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Competitiveness of Indonesian Tea Export in Southeast Asia Markets

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Abstract

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Tea is a popular export commodity from Indonesia. It has been exported worldwide, especially to Southeast Asia countries. However, the popularity of the tea export market attracts export competitors, which in turn served a strenuous chance to win in the market. The objective of the study was to analyze the competitiveness and factors that affected the exported Indonesian tea in Southeast Asia Market. The data analysis method applied was the Revealed Comparative Advantage (RCA), Trade Specialization Ratio (TSR), and data panel regression (Fixed-Effect Model). Findings showed that exported Indonesian tea had a strong level of comparative competitiveness. Analysis revealed that Indonesia tended to be a tea exporter on the export expansion stage. The real GDP of the countries of destination, exported tea price, the population of the countries of destination, and RCA index had delivered significant influence for the exported volume of Indonesian tea to the Southeast Asia countries.

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INTRODUCTION

Tea is a well-known refreshing beverage worldwide. It has been unified with the world culture, especially in Indonesia and Asian countries. Indonesia produced 162,587 tons of tea in 2000. Unfortunately, its production had declined as much as -0.58%/year to a total of 140,236 tons in 2018 (Directorate General of Plantation, 2019). Moreover, the domestic tea consumption from 2002 to 2008 was descending. It had been decreased by 4.75% per year. Domestic tea consumption was only reaching 0.35 kg/capita per year. In contrast, Turkey placed as a country with the highest tea consumption in 2011 worldwide. They consumed 3,157 Kg/capita of tea products per year (Narmada et al., 2020; Shannon et al., 2017)

Tea demand is forecasted to be grown by 5.5% per year from 2017 to 2024 with a value of US\$ 73 billion (Voora et al., 2019). Indonesia secures the seventh-place of greatest tea exporting country after China, Sri Lanka, Kenya, India, Vietnam, and Argentina. Indonesia had contributed to the world's total tea export by 2.98% (Data and Information Center, 2019). Indonesia tea export volume in the range of 2000 to 2019 was decreasing as much as -1,33% per year. In 2000 and 2019, it had dropped to 105,581 and 42,810 tons, respectively (UN Comtrade, 2020). The export values also decreased by -0.35% per year. This value was equal to US\$ 112,105,575 in 2000 to US\$ 92,347,338 in the year 2019 (UN Comtrade, 2020).

Instead, tea export volume slowly grew in the countries of destination in the Southeast Asia region that commonly imported tea from Indonesia, Malaysia, Singapore, Thailand, Vietnam, Philippines, and Brunei. The export volume means in 2000 to 2019 increased by 1.88% per year. Simultaneously, the export value also increased by 7.3 % per year. Indonesian tea exports to those countries were 9,532 tons or equal to US\$ 8,136,174 in 2000. In 2019, it increased significantly to 12,072-ton or US\$ 27,489,941 (UN Comtrade, 2020).

The increased export volume and value trend should have gathered more attention from the national stakeholders. Southeast Asia area had the highest population after China and India, with 654 million people (Anwar et al., 2020). It should have viewed a massive and potential line for the international market. The steady increase of income per capita reveals a higher buying power of communities in Southeast Asia. For the past of centuries and a half, countries in Southeast Asia have been experiencing a fast-paced GDP growth. The PDP of four countries in the Southeast Asia region (Indonesia, Thailand, Malaysia, and Philippines) rose above the average of 5% per year (Brueckner et al., 2017).

Recent studies and surveys reveal that China has been dominating the tea export market in South East Asia with the value of export of US\$ 403,305,000 in 2019. Countries in the Southeast Asia regions such as Indonesia, Vietnam, Malaysia, Thailand, and Singapore also invade the export tea market in the same area. The competitiveness seems quite dynamic. In 2019, Malaysia placed as the biggest exporter of tea in Southeast Asia with the value of export of US\$ 32,297,000. It significantly increased from a total of US\$ 9,427,000 in 2017 (Trademap, 2021). This finding signifies that Malaysia successfully replaced Indonesia's position as the biggest exporter of tea in Southeast Asia.

Competitiveness improvement is essential to maintain a commodity existence and domination in the Southeast Asia markets. High export volume from the countries in Southeast Asia also fluctuates. This fluctuation probably had triggered by the factors that affected the tea volume production to the countries of destination. Export volume influences the production volume, domestic consumption, export price, exchange value, interest rate, importer's GDP per capita, economic gap, and free trade agreement (Amoro & Shen, 2013; Inayah et al., 2016). World price, world export aggregate, the level of trade also influence the export volume (Verter & Bečvářová, 2014).

According to this fact and situation, studies related to the competitiveness and factors that affect the Indonesian export of tea to Southeast Asia essentially required. The information reflects the competitiveness stage and factors that influence the Indonesian tea export to the Southeast Asia market. This study aimed: 1) analyze the competitiveness of exported Indonesian tea in the Southeast Asia market and 2) examine factors that affected the exported Indonesian tea in the Southeast Asia market.

RESEARCH METHOD

This was a quantitative descriptive method employing secondary data. It composed of time series data from 2000 to 2019 and cross-section data from five tea export destinations of countries in the Southeast Asia market: Malaysia, Singapura, Thailand, Vietnam, Filipina, and Brunei. Data of volume and export code value of Harmonized System (HS) 0902 (flavored or herbal tea) were collected.

The data were gathered from official government websites: Ministry of Agriculture, Data and Information System Center, Directorate General of Plantations, and Central Bureau Statistic. We also collected data from the international board of economic institutions such as the United Nations Commodity Trade (UN Comtrade), Trademap, and World Bank.

The descriptive and quantitative analysis applied in this study. The descriptive analysis had explained the competitiveness state and factors that affected the tea exports in Southeast Asia markets. The first aim addressed by the Revealed Comparative Advantage (RCA) and Trade Specialization Ratio (TSR). The second aim answered by the panel data regression. Statistical analysis conducted by using Microsoft Excel and the tenth version of Eviews.

Revealed Comparative Advantage (RCA) initially introduced by Balassa (1965) to assess the comparative advantages of a particular agricultural commodity in an area or country. The RCA values were calculated to compare the comparative advantages of tea exports in Southeast Asia countries: Malaysia, Singapore, Thailand, and Vietnam. RCA value was formulated as follow:

$$RCA_{ij} = \frac{X_{ijt} - X_{it}}{X_{wjt} - X_{wt}}$$

X_{ijt} is the export value of country i , commodity j , to the country of destination at the year t ; X_{it} , is the total export from the country i to the country of destination at the year t ; X_{wjt} , is world total export of the commodity j to the country of destination at the year t ; X_{wt} , is the world total export to the country of destination at the year t .

The value of $RCA > 1$ indicates that a country has comparative advantage for a given commodity. The value of < 1 inferres that a country is not a competitive producer and exporter of a commodity (Rossato et al., 2018). Higher RCA value produces higher competitiveness. RCA Index also classifies into four categories: very strong ($RCA > 2.5$), strong ($1.25 \leq RCA \leq 2.5$), moderate ($0.8 \leq RCA < 1.25$), and weak ($RCA < 0.8$) (Yu & Qi, 2015).

Trade Specialization Ratio (TSR) is analysis method organized by Kaneko & Yanagi (1988) to complement the revealed comparative analysis (RCA). TSR identifies the tendency of a country to be an exporter or importer.

$$TSR = \frac{X_{ijt} - M_{ijt}}{X_{ijt} + M_{ijt}}$$

Where, X_{ijt} , is the value of export commodity j in country i at the year t ; M_{ijt} , is the value of import commodity j in country i at the t .

The value of TSR ranges from -1 to 1 . The value of $TSR > 0$ shows that a country had tendency to be an exporter. Contrary, the value of $TSR < 0$ indicates that a country tends to be an importer (Quansah & Ahn, 2017). TSR also groups the trade cycle into five phases: introduction with the value of TSR of -1 to -0.5 ; import substitution with the value of TSR of -0.51 to 0.00 ; export expansion, with the value of TSR of 0.01 to 0.80 ; maturity with the value of TSR of 0.81 to 1.00 ; and re-import stage if the value of TSR declines, from 1.00 to 0.00 .

Panel data regression enrolled to analyse factors that influence the tea export volume from Indonesia to Southeast Asia markets. The employment of panel data had provided individual heterogeneity, gauged more information, served variation, offered fewer collinearity between independent variables, improved degrees of freedom, and allowed efficient model estimation (Gujarati & Porter, 2012). The study model of equation is present as follow:

$$\begin{aligned} LN_VOL_{ijt} &= \beta_0 + LN_PRO_{it} + LN_GDP_{jt} + LN_HAR_{ijt} + LN_KUR_{ijt} + \\ &LN_POP_{jt} + LN_KON_{it} + LN_RCA_{ijt} + e_{ijt} \end{aligned}$$

Where, β_0 is the constanta; VOL_{ijt} , tea export volume from Indonesia to the country j at the year t (kg); PRO_{it} , tea production volume in Indonesia at year t (kg); GDP_{jt} , real GDP per capita in country j at year t (US\$); HAR_{ijt} , price of exported Indonesiato country j at year t (kg/US\$); KUR_{ijt} , real exchange rate in country j at the year t (Rp/LCU); POP_{jt} , population of country j at year t (people); KON_{it} , Indonesian domestic tea consumption at year t (kg/capita); and RCA_{ijt} , RCA index of Indonesian tea in country j ; and e , error.

RESULT AND DISCUSSION

Indonesian Tea Competitiveness in Southeast Asia Market

RCA analysis confirmed the powerful position of Indonesian tea (HS0902) in the Southeast Asia market. Indonesia had posed a very strong comparative competitiveness as a tea exporting country. Indonesian tea is well known for its high quality. Its rich catechin content has attracted tea consumers worldwide (Nugraha et al., 2016). Its high comparative competitiveness was parallel with the export volume that consistently raised, approximately up to 1.88% per year. The export volume in 2000 was only 9,532 tons, and it slowly raised to 12,072 tons in 2019, respectively. Parallel with this finding, Ramadhani (2013) also declared that

Indonesian tea had a moderate level of competitiveness in the international market. Export competitiveness is a quality required to penetrate and maintain a commodity's existence in the global market. The result from the RCA would be influenced by the variable of export volume, trade openness, the export value of the competitor country, exchange rate, and commodity export price (Perdana et al., 2015; Yulhar & Darwanto, 2019).

Indonesian tea has prominent comparative competitiveness in Malaysian market. Unfortunately, we identified a declining trend in the level of competitiveness in this study. China as a new competitor has been served as a strenuous challenge for Indonesia to maintain the tea commodity's existence in the Malaysian domestic market. In 2000 and 2019, the value of China's tea imports in Malaysia had reached US\$ 1,597 thousand and US\$ 47,633 thousand, respectively (UN Comtrade, 2020). China had established a rapid tea production since the year 1990. One-third of tea leaves distributed worldwide were exported by China (Wei et al., 2012).

Indonesian tea also secured a strong comparative competitiveness level in the Singapore market. No significant change in the comparative competitiveness level reported in this study. It probably generated by a limited number of tea export competitors of countries in Singapore's domestic markets. Japan and China were the only countries documented with high export volume. The tea export volume in 2019 from Japan and China was US\$ 10,658,000 and US\$ 7,072,000, respectively. This number was slightly higher than Indonesia's export volume. In addition, in comparison to Indonesia, several countries such as Sri Lanka, Maroko, and India exported a lower volume of tea leaves.

Table 1. RCA Value of Indonesian Tea (HS0902) in Southeast Asia Market

Year	Countries of Export Destination						Mean
	MYS	SGP	THA	VNM	PHL	BRN	
2000 – 2003	20.40	3.72	4.15	4.15	0.25	4.90	6.26
2004 – 2007	17.83	4.29	4.50	39.36	3.77	0.71	11.74
2008 – 2011	9.46	2.82	3.67	32.63	2.89	0.70	8.70
2012 – 2015	6.51	2.01	5.08	18.65	4.52	2.57	6.56
2016 – 2019	4.78	2.64	4.97	12.67	2.88	3.41	5.23
Mean	11.80	3.09	4.47	21.49	2.86	2.46	7.70

Source: UN Comtrade, 2020 (processed).

Indonesian tea has a very strong level of comparative competitiveness in Thailand markets. The comparative competitiveness level was parallel with the export volume. The tea export volume from Indonesia in the year of 2000 was only 1.8 tons, but in 2019 it significantly increased to 1,170 tons (UN Comtrade, 2020). The level of green tea consumption was relatively low in Thailand. They preferred ice tea over green tea beverages or products (Lee et al., 2010). The comparative competitiveness level of Indonesian tea in Vietnam also identified in a very strong position. However, the Indonesian tea export volume to the Vietnamese domestic market ws declined in the last five years. The high export volume of tea from China to Vietnam might broadly contribute to this issue. The import value of Chinese tea was only US\$ 3,277,000 in 2015, but suddenly in 2019, it significantly increased to US\$ 20,163,000 (UN Comtrade, 2020).

Indonesian tea's comparative competitiveness in the Philippines domestic market also classified into a very strong level. We did not identify any level of comparative competitiveness in the range of the year 2000 to 2004. This situation occurred due to the absence of tea export activity before 1995. Further, due to this situation, only 22 tons of tea commodities exported up to 2000. The low level of comparative competitiveness also occurred due to the high export of tea from Vietnam to the Philippines. In 2019, the total of tea exported from Vietnam and Thailand had accomplished a total of US\$ 2,719,000 and US\$ 2,337,000, respectively (UN Comtrade, 2020). In Brunei, the export of Indonesian tea had a strong level of comparative competitiveness. However, Brunei was only a small market target for Indonesian tea export activity.

Table 2. The Comparison of RCA Index of Indonesian Tea (HS0902) in Southeast Asia Market

Year	Tea Exporting Countries				
	IDN	MYS	SGP	THA	VNM
2000 – 2003	6.26	1.75	3.27	0.84	8.04
2004 – 2007	11.74	0.81	0.15	0.07	10.14
2008 – 2011	8.70	1.33	0.32	0.17	11.87
2012 – 2015	6.56	1.19	0.95	0.43	8.45
2016 – 2019	5.23	3.77	1.28	1.00	6.01
Mean	7.70	1.77	1.20	0.50	8.90

Source: UN Comtrade, 2020 (processed).

Findings revealed Indonesia and Vietnam as the top tea exporting countries in Southeast Asia with a very strong level of comparative competitiveness. Malaysia, Singapura, and Thailand are considered smaller tea exporting countries. Moreover, Vietnam dominated the tea products distributed in Indonesian domestic markets. The export volume from Vietnam had earned 1,104 tons of tea commodity in 2000. Then, it had significantly increased to 10,417 tons (UN Comtrade, 2020). Vietnam also classified into the top seven tea exporting country worldwide. Unfortunately, their tea production still dominated by small-scale plantation areas run by the local community. They also did not equip with sufficient technology and tool. This situation led to poor tea production and quality (Hong & Yabe, 2015).

Malaysian tea also had a very strong level of comparative competitiveness in the Southeast Asia market. The main export countries of destination for Malaysian tea were Thailand, Singapura, dan Vietnam. Singapore tea in the Southeast Asia market has a moderate level of comparative competitiveness. Although no area for tea plantations adequately provided, Singapura also performed as the tea exporter parties. They initially imported tea from Japan, China, Sri Lanka, and Indonesia, then exported those tea commodities to their export countries of destination. The comparative competitiveness of Thailand in the Southeast Market had a weak loss. Oktaviana et al. (2016) stated that Malaysia, Singapura, and Thailand only concentrated on exporting tea commodities to ASEAN countries. Therefore, tea quality improvement and effective marketing strategies to the country with the high volume of tea demand need to be well developed.

Table 3. The TSR Value of Indonesian Tea (HS0902) in Southeast Asia Market

Year	Export Country of Destinations						Mean
	MYS	SGP	THA	VNM	PHL	BRN	
2000 – 2003	1.00	0.91	0.88	-0.50	-0.42	1.00	0.48
2004 – 2007	0.99	0.92	0.91	0.22	-0.02	1.00	0.67
2008 – 2011	0.99	0.95	0.87	-0.33	0.97	1.00	0.74
2012 – 2015	0.99	0.92	0.93	-0.59	1.00	1.00	0.71
2016 – 2019	0.96	0.80	0.11	-0.45	1.00	1.00	0.57
Mean	0.99	0.90	0.74	-0.33	0.51	1.00	0.63

Source: UN Comtrade, 2020 (processed).

Trade Specialization Ratio (TSR) analysis revealed the tendency of Indonesia as the exporter for Southeast Asia countries, on the export expansion stage. This finding was parallel with a study conducted by Nugrahaningrum et al. (2020). They also discovered that Indonesia tended to be the tea exporter on the growth or export expansion stage. Indonesia posed as a tea exporter for Malaysia in the export maturity stage. This situation occurred because Indonesia had been targeting Malaysia as the main country of export destination or equal to fifteen percent of the total of exported tea (UN Comtrade, 2020). Indonesian black tea dust was the most favored product in Malaysia. It had utilized as the main blending ingredient for Malaysian tea products. It has gained popularity among the local community in Malaysia (Alvianti & Pazli, 2017).

Indonesia tended to be the tea exporting country for Singapore in the stage of export maturity. However, during the past two years, Indonesia's value of TSR was regressed to the export expansion stage. This situation occurred due to the high import value of tea from Singapore was slowly raised since 2017, from US\$ 453,000 to US\$ 639,000 in 2019 (UN Comtrade, 2020). Ng et al. (2021) mentioned that more than the half of Singapore population consumed tea in their everyday life, especially traditional Chinese tea. Indonesia also managed as the tea exporter for Thailand in the export expansion stage. However, for the last two years, Indonesia somehow tended to import tea from Thailand (import substitution stage). In 2019, the value of tea export volume to Thailand was only US\$ 3,138,000, with a doubled value of import of US\$ 7,318,000 (UN Comtrade, 2020).

Indonesia tended to play the role of an importer rather than an exporter for Vietnam (import substitution stage). Indonesia considered a country that consistently imported its tea product from Vietnam to meet the demand of the domestic market (Sumadio et al., 2017). Indonesia tended to import tea products from Vietnam due to its affordable price despite its low quality. Indonesia had encountered a challenging time penetrating the Vietnam market due to the high import duty rate and taxes applied (>50%). Contrary to this situation, the import duty rate and taxes applied for the imported tea product to Indonesian markets were relatively low. For the HS090230 and HS090240 was 20% and only 5% to HS090220 and HS090210 (Ministry of Finance, 2017).

Indonesia tended to be a tea exporter for the Philippines in the stage of export expansion. However, during 2000-2019, Indonesia had positioned in the export maturity stage. This situation probably occurred due to the improvement of

the export value by 23.9% per year (UN Comtrade, 2020). Indonesia also tended to be an exporter for Brunei on the stage of export maturity. Indonesia consistently played the role of tea for Brunei and never imported any tea commodity from Brunei. Brunei only exported their tea commodity to Malaysia with a relatively low volume of US\$ 7,000 (UN Comtrade, 2020).

Factors Influenced the Indonesian Tea Export to South East Asia Countries

The best data panel regression model selected by the Chow and Hausman Test. Chow Test revealed that the p-value was $0.00 < \text{actual significance level } (\alpha = 0.05)$. This result indicated that the best model was the Fixed Effect Model. Hausman test showed the p-value of $0.00 < \text{actual significance level } (\alpha = 0.05)$. Hence, the best model picked was the Fixed Effect Model. Therefore, the model applied in this study was the Fixed Effect Model.

According to the F test, the probability (F-statistic) was 0.00 or $< \text{actual significance level } (\alpha = 0.05)$. The determination coefficient (R^2) was 0.97. This finding indicated independent variables answered 97% of the study objectives, while 3% of it, explained by the unstudied variables. A classical assumption regression test conducted with a model that had passed the residual, heteroskedasticity, and multicollinearity test. The fixed-effect model did not need to be free from the model assumption from the correlation serial. Hence, the autocorrelation test could be ignored in the statistical analysis (Nachrowi & Usman, 2006).

The variable of Indonesian tea production did not present a significant effect on Indonesia's tea export volume. This finding was in line with studies by (Kannan, 2013; Mwinuka & Mlay, 2015). They highlighted that domestic product did not associate with export volume. This situation probably occurred due to the declining trend of Indonesian tea production. Interestingly, the Indonesian tea export to the Southeast market was relatively arisen. Indonesian tea production from 2003 to 2019 was dropped to -0.91% per year. In 2003, the production of tea in Indonesia was 169,821 tons. It decreased to 137,803 tons in 2019 (Directorate General of Plantation, 2019). However, the export volume to the Southeast Asian countries was increasing as much as 1.22% per year in the same period (UN Comtrade, 2020). Brilliantina et al. (2019) also highlighted the declining production of tea of 2.6 % and its value relatively higher than the plantation reduction area.

Table 4. Result of Factors Regression Affected the Indonesian Tea Export to Southeast Asia Market

Variable	Coefficient	t-statistic	Prob.
C	-40.40066	-1.589532	0.1155
LN_PRO	-0.434057	-0.497305	0.6202 ^{ns}
LN_GDP	2.872278	7.735179	0.0000*
LN_HAR	-0.933748	-8.129201	0.0000*
LN_KUR	-0.541702	-1.712705	0.0902 ^{ns}
LN_POP	2.304002	2.412624	0.0179*
LN_KON	0.179653	1.061223	0.2915 ^{ns}
LN_RCA	0.991161	21.14443	0.0000*
R-squared	0.979977		
F-statistic	362.9886		
Prob(F stat)	0.000000		

Note: *) significant on the level of 5%; ^{ns}) not significant

Source: Secondary Data, 2021 (processed).

The variable of real GDP per capita of the destination countries presented a positive and significant effect on Indonesia's export volume. The coefficient of 2.87 indicates that 1% of real GDP per capita would add the tea export volume of 2.87%, *ceteris paribus*. The previous study had revealed that real GDP positively influenced the export volume, *ceteris paribus* (Braha et al., 2017; Lero et al., 2020). GDP per capita of ASEAN countries has been increasing by 5% per year since 2000. Further, 67 million of the population titled with high-level consumption (Vinayak et al., 2014).

The variable of tea export presented a significant and negative effect on the export volume of Indonesia tea export to the Southeast Asia market. The coefficient of -0.93 indicated that the addition of 1% of the exported tea price would decrease 0.93% of the exported tea volume, *ceteris paribus*. This finding was in line with a study conducted by Djoni et al. (2013). They found export price delivered a negative influence on the export volume. The average of export price in Indonesia in the International market in 2019 was US\$ 2.16 per kilograms (UN Comtrade, 2020). The price was negatively associated with the demand. According to the demand theory, higher price produces lower demand, contrarily lower price produced higher demand, *ceteris paribus* (Parkin, 2012).

The variable of real Indonesia Rupiah exchange rate to the countries of destination currency also did not significantly influence the tea export volume. This finding was parallel with the previous studies that had discovered the insignificant effect of the exchange rate on the export volume (Abolagba et al., 2017; Tesfaye, 2014). In contrast with these findings, Mankiw (2016) found that the occurrence of depreciated domestic value initiated the perception of the cheaper price of the domestic product. This situation would increase the demand for domestic products and decrease imported products' demand. Indonesia's export volume is also affected by the internal situation (Ginting, 2013). Higher labor income, electricity cost, and fuel price indirectly affect the production cost. This situation would increase the production cost, increase the exported product price, and decrease the degree of competitiveness in the global market.

The variable of the population of countries of destination owned a significant positive effect on the exported Indonesian tea to the Southeast Asia markets. The coefficient of 2.30 showed that the 1% increase of population would add 2.30% of Indonesian tea export volume, *ceteris paribus*. Sugiharti et al. (2020). found similar findings. They found that the 1% increase of the importer country's population would add to the 0.74% increase of raw Indonesian agricultural product volume in Indonesia. The rapidly increased study population and income of countries in Southeast Asia also reflected the large size of the market and stronger buying power. A country manages import activities to meet its domestic demand adequately. This situation would increase the export volume in Indonesia. Parkin (2012) mentioned that the goods and services demand did not only rely on the population number but also the structure and the age of the population.

The variable of domestic consumption did not significantly affect the Indonesian tea export to the Southeast Asia countries. In contrast with this finding, Amoro & Shen (2013) discovered that high domestic consumption would produce lower export volume. The insignificant effect of domestic tea consumption in this study might occur due to the low domestic consumption of Indonesian tea. Data also had presented a declined trend of domestic tea consumption. From 2002 to 2018, domestic tea consumption in Indonesia was dropped to -4,75%. It had decreased from 0.77kg/capita per year in 2002 to 0.29 Kg/capita per year in 2018 (Information and Data Center, 2019).

The variable of revealed comparative analysis had delivered a significant positive effect on the tea export volume to the Southeast Asian countries. The value of 0.99 indicates that the 1% increase in the comparative competitiveness of Indonesian tea in the countries of destination would add 0.99% of Indonesian tea export volume from Indonesia to the Southeast Asia countries, *ceteris paribus*. This finding was parallel with a study conducted by (Boansi et al., 2014) They had discovered that the increased RCA index would increase commodity export volume, export value, and comparative competitiveness. The high Indonesian tea RCA index described a strong level of comparative competitiveness in the market and capability to produce exported tea commodities more effectively. A high index of RCA also presented the ability of exporters to meet the importer demand in the form of price, quality, and quantity (Yulhar & Darwanto, 2019).

CONCLUSION

In comparison with six countries in Southeast Asia, Indonesian tea had a strong level of comparative competitiveness. Vietnamese tea had placed as the tea commodity with the highest comparative advantages, followed by Indonesia, Malaysia, and Thailand. Analysis revealed that Indonesia tended to be a tea exporter on the export expansion stage, especially for Malaysia, Singapore, Thailand, Philippines, and Brunei. However, findings also reported the tendency of Indonesia to import tea commodities from Vietnam. The real GDP of the countries of destination, exported tea price, the population of the countries of destination, and RCA index had delivered significant influence for the exported volume of Indonesian tea to the Southeast Asia countries. In contrast, Indonesian tea volume production, real Indonesian Rupiah (IDR) exchange rate to the countries of destination currency, and domestic tea consumption found to be not significantly

associated with the exported volume of Indonesian tea to the Southeast Asia countries.

RECOMMENDATION

The recent study had discovered that the export of Indonesian tea commodities identified in the export expansion stage. This finding implied the need to improve the export activity to the maturity stage and expand the export commodity to the new market area, such as Myanmar, Kamboja, and Laos. Findings also emphasized the need to maintain the quality of exported tea to meet the market demand and taste. Further, the volume of imported tea from Vietnam needs to be reduced. It could be addressed by increasing the import duties or taxes or applying halal certification. This situation would protect the local tea industries and provide boundaries for the imported tea products to invade the local businesses.

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