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EXPORT DESTINATIONS MAPPING OF INDONESIAN TEA PRODUCTS IN THE INTERNATIONAL MARKET

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Abstract: Indonesian tea products have become an export-oriented commodity. However, Indonesian tea products trade performance, particularly the exports, has shown a persistent decline for the last decade (2012–2021). Therefore, this study aims to analyse the competitiveness of Indonesia tea products export as well as map the export destinations for Indonesia tea products. This study employs secondary data regarding tea product export value from UN Comtrade during the 2012–2021 period with analysis using revealed comparative advantage (RCA), export product dynamic (EPD), and X-model potential export product. The RCA results suggest that Indonesian tea products exhibit an overall strong comparative advantage in the international market, albeit still lagging behind India. Additionally, Indonesia also exhibits a strong comparative advantage in all tea products, except tea extract and preparation products. The EPD results show that Indonesia possesses a competitive advantage in packaged black tea, bulk green tea, also tea extract and preparation products. The export destination mapping reveals the 28 potential destinations serving as the focus for Indonesian tea export expansion. These potential destinations are dominated by the non-traditional.

Keywords: tea products export, EPD, potential destinations, RCA, X-model potential export product

Abstrak: *Produk teh Indonesia telah menjadi komoditas yang beorientasi ekspor. Akan tetapi, kinerja perdagangan, khususnya ekspor, produk teh Indonesia menunjukkan tren menurun selama satu dekade terakhir (2012–2021). Oleh karena itu, penelitian ini bertujuan untuk menganalisis daya saing ekspor produk teh Indonesia dan memetakan negara tujuan ekspor produk teh Indonesia. Penelitian ini menggunakan data sekunder terkait nilai ekspor produk teh pada periode 2012–2021 dari UN Comtrade dengan metode analisis revealed comparative advantage (RCA), export product dynamic (EPD), dan X-model potential export product. Hasil perhitungan RCA menunjukkan bahwa produk teh Indonesia memiliki keunggulan komparatif kuat secara umum di pasar internasional meskipun masih di bawah India. Selain itu, Indonesia juga memiliki keunggulan komparatif kuat pada semua produk teh, kecuali produk ekstrak dan preparasi teh. Hasil perhitungan EPD menunjukkan Indonesia memiliki keunggulan kompetitif pada teh hitam kemasan, teh hijau curah, serta produk ekstrak dan preparasi teh. Hasil pemetaan menunjukkan terdapat 28 negara tujuan potensial yang dapat menjadi fokus untuk pengembangan ekspor produk teh Indonesia. Negara tujuan potensial tersebut didominasi oleh negara tujuan non-tradisional.*

Kata kunci: *ekspor produk teh, EPD, negara tujuan potensial, RCA, X-model potential export product*

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INTRODUCTION

During the 2012–2021 period, Indonesia was positioned as the 13th largest tea products exporter in the world, constituting a market share of 1.45%. Indonesia's standing is still below several major non-tea-producing countries, such as European countries, the United States, and the United Arab Emirates (UN Comtrade, 2023). According to findings from UN Comtrade (2023) data, 36 destination countries served as the routine destination countries for Indonesian tea products export in aggregate for the last decade (2012–2021) (Table 1).

As examined based on the classification of traditional and non-traditional countries, using UN Comtrade data over the past 30 years (1992–2021), then compared with the findings of Sabaruddin (2016) and Hotsawadi & Widyastutik (2020), it is observed that the countries routinely serving as export destinations for Indonesian tea products are predominantly non-traditional countries, amounting to a total of 27 countries (Table 1). Traditional destination countries consist of the top 15 countries that have consistently been the destination of Indonesian exports for over 30 years, while non-traditional destination countries are those that have not consistently been among the top 15 export destinations for Indonesia over the same period (Sabaruddin, 2016; Hotsawadi & Widyastutik, 2020). Indonesian exports to non-traditional countries can promote the diversification of the export destinations, which can act as an alternative to sustain Indonesian export performance (Hotsawadi & Widyastutik, 2020).

Nevertheless, the trade performance of Indonesian tea products on the international market showed a discernible decline, evidenced by negative CAGR growth in Indonesian tea product exports of 5.08% over the last decade (2012–2021). As disaggregated into traditional and non-traditional markets, Indonesian tea products export performance shows a persistent downturn to traditional and non-traditional destinations (Figure 1). This decline indicates that Indonesia has not yet fully exploited the opportunities and realized the potential for exporting tea products to the international market (Nugrahaningrum et al. 2020; Zuhdi et al. 2022).

Table 1. List of 36 destinations countries served as the routine destination countries for Indonesian tea products export

Continents	Destination Countries		
Asia	1. Brunei Darussalam	**7. Japan**	13. South Korea
	2. Cambodia	**8. Malaysia**	**14. Singapore**
	3. China	9. Mongolia	15. Thailand
	4. Hong Kong	10. Pakistan	16. UAE
	5. India	11. Philippines	17. Viet Nam
	6. Israel	12. Saudi Arabia	
Europe	1. Belgium	5. Poland	9. Switzerland
	2. France	**6. Netherlands**	**10. United Kingdom**
	3. Germany	7. Russian Federation	11. Türkiye
	4. Italy	8. Spain	12. Ukraine
Africa	1. Egypt		
America	1. Canada	2. Suriname	**3. USA**
Oceania	**1. Australia**	2. Fiji	3. New Zealand

Note: the bold prints denote the traditional destinations
Source: UN Comtrade (2023), processed

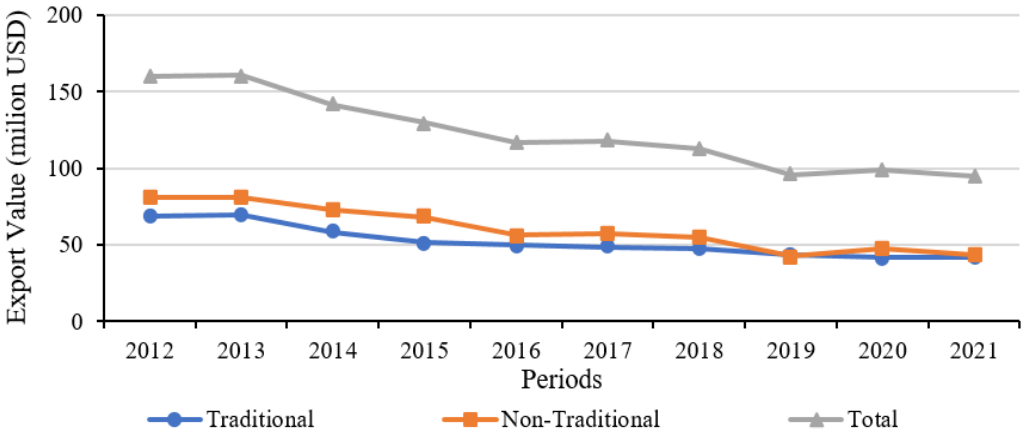

Figure 1. Indonesian tea products export dynamics during 2012–2021 (UN Comtrade, 2023)

The increased competition in the international tea trade, attributed to the innovations in tea product processing by developed countries and the existing oversupply condition, is presumed to be the main factor in declining of Indonesian tea product exports (Veeramani, 2012; Khaliqi et al. 2020; Nair, 2021; Tanuputri & Bai, 2022; Zuhdi et al. 2022). Additionally, the overall competitiveness of Indonesian tea exports in the international market is still inferior to the major exporting countries, namely China, Sri Lanka, India, and Kenya, notwithstanding remains competitive (Nugrahaningrum et al. 2020; Nursodik et al. 2021; Muflihah et al. 2023). Looking at the decline of Indonesian tea products' export performance as well as its challenge, it is urgent to map the potential export destinations to focus on the export expansion of Indonesian tea products to destination countries with comparative and competitive advantages.

As of now, the previous studies regarding the competitiveness of Indonesian tea exports have been limited to the aggregated international market (Ramadhani, 2013; Nayantakaningtyas et al. 2017; Khaliqi et al. 2020; Nugrahaningrum et al. 2020; Nursodik et al. 2021; Zuhdi et al. 2022; Muflihah et al. 2023) and main export destinations with major market shares (Suprihatini, 2005; Nursodik et al. 2022; Putro & Hidayat, 2023). Those studies still lacked the dynamic details of each regular export destination, which has served as a routine destination for the last decades (2012–2021), and have not identified potential export destinations. Focusing on the competitiveness analysis only on either the international market as aggregate or several main export destinations disregards the potential of other regular destination countries in expanding Indonesia's tea product exports.

Meanwhile, the latest studies regarding the potential export destinations mapping for Indonesian strategic estate commodities (Ministry of State Secretariat, 2021) using the Ministry of Trade (2013) approach of X-Model Potential Export Products are still limited to cocoa (Fahmid et al. 2022), coffee (Aurelia et al. 2022), oil palm (Destiarni et al. 2021), and rubber (Meliany & Novianti, 2022). Hence, the study regarding export competitiveness accompanied by mapping potential export destination countries for Indonesian tea products is crucial to complement the previous studies and provide an overview of the export expansion focus of Indonesian tea products to potential destinations. Therefore, this study aims to analyse the export competitiveness of Indonesian tea products in 36 regular export destinations which have served as the routine destination countries and map the export destinations for Indonesian tea products. This study also takes China and India as the competitor countries, considering their positions as the major producers as well as routine exporters of world tea accounting for 20.59 percent and 9.09 percent of the world tea market share respectively (UN Comtrade, 2023).

METHODS

This study utilises secondary data, encompassing the export value of Indonesian tea products and its competitors over 10 years (2012 to 2021) across 36 routine destinations from the United Nations Commodity Trade (UN Comtrade) database. The Indonesian tea products export competitors analysed in this study are China and India. Those two countries were selected based on their export share dominance and consistent export patterns. Additionally, the tea

products comprise five forms of tea products exported by Indonesia based on the 6-digit Harmonized System (HS) code, consisting of (1) HS 090210, packaged green tea; (2) HS 090220, bulk green tea; (3) HS 090230, packaged black tea; (4) HS 090240, bulk black tea; (5) HS 210120, tea extract and preparation products.

Figure 2 illustrates the research framework used in this study. The declining export performance of Indonesian tea products coupled with the increasing global competition posed a critical consequence on Indonesian tea products' export continuity and foreign exchange reserve, thus needing an expansion strategy on potential export destinations with high competitiveness. Meanwhile, the studies regarding export destination mapping are still limited and have not been conducted on Indonesian tea products. Therefore, mapping the potential export destination of Indonesian tea products becomes the main objective of this study. This study first conducts the competitiveness analysis using Revealed Comparative Advantage (RCA) and Export Product Dynamic (EPD), then performs the clustering of export destinations using X-Model Potential Export Products to map the potential export export destination of Indonesian tea products.

Firstly, the export competitiveness is analysed using the Revealed Comparative Advantage (RCA), initially introduced by Liesner (1958), later refined and popularised by Balassa (1965), consequently known as the Balassa Index and has become a common method for analysing the countries' comparative advantage (Podoba et al. 2021). The RCA can indicate the trade performance and patterns of products from a given country (Balassa, 1965). The mathematical equation for RCA is depicted in Equation 1.

$$RCA = (X_{ij}/X_j)/(X_{iw}/X_w) \quad (1)$$

Where shows the tea products export value (*i*) of the exporting country (*j*) (US$), shows the total export value of the exporting country (*j*) (US$), shows the world's (*w*) tea products export value (*i*) (US$), shows the world's (*w*) total export value (US$), shows the exporting countries of Indonesia, China, and India.

The RCA value ranges from 0 to ∞, as a value greater than 1 indicates competitiveness in the tea products of the exporting country (Gordeev, 2020). Subsequently, Hinloopen & van Marrewijk (2001) classified RCA values into four categories to assess the stability of the RCA value distribution, thereby facilitating the analysis of comparative advantages among countries (Table 1).

Table 1. RCA classification

Range	Classifications
$0 < RCA \leq 1$	No competitiveness
$1 < RCA \leq 2$	Weak competitiveness
$2 < RCA \leq 4$	Moderate competitiveness
$4 < RCA$	Strong competitiveness

source: Hinloopen & van Marrewijk (2001)

After that, the Export Product Dynamic (EPD) is used to analyse the position of Indonesian tea products. The growth of export market share represents the business strength of the analysed export products (X-axis), whereas the growth of the total exports signifies the market attractiveness (Y-axis) (Santoso et al. 2022). The mathematical equations for EPD can be observed in Equations 2 and 3, where denotes the analysis year (2012-2021) also shows the total analysis year (10 years). The EPD results produce four categories of trade positions that can be graphically represented in four quadrants (Figure 3).

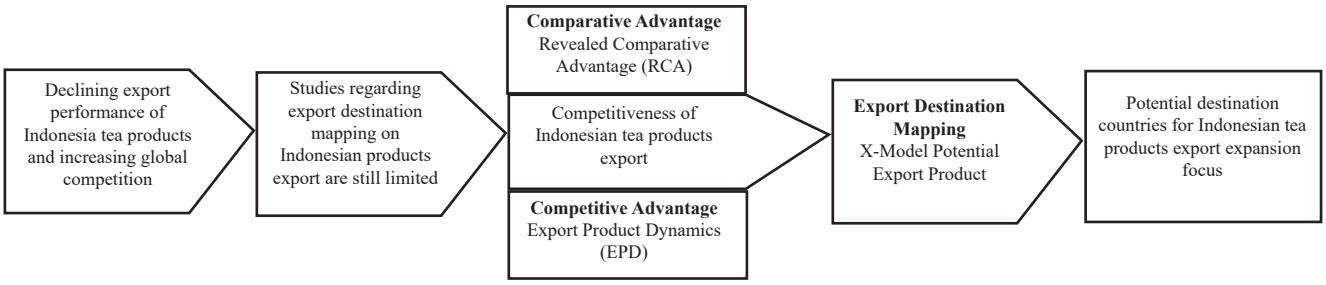

Figure 2. Research framework

$$X\ axis = \frac{\sum_{t=1}^{T}\left(\left(\frac{X_{ij}}{X_{iw}}\right)_t \times 100\right) - \left(\left(\frac{X_{ij}}{X_{iw}}\right)_{t-1} \times 100\right)}{T} \quad (2)$$

$$Y\ axis = \frac{\sum_{t=1}^{T}\left(\left(\frac{X_{j}}{X_{w}}\right)_t \times 100\right) - \left(\left(\frac{X_{j}}{X_{w}}\right)_{t-1} \times 100\right)}{T} \quad (3)$$

The potential export destinations mapping for Indonesian tea products is conducted using the X-Model Potential Export Products (Rivai et al. 2021). The X-Model Potential Export Products provides a more comprehensive analysis regarding export competitiveness by integrating the competitiveness (RCA) and market position (EPD) (Yulisti et al. 2021). The matrix is presented in Table 2.

RESULTS

Competitiveness Positions of Indonesia Tea Products in The International Market

The RCA results for Indonesian tea products with two main competitor countries, namely China and India, reveal that Indonesian tea products demonstrate strong competitiveness in the international market, as evidenced by an RCA value of 4.62. Furthermore, the comparative advantage of Indonesian tea products is stronger than that of China, but weaker than that of India (Table 3). The Indonesian RCA position is in line with the studies of Nugrahaningrum et al. (2020) and Nursodik et al. (2021), which focus on aggregate tea of HS 0902, but contrasts with the study of Muflihah et al. (2023) due to the difference on the amount of analysed period. Muflihah et al. (2023) employed a shorter analysis period (5 years) compared to this study (10 years).

According to the six-digit HS code classification, Indonesia demonstrates strong competitiveness in the export of packaged green tea (HS 090210), bulk green tea (HS 090220), packaged black tea (HS 090230), and bulk black tea (HS 090240), but no competitiveness in the export of tea extract and preparation products (HS 210120) (Table 3). This is evident in the export share of tea extract and preparation towards Indonesian total tea products export, which remains relatively small compared to other tea products, at 3.50% (UN Comtrade, 2023). The international market for tea extract and preparation products export is still dominated by developed countries such as the United States, Netherlands, Ireland, and Germany (Veeramani, 2012; ITC TradeMap, 2024).

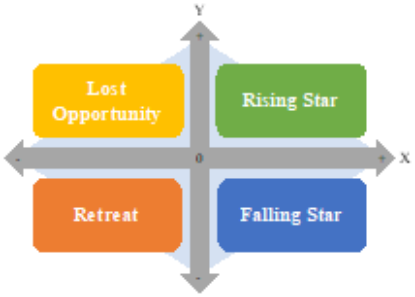

Figure 3. EPD Matrix (Esterhuizen, 2006)

Table 2. X-model potential export products matrix

RCA	EPD	X-Model
> 1	Rising Star	Optimistic market
	Falling Star	Potential market
	Lost Opportunity	Potential market
	Retreat	Less potential market
< 1	Rising Star	Potential market
	Falling Star	Less potential market
	Lost Opportunity	Less potential market
	Retreat	Not potential market

Source: Ministry of Trade (2013)

Table 3. The Comparison of Indonesian, Chinese, and Indian Tea Products' Comparative Advantage

Destinations	Indonesia						China						India					
	HS 090210	HS 090220	HS 090230	HS 090240	HS 210120	Tea Products	HS 090210	HS 090220	HS 090230	HS 090240	HS 210120	Tea Products	HS 090210	HS 090220	HS 090230	HS 090240	HS 210120	Tea Products
Australia	31.24	2.81	2.75	4.73	0.65	4.91	1.55	1.10	0.67	0.14	0.07	0.64	2.63	9.56	4.27	132.06	1.89	10.86
Belgium				13.58	0.12	2.16	8.80	2.74	0.12	0.27	0.55	2.81	0.17	8.24	0.04	19.48	0.36	2.57
Brunei Darussalam	0.38	1.40	10.44	4.25	1.05	2.23	0.02		0.55			0.01	0.11		9.56	0.81	0.38	0.46
Cambodia	2.72		13.85			0.93	2.89	0.99	6.59	6.87	2.11	1.71		0.05	7.64	1.55	1.61	0.67
Canada	0.29	1.44		9.89	0.18	1.39	1.31	5.00	0.51	0.56	0.07	0.75	1.10	2.90	7.65	45.29	2.01	9.65
China	1.48	9.55	0.38	4.85	0.30	3.19							0.10	5.06	0.32	34.44	3.77	19.21
Egypt	1.55	3.87		0.20		0.21	1.38	4.60	0.09	0.02	0.27	0.06	0.25	0.16	1.91	1.05	1.29	1.07
Fiji	179.18		2.99	23.12		8.09							4.00	27.71	0.58	2.09	1.75	0.87
France	0.04	1.50		0.21	0.12	0.14	5.10	3.11	0.29	2.78	0.03	1.85	0.05	1.02	0.17	17.22	0.16	1.10
Germany	71.23	7.90	1.90	10.05	0.39	9.59	0.63	8.60	0.05	1.50	1.69	2.74	1.29	9.31	3.26	45.47	2.15	22.58
Hong Kong	2.68	0.15	0.24	1.10	1.85	1.01	4.65	8.61	3.48	2.72	2.85	3.51	0.10	0.02	0.43	1.58	0.08	0.68
India	42.83	5.68		0.93		1.30	1.20	2.97	0.12	0.10	0.33	0.30						
Israel				35.01		11.13	1.65	2.87	0.01	0.03	0.46	0.44	2.93	0.15	0.23	8.15	0.46	3.59
Italy		3.44		0.10	1.17	0.32	1.23	1.00	0.01	0.05	0.29	0.32	0.46	1.67	1.60	61.28	6.81	9.12
Japan	0.38	0.04	0.03	0.71	0.14	0.40	2.90	4.02	0.43	1.60	1.42	1.57	1.81	0.31	2.15	23.92	22.80	16.45
Malaysia	6.03	0.33	4.57	6.60	0.94	4.40	6.81	5.23	6.55	2.20	0.89	3.55	1.10	0.20	0.71	4.08	0.79	2.24
Mongolia	43.57		39.01			20.20	0.13	0.64	2.25	0.17	0.26	0.64	0.19		2.30	14.91	0.01	1.42
Netherlands	0.52	4.24	0.04	4.42	0.18	0.97	0.98	2.87	0.02	0.27	0.06	0.32	0.28	20.56	1.03	40.50	0.12	6.93
New Zealand	948.49	2.52	2.37	16.54	1.25	8.50	0.85	4.07	0.03	1.41	0.08	0.31	24.67	3.81	3.25	14.98	4.12	4.76
Pakistan	274.91	0.87	151.38	0.66		0.74	13.60	3.62		0.02	0.46	0.10	1.76		4.71	1.29	20.69	1.28
Philippines	10.28	1.38	4.76	2.65	0.47	1.53	1.65	0.92	1.78	0.80	0.27	0.55	0.18	1.91	3.72	25.58	3.98	4.69
Poland	356.24	31.98	1.15	23.09		23.28	4.76	2.88	0.53	0.52	0.20	0.88	3.15	3.26	10.12	31.23	0.11	19.24
Russian Federation	12.50	2.44	1.23	8.85		6.86	1.00	4.20	0.09	0.15	0.03	0.43	2.63	0.69	6.11	27.38	0.16	20.82
Saudi Arabia	3.60	2.84	0.18	0.74	0.35	0.34	6.40	1.47	0.02	0.01	0.43	0.15	0.44	0.22	1.01	3.59	2.89	1.37
Singapore	4.28	0.07	1.90	2.76	1.13	2.02	0.79	2.29	0.89	1.55	0.85	1.23	0.48	0.16	3.10	2.99	1.21	1.62
South Korea	3.20	3.43	0.09	1.50	0.06	0.26	24.32	300.99	0.84	3.54	0.20	1.33	0.84	246.04	0.61	21.15	2.38	3.84
Spain		3.01		2.01	0.04	0.35	9.60	7.82	0.05	0.94	0.01	2.91	0.10	4.13	1.11	12.27	0.05	1.70
Suriname		734.12	3.44			4.43	1.88		0.15		5.77	0.60			10.35	170.23	0.12	14.24
Switzerland				89.64	0.22	15.12	0.52	4.63	0.07	0.17	0.07	0.45	0.17	1.03	0.35	6.51	3.96	3.16
Thailand	2.19	0.90	2.92	10.06	0.18	2.36	11.49	9.84	5.08	7.87	1.73	4.68	0.07	0.12	1.94	2.27	2.91	1.97
Türkiye	116.72	11.71		7.99		5.92	42.88	8.84	0.06	0.01	0.04	0.36	0.93	2.23	4.44	3.86	0.39	2.53
UAE	14.03	9.53	0.39	4.50	0.04	2.11	1.33	3.95	0.03	0.05	0.46	0.18	0.57	0.08	1.75	3.52	2.94	1.80
Ukraine		0.99		5.01		3.02	0.48	6.29	0.01	0.09	0.00	0.73	0.26	0.31	0.99	20.86	0.10	12.51
United Kingdom	37.62		0.52	6.18	0.51	5.25	1.16	4.34	0.12	0.09	0.23	0.27	2.22	9.15	4.53	11.38	3.23	9.78
USA	0.66	1.32	0.15	4.08	0.44	1.60	1.68	1.85	0.86	0.53	0.63	0.89	1.11	1.69	6.04	9.34	3.51	5.33
Viet Nam	131.71	0.80	21.12	15.67	0.52	10.13	39.18	24.46	10.45	15.38	3.20	10.08	0.05	0.01	0.12	3.76	1.32	1.10
Average Values	79.33	29.32	10.71	9.75	0.51	4.62	6.02	13.96	1.30	1.64	0.79	1.39	1.70	11.67	3.09	23.60	2.87	6.32

Note: 0 < RCA ≤ 1 (No Competitiveness); 1 < RCA ≤ 2 (Weak Competitiveness); 2 < RCA ≤ 4 (Moderate Competitiveness); RCA > 4 (Strong Competitiveness); No data available

Source: UN Comtrade (2023) (processed)

The EPD results for Indonesian tea products (Table 4) indicate that, generally, Indonesia tends to have a competitive advantage in the export of packaged black tea (HS 090230) and bulk green tea (HS 090220), with a dominance of rising star and falling star positions. The trade positions for these tea products suggest that packaged black tea and bulk green tea exhibit competitive market share growth with either dynamic or stagnant export growth.

The observed competitive advantage also signifies an improvement in trade positions as revealed in the study of Nayantakaningtyas et al. (2017), indicating that Indonesian packaged black tea and bulk green tea tended to lack competitiveness, reflected by a retreat position indicative of a decline in export performance. Conversely, there are export destinations of Indonesian packaged black tea and bulk green tea positioned as falling stars with stagnant export growth. This stagnation in export growth may be attributed to increased domestic tea consumption, insufficient technological innovation in packaging, and the implementation of non-tariff barriers (Putro & Hidayat, 2023).

Table 4. The Trade Positions of Indonesian Tea Products During 2012–2021

Destinations	HS 090210	HS 090220	HS 090230	HS 090240	HS 210120
Australia	Retreat	Retreat	Falling star	Retreat	Falling star
Belgium	n.a.	n.a.	n.a.	Lost opportunity	Lost opportunity
Brunei Darussalam	Rising star	Lost opportunity	Rising star	Lost opportunity	Lost opportunity
Cambodia	Retreat	n.a.	Falling star	n.a.	n.a.
Canada	Lost opportunity	Lost opportunity	n.a.	Lost opportunity	Rising star
China	Lost opportunity	Lost opportunity	Rising star	Lost opportunity	Rising star
Egypt	Rising star	Rising star	n.a.	Lost opportunity	n.a.
Fiji	Lost opportunity	n.a.	Rising star	Rising star	n.a.
France	Retreat	Retreat	n.a.	Falling star	Falling star
Germany	Retreat	Falling star	Falling star	Retreat	Retreat
Hong Kong	Retreat	Retreat	Falling star	Retreat	Falling star
India	Falling star	Falling star	n.a.	Retreat	n.a.
Israel	n.a.	n.a.	n.a.	Retreat	n.a.
Italy	n.a.	Rising star	n.a.	Rising star	Lost opportunity
Japan	Retreat	Falling star	Falling star	Falling star	Retreat
Malaysia	Retreat	Retreat	Retreat	Retreat	Retreat
Mongolia	Retreat	n.a.	Falling star	n.a.	n.a.
Netherlands	Retreat	Falling star	Falling star	Retreat	Falling star
New Zealand	Lost opportunity	Lost opportunity	Falling star	Rising star	Rising star
Pakistan	Lost opportunity	Rising star	Rising star	Lost opportunity	n.a.
Philippines	Rising star	Rising star	Rising star	Rising star	Lost opportunity
Poland	Lost opportunity	Rising star	Lost opportunity	Lost opportunity	n.a.
Russian Federation	Lost opportunity	Rising star	Rising star	Lost opportunity	n.a.
Saudi Arabia	Falling star	Retreat	Falling star	Retreat	Falling star
Singapore	Retreat	Falling star	Falling star	Falling star	Retreat
South Korea	Falling star	Retreat	Falling star	Retreat	Falling star
Spain	n.a.	Retreat	n.a.	Retreat	Falling star
Suriname	n.a.	Retreat	Retreat	n.a.	n.a.
Switzerland	n.a.	n.a.	n.a.	Rising star	Rising star
Thailand	Retreat	Falling star	Falling star	Falling star	Falling star
Türkiye	Lost opportunity	Rising star	n.a.	Lost opportunity	n.a.
UAE	Falling star	Falling star	Falling star	Falling star	Falling star
Ukraine	n.a.	Retreat	n.a.	Retreat	n.a.
United Kingdom	Retreat	n.a.	Retreat	Retreat	Falling star
USA	Lost opportunity	Rising star	Rising star	Lost opportunity	Lost opportunity
Viet Nam	Lost opportunity	Rising star	Rising star	Rising star	Lost opportunity

Source: UN Comtrade (2023) (processed)

On the other hand, Indonesia tends to lack a competitive advantage in the export of bulk black tea (HS 090240) and packaged green tea (HS 090210) positioned as a retreat (Table 4). This trade position indicates that the export of bulk black tea and packaged green tea from Indonesia is losing competitive market share and experiencing stagnation in export growth, thus impairing the export performance.

The decline in the competitive advantage of Indonesian bulk black tea indicates efforts in processing from an intermediate product, namely bulk black tea, into packaged black tea or extract and preparation tea products. This is supported by the increased export share of packaged black tea by 20.78% and extract and preparation tea products by 11.40%, whereas the export share of bulk black tea tends to decrease by 2.66% during 2012–2021 (UN Comtrade, 2023). Furthermore, the decrease in the competitive advantage of Indonesian packaged green tea contrasts with the study of Nayantakaningtyas et al. (2017), which was initially a rising star. This is supported by a significant decrease in the export share of Indonesian packaged green tea by 19.69% during 2012–2021 (UN Comtrade, 2023).

The export of tea extract and preparation products (HS 210120) from Indonesia still maintains a competitive advantage but experiences stagnation in export growth, as indicated by the dominance of a falling star position (Table 4). This stagnation in export growth may be attributed to the low adoption of downstream processing technology and innovation in packaging technology, thus limiting production capacity (Sita & Rohdiana, 2021; Nugrahaningrum et al. 2020). Additionally, the non-tariff measures imposed by destination countries are generally stricter for final products than intermediate products, thus potentially disincentives the export, alongside the enactment of value-added tax (Nasution, 2023; Putro & Hidayat, 2023).

TRAINS UNCTAD (2024) data reveals that the sanitary and phytosanitary (SPS) measures became the highest non-tariff measures imposed by destination countries for Indonesian tea products amounting to 26 imposing countries with UAE as the highest SPS imposing countries totalling 68 SPS notifications during 2012–2021. SPS measures have gained popularity recently driven by the increase in consumer concern and demand for safe and high-quality agricultural products (Wood et al. 2017; Assoua et al. 2022).

The Potential Export Destinations Mapping of Indonesian Tea Products

The export destination mapping for Indonesian tea products is conducted by clustering the export expansion potential, which integrates the results of RCA and EPD using the X-Model Potential Export Products. This clustering provides a comprehensive view of the potential export destinations by examining export competitiveness from both sides (Meliany & Novianti, 2022). Additionally, this mapping is divided based on the five tea products exported by Indonesia.

In total, there are 28 potential export destinations suggested to become the focus of main destinations countries for Indonesian tea products export expansion at present (Table 5). This result covers more extent potential destinations compared to previous studies which focused on main destinations (Aurelia et al. 2022; Fahmid et al. 2022; Meliany & Novianti, 2022) or non-traditional destinations (Destiarni et al. 2021).

Non-traditional countries dominate the potential destinations for Indonesian tea products export expansion. There are 22 non-traditional countries included in the potential destination countries, while traditional countries consist of only six countries, namely Australia, Germany, Hong Kong, Netherlands, Singapore, and USA (Table 5). This result also promotes diversification of the export destinations towards non-traditional with high untapped potential countries, such as China (71.50%), Egypt (95.70%), Pakistan (79.60%), Saudi Arabia (76.00%), Thailand (60.50%), Türkiye (96.30%), and Viet Nam (46.10%) (ITC Export Potential Map, 2024). Those high untapped potentials are also supported by high tea consumption per capita, namely China (1.25 kg), Egypt (0.72 kg), Pakistan (0.93 kg), Saudi Arabia (1.20 kg), Thailand (0.87 kg), Türkiye (3.17 kg), and Viet Nam (1.41 kg) (World Population Review, 2024).

Furthermore, based on data from the FTA Center Ministry of Trade (2024), as of 2022, Indonesia has implemented trade agreements with 14 potential destination countries for exporting Indonesian tea products. These trade agreements include AFTA, ACFTA, AKFTA, AANZFTA, AIFTA, IP-PTA, AHKFTA, and IE-CEPA. Trade agreements between Indonesia and partner countries can promote exports and unleash market access (Ardiyanti, 2015). Nevertheless, the findings revealed by Sitepu & Nurhidayat (2015)

and Ningsih et al. (2018) indicate that the utilisation of Indonesia's trade agreements with Asian partner countries, namely AFTA, ACFTA, AKFTA, and AIFTA, remains low due to insignificant differences between preferential tariffs and most-favoured nations (MFN) tariffs and the complexity of export compliance procedures under FTA preferences.

Managerial Implications

The mapping results indicate that potential export destinations for Indonesian tea products are predominantly non-traditional destination countries. This condition supports the diversification of destination countries towards high untapped potential countries (Rindayati & Akbar, 2022). Diversifying target countries plays a crucial role in mitigating shocks in both destination countries as well as international markets, contributing to the stability of macroeconomic conditions and export revenue in the form of foreign exchange (Xuefeng & Yaşar, 2016; Osakwe *et al*. 2018). Furthermore, primary or agricultural products are susceptible to external shocks such as price fluctuations and a slowdown in import demand from destination countries (Osakwe *et al*. 2018; Hotsawadi & Widyastutik, 2020). Additionally, the Ministry of Trade and tea industry stakeholders need to collaborate in enhancing FTA utilisation to further gain market access thus expanding exports and maintaining the competitiveness of Indonesian tea products, especially in potential destinations that have implemented trade agreements.

Table 5. The potential export destinations mapping of Indonesia tea products

Optimistic Market	Potential Market	Less Potential Market	Not Potential Market
HS 090210 – Packaged green tea			
2 Countries (Egypt, Philippines)	13 Countries (Brunei Darussalam, China, Fiji, India, New Zealand, Pakistan, Poland, Russian Federation, Saudi Arabia, South Korea, Türkiye, UAE, Viet Nam)	11 Countries (**Australia**, Cambodia, Canada, **Germany**, **Hong Kong**, **Malaysia**, Mongolia, **Singapore**, Thailand, **United Kingdom**, **USA**)	3 Countries (France, **Japan**, **Netherlands**)
HS 090220 – Bulk green tea			
7 Countries (Egypt, Italy, Philippines, Poland, Russian Federation, Türkiye, **USA**)	10 Countries (Brunei Darussalam, Canada, China, **Germany**, India, **Netherlands**, New Zealand, Pakistan, UAE, Viet Nam)	9 Countries (**Australia**, France, **Japan**, Saudi Arabia, **Singapore**, South Korea, Spain, Suriname, Thailand)	3 Countries (**Hong Kong**, **Malaysia**, Ukraine)
HS 090230 – Packaged black tea			
8 Countries (Brunei Darussalam, Fiji, Mongolia, New Zealand, Pakistan, Philippines, Russian Federation, Viet Nam)	8 Countries (**Australia**, Cambodia, China, **Germany**, Poland, **Singapore**, Thailand, **USA**)	8 Countries (**Hong Kong**, **Japan**, **Malaysia**, **Netherlands**, Saudi Arabia, South Korea, Suriname, UAE)	1 Country (**United Kingdom**)
HS 090240 – Bulk black tea			
5 Countries (Fiji, New Zealand, Philippines, Switzerland, Viet Nam)	12 Countries (Belgium, Brunei Darussalam, Canada, China, Italy, Poland, Russian Federation, **Singapore**, Thailand, Türkiye, UAE, **USA**)	14 Countries (**Australia**, Egypt, France, **Germany**, **Hong Kong**, Israel, **Japan**, **Malaysia**, **Netherlands**, Pakistan, South Korea, Spain, Ukraine, **United Kingdom**)	2 Countries (India, Saudi Arabia)
HS 210120 – Tea extract and preparation products			
1 Country (New Zealand)	6 Countries (Brunei Darussalam, Canada, China, **Hong Kong**, Italy, Switzerland)	14 Countries (**Australia**, Belgium, France, **Netherlands**, Philippines, Saudi Arabia, **Singapore**, South Korea, Spain, Thailand, UAE, **United Kingdom**, **USA**, Viet Nam)	3 Countries (**Germany**, **Japan**, **Malaysia**)

Note: the bold prints denote the traditional destinations
Source: UN Comtrade (2023), processed

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

Indonesian tea products exhibit strong competitiveness in the international market. The comparative advantage of Indonesian tea products is relatively stronger than that of China but weaker than that of India. When detailed based on the five forms of tea products, Indonesia demonstrates strong competitiveness in exporting all tea products, except for tea extract and preparation products. Conversely, Indonesia tends to gain a competitive advantage in exporting packaged black tea, bulk green tea, and tea extract and preparation products. The mapping results show 28 potential destination countries that can be a focus for the current export expansion of Indonesian tea products and need to maintain their positions. These destination countries are predominantly non-traditional export destinations.

Recommendations

There are several trade strategies that the Indonesian government can implement to promote the export of Indonesian tea products to potential destination countries. As for the potential destination countries where competitiveness is already established, the government, in collaboration with tea industry stakeholders, must sustain the quantity and quality of tea products that have already secured market access by ensuring compliance with requirements and standards imposed by the destination countries. The Ministry of Trade can also establish and utilise trade agreement forums to negotiate reductions in trade barriers that may threaten the competitiveness of Indonesian tea products by balancing the FTA preference utilisation.

As for the potential destination countries that are losing competitiveness and/or experiencing stagnant export growth, The Government through its trade attachés can implement market intelligence strategies to reveal the factors behind the losing competitiveness and/or stagnant export growth of Indonesian tea products and address the destination countries' demand characteristics towards tea products. The Government through the Ministry of Trade also need to provide technical assistance and simplification procedures in complying with the standard requirements imposed by destination countries as well as promote the marketing mix that complies with the criteria, standards, and characteristics of tea demand in potential destination countries.

Further research can analyse the impact of trade agreement implementation on the export performance of Indonesian tea products. The results can provide insights into the effectiveness of trade facilitation for Indonesian tea products through trade agreements. Additionally, it is essential to investigate the influence of non-tariff measures, especially SPS and TBT, to determine whether Indonesian tea products have successfully met the requirements imposed by destination countries.

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