashew exporter, controlling 34.07% of the global export market. Vietnam processes the logs so they have more value and then exports them to other countries (Debora, 2016). The application of

technology and production standardization makes the cashews produced are of high quality and in accordance with market demand. In addition, the application of export duties affects the sales activity of cashew nuts in the country (Salamadian, 2020).

The following shows the export value of cashew nuts from Indonesia and Vietnam in thousand USD:

Table 1. Export Value of Indonesian and Vietnam Cashew Nuts 2000-2018

Year	Indonesia	Vietnam
2009	77.65	853.80
2010	89.44	638.65
2011	94.94	1,034.35
2012	101.73	1,444.37
2013	84.13	1,634.94
2014	54.04	1,322.09
2015	95.77	2,390.36
2016	85.85	886.89
2017	180.34	2,462.16
2018	75.87	2,137.72

Source: Tridge.com

Cashew nuts or cashew nuts are a commodity that is quite in demand because of their delicious taste, complete nutritional content, and can be used for beauty products. As one of the cashew nut exporters, Indonesia contributes 1.2% of world exports. The Director General of Plantation of the Ministry of Agriculture explained that most of Indonesia's cashew in 2019 was exported to Vietnam, amounting to 9 thousand tons, then to India with 2.3 thousand tons, and the United States 1.9 thousand tons. Development with an agribusiness orientation needs to be carried out on cashew nuts which were originally a reforestation plant and have now turned into superior commodities with high economic value (J Witjaksono, 2016). This research tries to see the comparative advantages of cashew nuts in Indonesia and Vietnam in the global market.

METHOD

This research is a descriptive study with a qualitative approach. The research took place in Indonesia, the object of research was the comparative and competitive competitiveness of the cashew nut trade in Indonesia and Vietnam. The data source used is secondary data in the form of time series for a period of 10 years (2009-2018) related to cashews in fresh or dry form, still shelled or shelled (HS code: o80130). Data collection methods are documentation or analyzing various data sources (COMTRADE). The following are data analysis techniques used in this study:

Ghozi and Sunindyo (2015) mention descriptive statistics as a tool for collecting, processing and analyzing data which is then presented in a certain form. Descriptive statistics aim to provide a general description of a phenomenon.

RCA analysis is an empirical analysis to measure the development of international trade specialization on certain commodities through the calculation of the export share comparison index. The calculation results obtained can be used as a basis for making improvements in the sale of a commodity (Balassa, 1965; Wardana, 2003).

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

Where X_{ij} is the export value of i commodity from j country; X_j is total export value of j country; X_{iw} is the export value of i commodity from the world; X_w is the Export Total value of the world.

Hidayati, (2017) defines the Trade Specialization Index (ISP) as a tool for analyzing the position of a commodity in the export and import framework. The values range from -1 to +1, used to identify the growth rate of a commodity's trade by stages: 1) Introduction stage (-1.0 to -0.50): industries in one country export new products and later income industries in other countries import these goods; 2) Import

substitution stage (-0.51 - 0.00): industrial competitiveness is low, the quality of the exported products is not very good, and production is lower than domestic demand; 3) Growth stage (0.01 - 0.80): industry carries out large-scale production and starts to activate export activities, supply is greater than demand for the domestic market; 4) Maturity stage (0.81 - 1.00): export commodities are already at the stage of technology-related standardization; 5) Re-import stage (1.00 - 0.00): industries in other countries are less competitive in their domestic market, and demand is higher than domestic production.

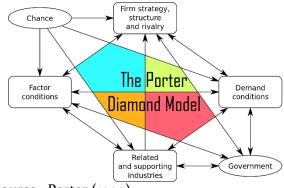
Formula of ISP:

$$ISP = \frac{(X_i - M_i)}{(X_i + M_i)}$$

Where X_i is the value of commodity exports of a country; M_i is the value of commodity imports of a country.

RESULTS AND DISCUSSION

Porter (1990) states that the competitive advantage of a country is obtained when an institution is competitive and has the ability to innovate. The Diamond Model consists of 4 factors that determine competitive advantage (Narayanan and Fahey, 2005; Wang and Chang, 2008).



Source : Porter (1990)

Figure 1. Porters Diamond Model

The following is an explanation of the 4 main factors and 2 supporting factors of Porter's diamond theory regarding cashew nuts in Indonesia and Vietnam.

The area of cashew plantations in Indonesia reached 526,336 ha in 2016, there is a decrease in the area and production every year because the plants are getting old and lacking maintenance as well as land conversion. In 2018, the planted area for cashew nuts was around 494,268 ha with a productivity level of 479kg/ha.

Dionita and Utama (2015) state that land area has a positive and significant effect on cashew nut exports, where if there is land expansion, the export value will increase.

The varieties cultivated are in accordance with regional conditions, farmer preferences and market needs. The Center for Research and of Development Horticultural (Puslitbanghorti) has developed various superior cashew varieties such as the YK and SM₉ Meteor varieties and the B-o2 line. The agricultural tools and machines used are tractors for land cultivation, conventional land planting machines, seed drills, and fertilizers. Post-harvest handling uses cashew pulping machines, dryers, moisture measuring devices, and machines.

The harvest season for Indonesian cashew is in July-October, in contrast to the harvest season for the world's main cashew producing countries, this can be used as an opportunity to maximize fulfillment of needs through activities (Utami, 2018). Generally cashew in Indonesia is produced by small farmers. The yield is dominated by cashew nuts because farmers are not familiar with processing technology, limited capital and labor. Efforts to provide Fairtrade certification to farmer groups are carried out so that profits are increased and well distributed.

In Vietnam, cashews are seen as a commodity with high economic value. The plant is cultivated in the rural areas of the provinces of Dak Nong, Daklak, Binh Duong, Binh Phuoc, etc. The planted area ranges from 380,000 ha in 2015

and increases to 400,000 ha in 2020 by producing 600,000 tonnes and exporting 250,000 tonnes of cashews. The harvest season for this crop is between February and June.

The cashew nut processing industry in Vietnam has existed since 1990, there are more than 1,000 cashew processing plants, both large, medium and small. All large-scale processors have obtained GMP, ISO and HACCP certificates. The use of machines is done to reduce the number of workers, reduce costs and maintain product consistency.

Cashew nuts are in great demand both in domestic and international markets. Several cities in Indonesia such as Jakarta, Semarang, Bandung and Surabaya have a high enough demand for these commodities to support the activities of wholesalers and the food industry. Cashew nuts originating from Indonesia have successfully entered the international market with the destinations of the United States, the Netherlands, Vietam and India. Expanding cooperation and expanding trade information can help improve export competitiveness (Fauziyah, 2017).

Vietnam has been known as a major cashew nut exporter since 2006. In September 2016, it was recorded that cashew nuts that were successfully exported reached a volume of 260,000, valued at 2,050 million USD. The markets for these commodities are the United States, Britain, China, Australia, Canada.

There is a cashew nut processing industry, the need for raw material to be processed is around 120,000 tons/year. Domestic harvests have not met demand, but Indonesia continues to export cashew nuts to various countries. Apart from direct consumption, cashews are used as a mixture in the confectionery and bread industry.

Just like in Indonesia, cashew nuts in Vietnam will be dried for immediate consumption or used as an additional ingredient in making cakes and traditional foods. Activities related to the high food processing sector are business opportunities utilized by various countries to meet market needs.

The cashew nut business development strategy in Indonesia involves several stakeholders to maintain productivity levels. Small entrepreneurs get access to funding from banks through credit. Apart from that, government agencies provide assistance in the form of saprotans that support the continuity of production, distribution and marketing. The adjustment of strategy, especially at the cultivation stage, needs to be taken into account by domestic agricultural business actors.

Another thing that can affect market fulfillment efforts is market expansion and product diversification. It is possible to emphasize transportation costs considering that several importing countries are relatively close geographically.

Vietnam applies technology to process cashews so that they have more value than the products of other countries. Import of cashew nuts is carried out to ensure that the domestic industry is productive and capable of exporting. 90% of the production will be exported and the rest is consumed by local people.

In Indonesia, the government assists cashew and cashew nut processing businesses through funding and distribution of assistance to small-scale farmer groups. Socialization related to cultivation and application of technology is carried out to adapt business conditions to existing developments. However, for international marketing, there are no policies that regulate export restrictions for raw cashews so that the added value of the product is very small and the productivity of the domestic industry is not too high.

The government and cashew nut entrepreneurs in Vietnam are implementing a diversification program for processed products such as roasted cashews, butter, and cashew nuts. In addition, efforts were made to cultivate cashew in old and new lands, develop varieties and cultivation techniques, support the agricultural and industrial sectors, invest in technology-based equipment, and carry out branding and sales promotion. The government has set high export taxes for the cashew nut trade, so that exporters tend to process the product into other forms.

The following is data on Revealed Comparative Advantage (RCA) for cashew nuts.

Table 2. RCA Value of Indonesian and Vietnam Cashew Nuts 2000-2018

Year	Indonesia	Vietnam
2009	3.12	70.13
2010	3.35	52.32
2011	1.91	43.86
2012	2.35	55.52
2013	1.78	48.06
2014	1.37	39.48
2015	1.65	38.31
2016	2.16	18.40
2017	3.36	36.03
2018	1.30	27.19

Source: processed data

Based on the calculation results, it can be seen that the RCA value of Indonesian cashews nut is lower than Vietnam. Regarding exported products, the specialization Indonesian cashews is always below 5, in 2018 it was around 1,306. Meanwhile, the average RCA value for Vietnam in the last 10 years has illustrates reached 42,934. This Indonesia's export comparative advantage is far below Vietnam's for cashew nut products in fresh or dry form, shelled or already peeled.

In the past 10 years, the ISP value for Indonesian cashew nut has always been above 0.5, which indicates that domestic production is carried out on a large scale and export activities are already underway. The number 0.91 is the highest ISP value achieved in 2015. However, the value decreased to 0.17 (in 2018), which indicates that the volume of cashew nut imports increased.

The following is the cashew nut Trade Specialization Index (ISP) data.

Table 3. Value of Indonesian and Vietnam Cashew Nut ISP 2009-2018

Year	Indonesia	Vietnam
2009	0.89	0.76
2010	0.91	0.46
2011	0.71	0.29
2012	0.91	0.69
2013	0.77	0.51
2014	0.82	0.56
2015	0.91	0.46
2016	0.83	0.10
2017	0.89	0.86
2018	0.73	0.73

Source: Processed data

The ISP value for Vietnamese cashew nuts from 2010-2016 was above 0.1 but below 0.8 which indicates that commodity trading is in a growth stage. There was an increase in ISPs in 2017, with a value of 0.86. The calculation result is influenced by the export and import activities of the commodity concerned, considering that Vietnam is the largest cashew nut exporter but some of the raw material is imported from various countries, one of which is Indonesia.

The competitive competitiveness of Indonesia's cashew nuts is below Vietnam in terms of land use, technology application, product processing, marketing and export policies. Meanwhile, for comparative advantage, Vietnam's export performance is far superior considering that the value obtained from processed cashews is quite large and the country already controls the international market. Indonesia and Vietnam are still developing industries and are actively exporting to meet market needs.

Cashew nut production in Indonesia comes from 99.8% of smallholder plantations with productivity reaching 434 kg/ha (2018). As much as 42.8% of the production is exported and the rest is for domestic consumption. Most cashews are exported to Vietnam, India and the United States. Cashew nuts (still shelled) originating from Indonesia are of good quality and are

acceptable in the global market. The increase in world cashew consumption and the development of the food industry have opportunities for Indonesia to take part in meeting market demand. Even so, cashew sales will be more profitable if the commodity is processed first. The value-adding process will increase the cashew nut price by 12-20 times. (Kurniawan & Yudha, 2016) stated that diversification and increasing production and technology through acquisitions with similar industries can support farming development.

In the 2007-2017 period, Indonesia only exported 12% of peeled/ processed cashews, while cashew nuts still dominated exports. The import proportions of peeled cashew nuts and cashew nuts were 53% and 47%. One of the factors that causes this is importers who are seasonal traders, causing the domestic industry to lack raw materials, this problem has an impact on decreasing factory utility, labor efficiency, decreasing competitiveness, and investment (Sedyastuti, 2018). Availability of raw materials needs to optimize the potential for primary production in rural areas (Yudha et al., 2020).

One of the things that causes Indonesia's cashew nut trade performance to be below Vietnam's is the issue of added value. Vietnam is known as an exporter of peeled cashews, but domestic production meets the needs of the global market, so they import from various countries such as Ivory Coast (28.7%), India (17.1%), Ghana (11.4%), Indonesia (2.4%), and other countries. Even so, optimizing the use of technology and support from various stakeholders has resulted in cashew nuts from Vietnam of high quality and very popular with markets including raw material exporting countries such as India, the United States, Germany, the Netherlands. Vietnam already has technical standards in processing cashew nuts through grading, testing, and calculations

as contained in TCVN 12380: 2018 (Yuliyanti, 2009).

The Indonesian government should set export duties so as not to cause oversupply of cashew nuts. In addition, the application of a warehouse receipt system can be carried out to assist farmers in financing production, but the goods can still be stored. From the point of view of domestic agribusiness actors, what is being done to add value to cashew nuts is the use of superior seeds, providing facilities in the form of post-harvest and processing equipment, conducting re-processing of land, and holding farmer training. Production development also needs to be supported by rural communities (E. Yudha et al., 2018 and E. P. Yudha & Dina, 2020).

The involvement of farmers, industry and government will influence business In development. addition, product standardization and market expansion are necessary so that the cashew nuts produced are of good quality and can compete in the international market. Learning from Vietnamese government, other efforts that can be implemented to strengthen export power are improving the cost structure and providing financial assistance to farmers (Nguyen, 2019).

CONCLUSION

Based on Berlian Porter's theory analysis and calculation of RCA and ISP, it can be concluded that the competitiveness of Indonesian cashews is still far from Vietnam in the last 10 years (2009-2018). Domestic production is of good quality, but the processing process has not been carried out optimally.

Indonesia needs to apply technology and standardization properly, the country is able to meet market needs and become the biggest business even though it has to be some raw materials from other countries. The government needs to impose a fee on exports of peanuts to

limit exports of raw commodities, so that they can generate more profits. In addition, an appropriate strategy is needed in terms of extensification and intensification of national cashew products that integrate the development of priority areas.

The government must pay more attention to trade policies to make it more profitable for domestic agricultural business actors. The wealth of existing natural resources needs to be utilized through the application of technology and a sound management system. Providing assistance to small farmers is carried out to support productivity so that the needs of the domestic and international markets can be met. In terms of business actors, adding value to products and increasing profits can be obtained through socialization of technology, adjustment of human resources, application of production standardization, and expansion of marketing.

REFERENCES

- Balassa, B. (1965). Trade Liberalisation and "Revealed" Comparative Advantage. *The Manchester School*, 33(2), 99–123. doi: 10.1111/j.1467-9957.1965.tb00050.x.
- Bustami, B., & Hidayat, P. (2013). Analysis of the Competitiveness of Export Products in North Sumatra Province [Analisis Daya Saing Produk Ekspor Provinsi Sumatra Utara]. Jurnal Ekonomi dan Keuagan, 2(1), 56–71.
- Debora, Y. (2016). Grabbing Vietnam's Cashew Market. Available at: https://tirto.id/.
- Dionita, N. F., & Utama, M. S. (2015). The Influence of Production, Land Area, United States Dollar Exchange Rate and Climate on Indonesian Cashew Nut Exports and Competitiveness [Pengaruh Produksi, Luas Lahan, Kurs Dollar Amerika Serikat dan Iklim Terhadap Ekspor Kacang Mete

- Indonesia Beserta Daya Saingnya]. E-Jurnal Ekonomi Pembangunan Universitas Udayana, 4(5), 349–366.
- Diphayana, W. (2019). *International trade* [*Perdagangan Internasional*]. Yogyakarta: Deepublish Publisher.
- Fauziyah, E. (2017). Strategy of Export Competitiveness Enhacement on Cashew Nut Commodity. *Economics and Policy*, 10(2), 302–316.
- Ghozi, S. & Sunindyo, A. (2015). *Descriptive Statistics for Economics [Statistik Deskriptif untuk Ekonomi*]. Yogyakarta: Deepublish Publisher.
- Hidayati, S. (2017). Indonesia's Tuna Export Performance [Kinerja Ekspor Tuna Indonesia]. Yogyakarta: Penerbit ANDI.
- J Witjaksono, A. (2016). Cocoa Farming System in Indonesia and its Sustainability Under Climate Change. *Agriculture, Forestry and Fisheries*, 5(5), 170–180.
- Kurniawan., & Yudha, B. P. (2016). Strategy and Development Prospects of Cashew (Anacardium occidentale. L) Jember Regency [Strategi dan Prospek Pengembangan Jambu Mete (Anacardium occidentale. L) Kabupaten Jember]. Manajemen dan Teori Terapan, 9(3), 242–258.
- Mulyono, E. (2007). *Cashew Processing Technology* [*Teknologi Pengolahan Mete*]. Bogor: Badan Penelitian dan Pengembangan Pertanian.
- Narayanan, V. K., & Fahey, L. (2005). The relevance of the institutional underpinnings of porter's five forces framework to emerging economies: An epistemological analysis. *Journal of Management Studies*, 42(1), 207–223. doi: 10.1111/j.1467-6486.2005.00494.x.
- Nguyen, T.-L. (2019). Stregthening Export Competitiveness of Vietnam Cashew Kernels. *Engineering and Applied Sciences.*, 14(5), 1682–1689.
- Porter, M. (1990). The Competitive Advantage of

- *Nations*. Brooklyn, Massachuset: Free Press.
- Sahban, M. A. (2018). Collaboration on Economic Development in Developing Countries [Kolaborasi Pembangunan Ekonomi di Negara Berkembang]. Makassar: CV Sah Media.
- Salamadian (2020). Exports and Imports: Definition, Goals & Commodities of **Exports** Indonesian [Ekspor Pengertian, Impor: Tujuan હ Komoditas Ekspor Indonesia]. Available at: https://salamadian.com/pengertianekspor-dan-impor/.
- Sedyastuti, K. (2018). Analysis of UMKM empowerment and increasing competitiveness in the global market arena [Analisis pemberdayaan UMKM dan Peningkatan Daya Saing Dalam Kancah Pasar Global]. Inovasi Bisnis dan Manajemen Indonesia, 2(2), 117–127.
- Sukirno, S. (2008). Introductory Theory to Macroeconomics 3rd edition [Teori Pengantar Makroekonomi edisi 3]. Jakarta: PT.Raja grafindo persada.
- Supardi, E. (2019). Export Import: Theory and Practicum of Export Import Activities for Logistics and Business Practitioners [Ekspor Impor: Teori dan Praktikum Kegiatan Ekspor Impor untuk Praktisi Logistik dan Bisnis]. Yogyakarta: CV Budi Utama.
- Utami, T. P. (2018). Export duties to grow the Indonesian cashew industry [Bea Ekspor untuk Menumbuhkan Industri Mete Indonesia]. Available at: http://pusdiklat.kemendag.go.id/v201 9/news/bea-ekspor-untukmenumbuhkan-industri-mete-indonesia.
- Wang, W. & Chang, P. P. (2008). Entrepreneurship and strategy in

- China: why "Porter's five forces" may not be. *Journal of Chinese Entrepreneurship*. Emerald, *1*(1), 53–64.
- Wardana, A. (2003). West Java Economic Analysis [Analisis Ekonomi Jawa Barat]. Bandung: Unpad Press.
- Yudha, E., et al. (2018). Measuring the effect of village spending on village development performance using geographically weighted regression [Pengukuran pengaruh belanja desa terhadap kinerja pembangunan desa dengan menggunakan geographically weighted regression]. Tataloka, 20(1), 23–34.
- Yudha, E., et al. (2020). Rural development policy and strategy in the rural autonomy era. Case study of Pandeglang Regency-Indonesia. *Human Geographies*, 14(1), 125– 147.
- Yudha, E. P., & Dina, R. A. (2020). Regional Potential Development of The Indonesian Country Border Area (Case Study Of Ranai - Natuna). *Tataloka*, 20(3)
- Yuliyanti, K. (2009). Analysis of Determinants of Competitiveness and Preference of Tourists in Touring the City of Bogor [Analisis Faktor-Faktor Penentu Daya Saing dan Preferensi Wisatawan Berwisata ke Kota Bogor]. Institut Pertanian Bogor.
- Zahir, N., & Sanawiri, B. (2018). Analysis of Competitiveness of Indonesian Cashew Nuts in the International Market [Analisis Daya Saing Kacang Mete Indonesia di Pasar Internasional]. Jurnal Administrasi Bisnis (JAB), 54(1), 66–73.