Exploring of Competitiveness Edge of Indonesian Creative Products in the Chinese and Japanese Markets

Tubagus Arya Abdurachman[1], Ambya[2], I Wayan Suparta[3], Arivina Ratih Yulihar Taher[4]

{tbarya89@gmail.com[1] ,ambya.1959@feb.unila.ac.id[2] ,iwayansuparta_09@yahoo.com[3] ,arivinaratih@gmail.com[4] }

Faculty of Economics and Business, University of Lampung[1234]

Abstract. To strengthen Indonesia's position in the global creative economy landscape, sustainable strategic efforts are needed, one of which is maximizing exports of creative economy products. Exports of creative goods have a significant impact on the economy, contributing to income growth, job creation and export earnings. the importance of the East Asian market for the expansion of Indonesian creative products. Japan, with its prominent position, has become one of the main destinations for the export of Indonesian creative products, thanks to the high demand for innovative designs and quality products that reflect the uniqueness of Indonesian culture. On the other hand, China, as one of the largest and most dynamic economies in the world, has also shown significant interest in Indonesian creative products. Furthermore, in the context of this research, focus is given to identifying potential that can provide comparative advantage using the Revealed comparative advantage (RCA) approach which is revealed for the Indonesian creative economy and the Manufacturing of crafts and design goods subsector to increase international competitiveness, including in China. and Japan.

Keywords: Creative Economic Product, Revealed Comparative Advantage, Manufacturing of crafts and design goods

1 Introduction

The creative economy sector is a significant driver of the global economy, contributing to income growth, job creation and increased export earnings[1]. The United Nations has supported initiatives such as UNCTAD's Creative Economy Program to encourage economic development through creativity[2]. The creative economy has become an important pillar in the economic development of various countries. In this way, the growth of the creative economy not only makes a direct contribution to a country's Gross Domestic Product (GDP) but also opens up great opportunities for innovation, investment and cross-sectoral collaboration. The integration of the creative sector into the overall development strategy can contribute significantly to the revitalization of the national economy through dynamic economic and cultural exchange[3]. In addition, this sector has also been proven to contribute to economic growth, job creation, revitalization and internationalization, as well as showing resilience even during economic crises.[4]. Developing and supporting the creative sector is considered important to meet demand in the global market[5].

The global paradigm shows diverse contributions of creative industries to GDP and employment, with countries such as the United States and the Netherlands showing significant impacts[6]. Subsectors such as fashion, handicrafts and culinary arts in the creative economy play an important role in shaping GDP structure and export dynamics[7]. The emergence of the creative economy as a combination of culture, arts and economics underscores the importance

ICEBE 2024, September 04-05, Shah Alam, Malaysia

DOI 10.4108/eai.4-9-2024.2353718

of cultivating creative human resources for sustainable economic development[8]. Indonesia plays quite an important role in the global creative economy arena. Indonesia has identified the creative economy as one of the strategic sectors to encourage sustainable economic growth. The Indonesian government, through the Ministry of Creative Economy, has established various initiatives and policies to support the development of this sector. This is reinforced by the statement of the President of Indonesia who has emphasized that the creative economy sector plays an important role as a main part of the national economic structure[9]. The development of a regional economic system within a creative economy framework has been identified as the main strategy to encourage economic sustainability and prosperity[10].

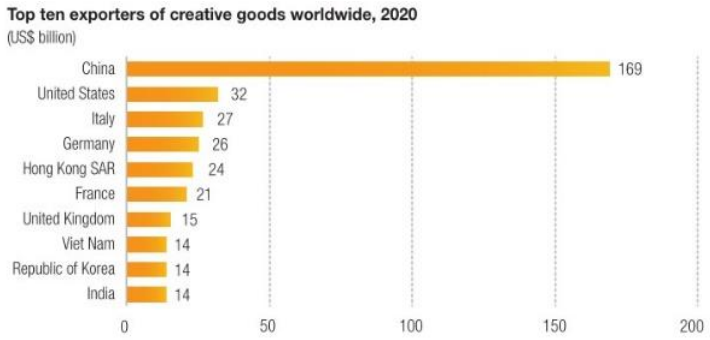
Source :catalogdata.kemenparekraf.go.id, data processed

Figure 1. Contribution of Creative Economy GDP to Indonesia's National GDP 2010 - 2022

Data on the contribution of creative economy GDP to Indonesia's national GDP from 2010 to 2022 can be seen in figure one above, showing quite significant variations. From 2010 to 2016, this contribution was relatively stable at around 7.4% to 7.7%. However, from 2017 to 2022, there was a fairly consistent downward trend. In 2022, the GDP contribution of the creative economy recorded the lowest figure at 6.54%, decreasing from 7.02% in 2021. This decline is an indication of the challenges faced by Indonesia's creative economy sector in facing various external and internal changes. On the external barriers side, various findings in research try to explain this, one of the main difficulties faced by this sector is the large number of small and medium enterprises (SMEs) and micro enterprises in it, which highlights the need for decision makers and policy makers to overcome obstacles faced by these businesses[11]. In addition, the creative economy is very vulnerable to external changes such as globalization and technological advances, which can disrupt traditional business models and require rapid adaptation to remain competitive.[12]. On the internal side, governance capacity and cross-sector collaboration are also major obstacles to the development of the creative economy. Governance capacity plays an important role in creating an environment that supports the development of creative industries, but many regions struggle with issues related to effective governance and regulatory frameworks that support creative entrepreneurship.[13]. Likewise, cross-sector collaboration remains a challenge in the creative economy, hampering the sector's ability to harness diverse skills and resources for sustainable growth[14].

To strengthen Indonesia's position in the global creative economy landscape, sustainable strategic efforts are needed, one of which is maximizing exports of creative economy products. Exports of creative goods have a significant impact on the economy, contributing to income growth, job creation and export earnings[15]. Creative products have been proven to have a positive impact on the GDP of creative economy countries, emphasizing the economic value obtained from these exports[16]. The contribution of exports, which is one of the main

aspects of international trade, has been proven to have a positive impact on economic growth in various regions[17], Furthermore Countries such as Ukraine have recognized the significant contribution of creative industries to local economic development, and exports account for a large part of the value of this sector[18]. Likewise in Russia, the development of creative industries has been proven to have a positive impact on key economic indicators such as production, employment, income and exports[19]. This highlights the multifaceted benefits of developing the creative sector for overall economic progress.



Source : UNCTAD, Creative Economic Outlook (2022)

Figure 2. Ten Largest Exporters of Creative Products in the World in 2020

Figure two shows data about the ten largest exporters of creative products in the world in 2020. China occupies the top position with an export value of $169 billion, far surpassing other countries. Second place is occupied by the United States with an export value of $32 billion, followed by Italy with $27 billion, and Germany with $26 billion. Hong Kong SAR and France are also on this list with export values of $24 billion and $21 billion respectively. Apart from that, countries like the UK, Vietnam, South Korea and India are also in the top ten list. China's export value, which is almost five times greater than that of the United States, shows how strong China's position is in the global market for creative products. This may be caused by various factors such as large production capacity, lower production costs, and government policies that support the creative industry. Meanwhile, other countries such as Italy, Germany and Hong Kong SAR also showed quite good performance in this sector, although with lower export values. The presence of countries such as Vietnam, South Korea and India on this list also indicates that the creative economy is not only developing in developed countries, but also in developing countries. This could be an indication that the creative sector has great potential to contribute to the global economy in various countries. Research result[20], stated that the export of creative products has been proven to have a positive impact on economic growth by diversifying sources of income and encouraging innovation. According to an article released on the fiscal.kemenkeu.go.id page throughout 2023, Indonesia's export value will still be concentrated in China with a share of 25.66%, the United States with a share of 9.57%, and India with a share of 8.35%. Meanwhile, Indonesia's exports to ASEAN and the European Union respectively have a share of 18.35% and 6.78% of Indonesia's total exports in 2023.

Table 1. Five Countries Absorbing Exports of Indonesian Creative Economy Products in Percentage for 2018-2019

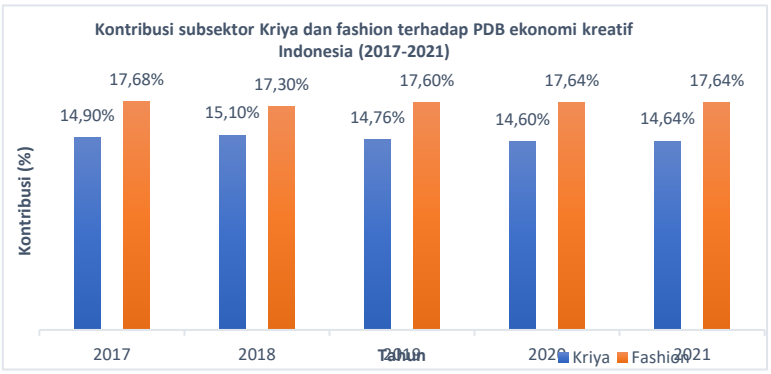
Year	United States of America	Japan	Singapore	China (China)	German
2018	36.36%	7.84%	5.42%	5.29%	4.36%
2019	39.57%	7.70%	5.39%	5.28%	4.40%

In the context of creative economy products exported by Indonesia, according to (bankdata.kemenparekraf.go.id), Japan and China rank second and fourth as the countries that absorb the largest number of Indonesian creative economy export products, namely 7.7% and 5.2%. with the dominance of fashion and craft creative economy products. This is in line with the data released (katalogdata.kemenparekraf.go.id). This position shows how important the East Asian market is for the expansion of Indonesian creative products. Japan, with its prominent position, has become one of the main destinations for the export of Indonesian creative products, thanks to the high demand for innovative designs and quality products that reflect the uniqueness of Indonesian culture. On the other hand, China, as one of the largest and most dynamic economies in the world, has also shown significant interest in Indonesian creative products.

Source : kemenparekraf.go.id, (2020)

Figure 3. Countries Absorbing Exports of Indonesian Creative Economy Products in Percentage for 2018-2019

The involvement of these two countries not only has a positive impact on the growth of the creative industry in Indonesia but also opens up opportunities for further development through collaboration and improving product quality that can meet international standards. Thus, focusing on the Japanese and Chinese markets is an important strategy in expanding the global reach of Indonesian creative products and increasing the competitiveness of the national creative industry in international markets. Creative economy products in the fashion and crafts categories are included in the top three subsectors that dominate their contribution to Indonesia's creative economy GDP. The contribution of the Crafts subsector shows mild fluctuations during the 2017-2021 period, these fluctuations indicate potential sensitivity to economic changes or subsector-specific factors. The trend of increasing the contribution of Crafts from 2017 to 2018 was followed by a decline until 2020, then stabilized in 2021. On the other hand, Fashion experienced a slight decline in 2018 but recovered in 2019 and continues to experience a slight increase until 2021. This indicates the fashion subsector more stable in its contribution to Indonesia's creative economy GDP.



Source : catalogdata.kemenparekraf.go.id, data processed

Figure 4. Contribution of the Craft and Fashion Subsector to Indonesia's Creative Economy GDP 2017-2021

Indonesia's position on the global creative economy map has quite good potential. Indonesia has taken many steps in bilateral trade cooperation agreements and multilateral cooperation, such as China-AFTA, Korea-AFTA, and IJEPA (beacukai.go.id). In the context of China-AFTA, this collaboration has opened up great opportunities for Indonesian creative economy products to enter the vast Chinese market. Eliminating or reducing tariffs for creative products, such as handicrafts, fashion and audiovisual products, allows Indonesia to be more competitive. Meanwhile, the Indonesia-Japan Economic Partnership Agreement (IJEPA) opens up great opportunities for Indonesian creative economy products in the Japanese market. The IJEPA protocol changes are expected to take effect soon, providing wider market access and reducing trade barriers. Japan, with its high demand for quality and innovative products, is a potential market for Indonesian creative products.

Via the treaty.kemlu.go.id page on November 28 2017 in Surakarta, a Memorandum of Understanding on Film Cooperation between the Agency for Creative Economy of the Republic of Indonesia and the State Administration of Press, Publication, Radio, Film and Television of the People's Republic of China. In the landscape of globalization and digitalization which increasingly influences the dynamics of the creative economy, it is important to understand the relative comparative advantage of a country in producing and trading creative products. Analysis of the Revealed Comparative Advantage (RCA) Approach between Indonesia and China and Indonesia and Japan is crucial in identifying potential for collaboration and growth in this sector. Indonesia can identify creative products that have high comparative advantages and focus on developing them. This analysis also helps in designing appropriate policies to increase the competitiveness and exports of Indonesian creative products. By understanding strengths and weaknesses through Revealed Comparative Advantage (RCA), Indonesia can take strategic steps to maximize its potential and compete more effectively in the global market. Research on the theme of Revealed Comparative Advantage (RCA) in the context of Indonesian commodity exports has been widely discussed and revealed. Research Studies on Indonesia's commodity export position and the competitiveness of products such as crude palm oil and tea provide valuable insights[21],[22]. Research result[23]has shown that the use of Revealed Comparative Advantage (RCA) analysis can provide insight into export dynamics, as in the case of Indonesian mango commodities, where EPD analysis complements Revealed Comparative Advantage (RCA) analysis to support strategic trade decisions.

Likewise in the Indonesian seaweed market, the application of Revealed Comparative Advantage (RCA) analysis reveals the country's comparative advantage, highlighting

Indonesia's superiority in trade with countries such as China[24]. Furthermore, in the context of this research, the focus is given to identifying potential that can provide comparative advantages using the Revealed Comparative Advantage (RCA) approach which is revealed for the Indonesian creative economy in the Manufacturing of crafts and design goods subsector. Based on the data presented above, regarding the contribution of the subsector to Indonesia's Creative Economy GDP, this subsector is considered to have great potential to increase international competitiveness, including in China and Japan.

2 Literature Review

2.1. Definition and Concept of Creative Economy

The creative economy is a relatively new concept but has experienced significant development in the last few decades. This term was first introduced by John Howkins in 2001 in his book entitled The Creative Economy: How People Make Money from Ideas. Based on Howkins' view, the creative economy is an economic activity that is centered on creating added value through creativity, innovation and the use of intellectual property rights. Howkins is known as a pioneer in introducing the concept of the creative economy, which emphasizes the economic value resulting from human creative efforts[25]. The definition not only includes traditional economic inputs such as land or capital, but also highlights the centrality of ideas in this economic model[26]. He predicts that the creative economy will emerge as a significant economic form in the 21st century, and underlines its potential importance[27]. The definition further underlines the transformative power of creativity in driving economic progress and societal development[28]. Howkins' conceptualization of the creative economy has sparked debate and discussion regarding the role of creativity in shaping the contemporary economy[29].

According to the United Nations Conference on Trade and Development (UNCTAD), the creative economy is a developing economic concept based on creative assets that have the potential to generate economic growth and development. The definition of creative industries provided by UNCTAD (2010) emphasizes the role of intellectual property and proposes that creative industries are, although not limited to, knowledge-based and arts-oriented activities that generate income from trade and intellectual property rights. Thus, the creative industry is a new dynamic sector in global trade. UNCTAD classifies creative economy sectors based on the 2017 Harmonized System (HS) code, which provides a detailed and systematic structure for categorizing creative products. This classification includes various main categories, such as "All creative goods" which includes all creative goods, as well as special subcategories such as "Audiovisual, multimedia and photography" and "Manufacturing of crafts and design goods". This subcategory includes products such as carpets, fashion accessories, interiors, jewelry, toys, woven crafts, and yarn, demonstrating the importance of crafts and design in the creative economy. In addition, other categories such as "Books and publishing", "Music, performing and visual arts", "Architecture", "Software, video games and recorded media", as well as "Cultural and natural heritage" highlight the wide scope of this sector, which includes book publishing, performing arts, architecture, recorded media and video games, as well as cultural and natural heritage.

UNCTAD's Creative Economy Program, which began in 2004, aims to help countries around the world understand how to harness creativity in industry to spur economic progress.[30]. By integrating creativity, knowledge, and innovation, the proposed economic model of creativity underscores the interconnectedness of these elements in driving economic prosperity[31]. UNCTAD's Creative Economy Report has been instrumental in highlighting the importance of the creative sector across countries, providing valuable quantitative evidence essential for comparison and analysis. In addition, the UNCTAD report has underscored the role of the creative economy in driving inclusive and sustainable economic growth globally[32]. The

definition of creative industry according to UNESCO is an industry that combines creativity, skills and abilities to generate wealth and employment. The creative industry is formed by creative culture, namely a culture that combines creation, products and commercialization. In Indonesia, the creative economy concept has been adopted and developed by the government through various initiatives and policies.

The Indonesian Ministry of Tourism and Creative Economy, for example, has determined 16 creative economy subsectors which are considered to have great potential for development. Based on Presidential Decree Number 72 of 2015 and Presidential Decree Number 142 of 2018, the creative economy in Indonesia includes the following sectors: (1) architecture; (2) interior design; (3) visual communication design; (4) product design; (5) films, animations and videos; (6) photography; (7) craft; (8) culinary arts; (9) music; (10) fashion; (11) application and game development; (12) publishing; (13) advertising; (14) television and radio; (15) performing arts; and (16) fine arts.

2.2. The Role of the Creative Economy in the Economy

The role of the creative economy in economic development has become a significant topic in recent years. The creative industry is increasingly seen as a vital sector with the potential to drive prosperity, create employment opportunities and contribute to regional and local economic growth[33]. This shift is based on the understanding that creativity, flexibility, agility and resilience are key elements for innovation and competitiveness in the modern economic landscape[34]. Various studies have explored strategies for developing the creative economy, such as identifying and mapping the potential of the creative sector and formulating strategic plans for growth through urban branding and innovative industrial centers.[35]. Additionally, the interaction between creative industries and traditional sectors has been a subject of interest, with research exploring how cross-sector partnerships can drive innovation and growth. Studies have highlighted the contribution of creative industries to the economy, particularly in terms of employment, regional development and urban dynamics[36]. This emphasis on collaboration and innovation emphasizes the transformational potential of creative industries in driving economic progress. The clustering of the creative economy in urban areas has also been noted as a significant factor in shaping the local economic base[37]. Urban centers serve as centers of creative activity, playing an important role in fostering creativity, innovation and economic development. In times of crisis, such as the current pandemic and periods of turmoil such as martial law, the economy undergoes a transformation where creativity and creative industries emerge as the main drivers of growth, ushering in a new economic era[38]. The economic value generated by the creative economy is enormous, including the production and export of commercial goods and creative services. This economic value is further strengthened by the potential of the creative economy to encourage regional development, especially in vulnerable or underdeveloped areas[39]. The creative economy is not just a sector but a strategic approach to economic development, with the capacity to reinvigorate and transform regions by harnessing creativity and innovation[40].

Observing the spatial distribution of the creative economy reveals its important role in driving innovation and introducing new ideas, knowledge, and processes throughout the economy[41]. The creative economy is an interconnected system that permeates various aspects of economic activity, driving progress and development. The emergence of the creative industry as a supporter of the modern knowledge-based economy emphasizes its importance in the policy agenda and economic development strategy[42]. By exploiting synergies in the innovation system, creative industries can catalyze economic development and create opportunities for sustainable growth[43]. Basic creative industries theory emphasizes the contribution of culture and creativity to economic progress, highlighting the transformational power of creative

endeavors. Cross-sector collaboration and development policies are very important to foster the rural creative economy, requiring adaptive public policies that are in line with the needs and potential of creative economy actors[44]. The creative economy sector is positioned as the backbone of economic growth, with the potential to drive economic transformation and resilience[45]. The creative economic potential of sub-sectors such as fashion, crafts and culinary arts is very significant, contributing greatly to the country's gross domestic product and foreign exchange earnings[46]. The implementation of models such as Penta Helix and Triple Helix emphasizes the collaborative nature of industrial creativity and innovation, highlighting the role of academia, business, government, media, and society in driving value creation[47]. Innovative approaches and models, such as helix four and five innovation systems, offer pathways to harness creativity and innovation to drive economic growth and development[48].

2.3. Revealed Comparative Advantage (RCA)

Revealed Comparative Advantage (RCA) was introduced by economist Bela Balassa in 1965 as a way to measure comparative advantage revealed through trade data. This method uses the ratio of exports of a product from a country to the country's total exports, compared with the same ratio at the global level. If the Revealed Comparative Advantage (RCA) value is greater than one, it means that the country has a competitive advantage in that product. This approach helps in identifying economic sectors that have the potential for higher growth and profits in international trade. Furthermore, a similar explanation regarding Revealed Comparative Advantage (RCA) is a fundamental concept in international trade that allows an assessment of a country's relative advantage or weakness in a particular product compared to other countries in the world.[49]. This index is very important for empirically identifying a country's strong and weak export sectors[50].The Balassa Index has been widely applied in various studies to evaluate competitiveness and comparative advantage in various sectors and countries[51]. This index is considered a standard measure for assessing Revealed Comparative Advantage (RCA) and has been used in a dynamic perspective to compare export structures and analyze competitiveness[52].

Various studies have explored various aspects of Revealed Comparative Advantage (RCA), including its application in industries such as textiles, clothing, agriculture, and services[53],[54],[55],[56]. The Revealed Comparative Advantage (RCA) Index has become an important tool in evaluating the competitiveness of sectors such as tourism, creative industries, and specific products such as pharmaceuticals and leather goods[57],[58],[59]. In the creative economy, Revealed Comparative Advantage (RCA) can be used to identify areas that have potential competitive advantage. Revealed Comparative Advantage (RCA) analysis, countries can determine which creative sectors have superior export performance, which in turn can encourage investment and develop policies that support the growth of these sectors. This is important because the creative economy is often the main driver of innovation and economic growth in the modern era. By analyzing a country's comparative advantage in certain sectors, researchers can gain insight into the country's trade patterns, competitiveness, and economic growth potential.[60],[61]. The Revealed Comparative Advantage (RCA) Index has also been used to analyze trade dynamics between countries, assess the impact of free trade agreements, and evaluate the competitiveness of various industries.[62],[63],[64]. Through Revealed Comparative Advantage (RCA) analysis, researchers can compare countries' export specializations, identify areas of strength and weakness, and make informed policy decisions to improve their international trade performance.[65],[66],[67].

3 Research Method

This study focuses on East Asian countries that have established a Free Trade Area (FTA) with Indonesia through several cooperation agreements between Indonesia-China

(ACFTA) and Indonesia-Japan (IJEPA). Data on trading partner countries was obtained from export and import data published from UN-Comtrade sources (*https://comtradeplus.un.org*), Trademap (*www.trademap.org*), as well as data from the Ministry of Creative Economy (https://satudata.kemenparekraf.go.id/) and the Central Bureau of Statistics (https://www.bps.go.id). This study uses secondary data, annual data in the form of time series data, for the period 2018 - 2022, which are Creative economy product groups according to the HS2017 code released by UNCTAD with the Manufacturing of crafts and design goods subsector from Indonesia to China, and from Indonesia to Japan. This research aims to analyze the export performance of Indonesia's creative economy products in the Manufacturing of crafts and design goods subsector on international markets, especially in China and Japan. The analysis was carried out by identifying export trends, trade patterns and the potential to increase the competitiveness of Indonesian creative economy products in the two countries. It is hoped that the results of this study will provide valuable insight for policy makers and stakeholders in formulating strategies for developing the creative economy sector that are more effective and sustainable. To calculate the Revealed Competitive Advantage (RCA) value between 0 and 1, you can use the Revealed Comparative Trade Advantage (RCTA) method as mentioned in the research[68]. Additionally, various indices such as RCA, RSCA, LnRCA, RCA, RTA, RMA, RC, and TBI are used to analyze competitiveness and comparative advantage in international trade, as shown in research[69].

Table 2. Creative economy product groups

Code	Label
CER020	Manufacturing of crafts and design goods
CER021	Carpets
CER022	Fashion accessories
CER023	Interiors
CER024	Jewellery
CER025	Toys
CER026	Wickerware
CER027	Yarn

Source : UNCTAD, DimHS2017 Products Creatives Hierarchy

Revealed Comparative Advantage (RCA) is a fundamental concept in international trade that helps countries to identify their strengths and weaknesses in a particular industry compared to other countries. This concept was introduced by Bela Balassa in 1965[70]and has been widely used in various studies to evaluate the competitiveness of different sectors in different countries. Based on the results of research that has been conducted, researchers have used the Revealed Comparative Advantage (RCA) index to analyze trade patterns, competitiveness and comparative advantage in industries such as textiles and clothing.[71], service[72], and manufacturing[73]. By calculating the Revealed Comparative Advantage (RCA) index, researchers can determine whether a country has a comparative advantage in a particular sector by comparing its export specialization with global trends. In this research, the author attempted to conduct research to see the potential for creative economy export products in the Indonesian Manufacturing of crafts and design goods subsector in the Chinese and Japanese markets, using the Revealed Comparative Advantage (RCA) calculation method for Indonesian products. Revealed Comparative Advantage (RCA) is a method used to measure the comparative advantage of an area, such as a region, country or province. In addition, the Revealed Comparative Advantage (RCA) index has been utilized in regional contexts, such as exploring the comparative advantages of provinces within a country such as Indonesia[74]and evaluating economic sustainability in specific regions such as the Sverdlovsk region in Russia[75]. These

regional studies provide a more detailed perspective on comparative advantage, enabling targeted interventions to improve competitiveness at the sub-national level. The Revealed Comparative Advantage (RCA) value can be formulated as follows[76]:

$$\boldsymbol{RCAij} = \frac{\left\{\frac{xij}{\Sigma_i xij}\right\}}{\left\{\frac{\Sigma_i xij}{\Sigma_i \sum_j x\, ij}\right\}} \ldots . \{1\}$$

Information :

Units			*Source*
RCAij	:	Comparative advantage (competitiveness) of Indonesian products	*https://comtradeplus.un.org*
Xij	:	Export Value of Indonesian products to China and Japan in Year t	*https://comtradeplus.un.org*
∑iXij	:	Total exports of all Indonesian products to China and Japan.	*www.trademap.org*
∑jXij	:	Total export value of product i to the world	*www.trademap.org*
∑i∑jXij	:	The total export value of all products to the world	*www.trademap.org*

4 Discussion

The creative economy has become an important pillar in global economic growth, including in Indonesia. Various subsectors in the creative economy, such as handicrafts and design, have great potential to make a significant contribution to state income, create jobs, and strengthen cultural identity. In the context of international trade, understanding the competitiveness and comparative advantages of these creative products is the key to maximizing the economic benefits that can be obtained. International trade plays an important role in the economic development and prosperity of a country. International trade allows countries, especially developing countries, to utilize their resources effectively through specialization, comparative advantage, and economies of scale, thereby driving economic progress[77]The use of Revealed Comparative Advantage (RCA) in international trade analysis allows countries to identify sectors in which they have a relative advantage. By understanding Revealed Comparative Advantage (RCA), countries can formulate more effective trade strategies, emphasize sectors with high comparative advantages, and maximize the benefits of international trade.

The handicrafts and design subsector in Indonesia has great potential as a contributor to the national economy through increasing exports and creating jobs. Furthermore, the importance of competitiveness analysis and comparative advantage in improving the performance of international trade in Indonesian creative products. Their research shows that creative products, including handicrafts and designs, have a great opportunity to compete in the global market, especially if supported by appropriate policies and continuous innovation. China and Japan are significant markets for Indonesian creative economy products. China is known for its ability to produce goods in large volumes and competitive prices, while Japan is known for its high quality standards and specific demand for products with high cultural and aesthetic value. Therefore, understanding Indonesia's comparative advantages between these two markets can provide strategic insights for the development of more effective export policies and

strategies. China has the advantage of producing goods on a large scale and low production costs, which allows them to dominate the global market with price-competitive products.

Table 3. Export of All Products Indonesia - China 2018-2022

	Year	Value (USD Thousand)	Growth
Total All	2018	$27,126,932	-
	2019	$27,961,887	3.08%
	2020	$31,775,692	13.64%
	2021	$53,764,668	69.21%
	2022	$65,924,117	22.67%

Source:Trademap, data processed (2024)

Table three above shows the total export value of all products from Indonesia to China in the period 2018 to 2022. This export value experienced a significant increase throughout this period. In 2018, the total export value reached $27,126,932. In 2019, the export value increased to $27,961,887, reflecting an increase of approximately 3.08%. In 2020, the export value rose further to $31,775,692, reflecting growth of approximately 13.64% from the previous year. The biggest jump occurred in 2021, with export value reaching $53,764,668, representing an increase of approximately 69.21% compared to 2020. This positive trend continued into 2022, with export value increasing further to $65,924,117, representing an increase of approximately 22.67% from 2021. Overall, the table above depicts strong and sustainable growth in the export value of all Indonesian products to China during the 2018-2022 period. This shows significant potential for Indonesia to continue to increase the presence of its products in the Chinese market through a more effective and sustainable export strategy.

This growth in export value also reflects the great potential possessed by Indonesia's creative economy products, especially the Manufacturing of crafts and design goods subsector. This creative economy subsector plays an important role in enriching Indonesia's export portfolio, considering that handicrafts and design goods from Indonesia have a unique appeal and high cultural value that can be appreciated in international markets such as China. The significant growth in export value provides an indication that there is an increase in demand and acceptance of Indonesian creative products in China. The calculation of the Revealed Comparative Advantage (RCA) value of the creative economy subsector of Manufacturing of crafts and design goods from Indonesia to China in 2018-2022 can be seen in table 3 below.

Table 4. Revealed Comparative Advantage (RCA) Value of Creative Economy Exports in the Manufacturing of Crafts and Design Goods Subsector Indonesia - China in 2018-2022.

Product Group	Year	RCA
Manufacturing of crafts and design goods	2018	1,296
	2019	1,270
	2020	1,287
	2021	1,259
	2022	1,250

Source : Uncomtrade, Trademap, Data processed (2024)

Table four above shows the Revealed Comparative Advantage (RCA) value for the manufacturing of crafts and design goods product group from 2018 to 2022. The data shows that the Revealed Comparative Advantage (RCA) value for manufacturing of crafts and design

goods remained above 1 throughout the period 2018-2022, which means Indonesia has a comparative advantage in this sector. In other words, Indonesia is more efficient in producing these goods compared to other countries and has a better position in the international market for these products. In 2019 the RCA ratio experienced a slight decrease of around 2.1% from the previous year 2018. This decrease may indicate increased competition or changes in market conditions that affect the competitiveness of this sector, although Indonesia still maintains a comparative advantage. In 2020 Revealed Comparative Advantage (RCA) increased by 1.3% from 2019. This increase shows improvements in comparative advantage or increased performance of this sector, which may be caused by innovation, increased quality or production efficiency. In 2021 and 2022, the RCA value decreased respectively by 2.2% and 0.8%. This decline may be caused by external challenges such as changes in trade policies, the impact of the global economy, or increased competition from other countries.To understand the dynamics and competitive position in various industries, it is important to refer to research that uses comparative advantage analysis, especially research that examines Revealed Comparative Advantage between Indonesia and China. For example, research that focuses on the competitiveness of the electronics industry in Indonesia and ASEAN-China uses Revealed Comparative Advantage (RCA) analysis, as carried out by[78], providing important insights into the competitive position of the sector. In addition, research analyzing the export competitiveness of the textile and apparel industry in Indonesia, China and India shows that China has significant comparative advantages and competitiveness.[79]. These studies emphasize the importance of RCA analysis in evaluating the competitive position of different countries in a particular industry.

Japan, as another important trading partner, has a market that is very sensitive to quality and design. Manufacturing of crafts and design goods products from Indonesia must meet the high standards applied in Japan to be well received. Japan values unique design and quality, so Indonesian products that feature cultural elements and distinctive aesthetics can have a strong appeal. Quality and innovation are key to entering the Japanese market, which requires adapting products to suit Japanese consumer expectations. Japan has a strong preference for high-quality products with high cultural value, which reflect the standards and aesthetics expected by Japanese consumers. Understanding these dynamics can help Indonesia develop a more targeted and effective export strategy.

Table 5. Export of All Products Indonesia - Japan 2018-2022

	Year	Value (USD Thousand)	Growth
Total All Products	2018	$19,479,892	
	2019	$16,003,261	(17.9%)
	2020	$13,662,871	(14.6%)
	2021	$17,868,287	30.7%
	2022	$24,845,365	39.1%

Source: Trademap, data processed (2024)

In table five it can be seen that the total export value of all Indonesian products to Japan from 2018 to 2022 reveals significant fluctuations in export volume during that period. In 2018, the export value reached $19,479,892, but saw a drastic decline in 2019 to $16,003,261, reflecting a decline of around 17.9%. This decline may be caused by various external factors, including economic instability or changes in market demand. In 2020, the export value fell again to $13,662,871 thousand, experiencing a further decline of around 14.6%. This decline could be

influenced by the global impact of the COVID-19 pandemic which has affected international trade and market demand. However, the situation started to improve in 2021, where the export value increased to $17,868,287 thousand, registering a growth of around 30.7%. This recovery shows an increase in demand or economic recovery which allows growth again in the export sector to Japan. Entering 2022, the export value jumped significantly to $24,845,365 thousand, with extraordinary growth of 39.1% compared to the previous year. This increase may indicate a strong recovery from the impact of the pandemic and increased demand for Indonesian products in the Japanese market. Overall this data shows that despite fluctuations in exports from year to year, the positive trend seen in 2021 and 2022 signals strong growth potential and the possibility of a good market recovery.

Formulating an effective export strategy from Indonesia to Japan requires a comprehensive understanding of Indonesia's export performance, competitiveness in key sectors, the impact of trade agreements and policies, and the dynamics of the Japanese market. By utilizing insights from research studies that analyze these aspects, policy makers and the business world can adjust their strategies to increase the presence of Indonesian exports in Japan and exploit market opportunities effectively, including those related to creative economy commodity exports, especially the manufacturing of crafts and subsectors. design goods.The calculation of the Revealed Comparative Advantage (RCA) value of the creative economy subsector of Manufacturing of crafts and design goods from Indonesia to China in 2018-2022 can be seen in table 5 below.

Table 6. Revealed Comparative Advantage (RCA) Value of Creative Economy Exports in the Manufacturing of crafts and design goods subsector Indonesia - Japan in 2018-2022.

Product Group	Year	RCA
Manufacturing of crafts and design goods	2018	1,349
	2019	1,366
	2020	1,383
	2021	1,368
	2022	1,346

Source : Uncomtrade, Trademap, Data processed (2024)

Based on table six, it can be seen that the Revealed Comparative Advantage (RCA) value for the Manufacturing of crafts and design goods subsector between Indonesia and Japan shows interesting dynamics from 2018 to 2022. During this period, the Revealed Comparative Advantage (RCA) value remains above 1 , indicating that Indonesia has a comparative advantage in this sector. In 2018, the Revealed Comparative Advantage (RCA) value was 1.349, indicating that Indonesia has an advantage in producing these goods compared to other countries. The Revealed Comparative Advantage (RCA) value increased to 1.366 in 2019 and 1.383 in 2020, reflecting gradual improvements in comparative advantage despite global challenges. However, in 2021, the Revealed Comparative Advantage (RCA) value decreased to 1.368, and this decline continued in 2022 to 1.346. This decline indicates competitive pressures or changes in market conditions that may affect the competitiveness of the sector. However, the Revealed Comparative Advantage (RCA) value which remains above 1 shows that Indonesia still maintains a relatively good comparative advantage in the Manufacturing of crafts and design goods subsector. The decline in the value of Revealed Comparative Advantage (RCA) in recent years may require further attention to understand the factors that influence

competitiveness and develop appropriate strategies to maintain or improve Indonesia's position in the international market.

Indonesia and Japan have a long history of economic and financial cooperation, stretching back more than six decades, as outlined in the review[80].While economic relations between the two countries are generally strong, there are several specific issues related to investment and trade that require close attention. Understanding these challenges is crucial to more accurately assess the comparative advantages between Indonesia and Japan. Study conducted by Sumiyati[81]regarding Indonesian exports to Japan and Singapore, identify the factors that influence these trade flows. This research also highlights the role of comparative advantage in determining export destinations, which in turn provides deep insight into the dynamics of trade between Indonesia and Japan. In addition, it explores the implications of regional cooperation frameworks, such as the Indo-Pacific framework[82], on economic relations between Indonesia and Japan can provide valuable insight. These cooperative frameworks often aim to increase economic integration and facilitate trade, which in turn can influence comparative advantages between countries in the region. Specifically regarding the Revealed Comparative Advantage (RCA) analysis between Indonesia and Japan, for example,[83]applying Revealed Comparative Advantage (RCA) to evaluate the competitiveness of Indonesian coffee exports to the United States and Japan. Besides that,[84]examine the competitiveness of Indonesian coal exports to several countries, including Japan. Besides that,[85]investigated the performance of Indonesian frozen shrimp exports to Japan using the Revealed Comparative Advantage (RCA) method to assess competitiveness.

5 Conclusions

Revealed Comparative Advantage (RCA) analysis between Indonesia and China and Indonesia and Japan shows interesting dynamics. The Revealed Comparative Advantage (RCA) value for Indonesia and China during the period 2018 to 2022 continues to fluctuate, however, the value remains above 1, indicating that Indonesia still maintains a comparative advantage in this subsector. A decrease in the value of Revealed Comparative Advantage (RCA) can be an indication that further attention is needed to understand the factors that influence competitiveness and develop appropriate strategies to maintain or improve Indonesia's position in the international market. In this way, Indonesia can continue to take advantage of its comparative advantages and strengthen its position in the manufacturing of crafts and design goods sector. Some limitations in this research are that it only covers the period from 2018 to 2022, which may not reflect long-term trends in the comparative advantage of the manufacturing of crafts and design goods sector. The Revealed Comparative Advantage (RCA) value is influenced by various external factors such as global economic fluctuations, changes in international trade policies, and fluctuating market conditions. This research does not completely isolate or control the influence of these external factors, so the interpretation of the results may not be completely accurate in reflecting real domestic conditions. This analysis focuses on the comparison between Indonesia-China and Indonesia-Japan in the manufacturing of crafts and design goods subsector. Further research involving more countries can provide a more complete picture. The methodology used to calculate Revealed Comparative Advantage (RCA) values has inherent limitations, including the assumption that comparative advantage is based solely on relative production efficiency. Other aspects such as innovation, distribution networks, and diplomatic relations also play an important role in determining international competitiveness but are not covered in this Revealed Comparative Advantage (RCA) analysis.

References

[1] D. Štreimikienė and T. Kačerauskas, “The Creative Economy and Sustainable Development: The Baltic States,”*Sustainable Development*, 2020, doi: 10.1002/sd.2111.

[2] C. Chaiboonsri, “The Potential Analytical Impact of Significant Sectoral Creative Economy on Thailand's Economy: A Case Study of the IRS-CGE Model vs. The CRS-CGE Model for Both the National and Provincial Economies,"*Economies*, 2024, doi: 10.3390/economies12020044.

[3] J. Fazlagić and EI Szczepankiewicz, “The Role of Local Governments in Supporting Creative Industries—A Conceptual Model,”*Sustainability*, 2020, doi: 10.3390/su12010438.

[4] M. Klein, P. Gutowski, L. Gerlitz, and E. Gutowska, "Creative and Cultural Industry in Baltic Sea Region Condition and Future,"*Sustainability*, 2021, doi: 10.3390/su13084239.

[5] O. KOVALENKO, “Development Prospects of Ukrainian Creative Industry Enterprises Under the Challenges of Wartime,”*Bulletin of Taras Shevchenko National University of Kyiv Economics*, 2023, doi: 10.17721/1728-2667.2023/223-2/8.

[6] K. Holubchak, Y. Chuchuk, T. Savchuk, and I. Negrych, “The Phenomenon of Creative Economy in Ukraine and Defining Its Place in the Architectural Space,” 2019, doi: 10.2991/mdsmes-19.2019.15.

[7] B. Surodjo, P. Astuty, and L. Lukman, "Creative Economic Potential of the Fashion, Crafts and Culinary Sub Sector in the New Normal Era," 2022, doi: 10.4108/eai.16-4-2022.2319729.

[8] N. Kuznetsova, V. Tkachuk, S. Obikhod, T. Vlasenko, O. Samborska, and L. Chorna, “Development and Preservation of Human Capital Under the Conditions of the Creative Economy,”*Financial Engineering*, 2023, doi: 10.37394/232032.2023.1.7.

[9] W. Harwiki and C. Malet, "Quintuple Helix and Innovation on Performance of SMEs Within Ability of SMEs as a Mediator Variable: A Comparative Study of Creative Industry in Indonesia and Spain,"*Management Science Letters*, 2020, doi: 10.5267/j.msl.2019.11.018.

[10] TS Hu, SC Pan, HT Cheng, C. Su, and H. Lin, “Toward Economic Sustainability: How to Shape Fashion Industry Development in Taipei,”*International Journal of Business Environment*, 2021, doi: 10.1504/ijbe.2021.112118.

[11] Ž. Đorić, “Creative Economy: Exploring the Concept and European Perspective,”*Biznisa School*, 2020, doi: 10.5937/skolbiz2-28894.

[12] D. Štreimikienė and T. Kačerauskas, “The Creative Economy and Sustainable Development: The Baltic States,”*Sustainable Development*, 2020, doi: 10.1002/sd.2111.

[13] M. Mayarni*et al.*, “Governance Capacity of Creative Economy of Coastal Communities,” Kne Social Sciences, 2023, doi: 10.18502/kss.v8i5.13005.

[14] S. Rosyadi, A. Sabiq, AA Ahmad, and M. Yamin, "The Cross-Sector Collaboration for Development Policy of Rural Creative Economy: The Case of Bengkoang Creative Hub,"*Journal of Governance and Public Policy*, 2021, doi: 10.18196/jgpp.811339.

[15] D. Štreimikienė and T. Kačerauskas, “The Creative Economy and Sustainable Development: The Baltic States,”*Sustainable Development*, 2020, doi: 10.1002/sd.2111.

[16] BT Putri Rikaltra and E. Soesilowati, "The Effect of Human Resource Quality and Technological and Market Accesses on Creative Economy Development in Indonesia,"*Saudi Journal of Economics and Finance*, 2023, doi: 10.36348/sjef.2023.v07i03.007.

[17] B. Shimbov, M. Alguacil, and C. Suárez, “Export Structure Upgrading and Economic Growth in the Western Balkan Countries,”*Emerging Markets Finance and Trade*, 2019, doi: 10.1080/1540496x.2018.1563538.

[18] S. Pavliuk, "The Role of Creative Industries in Local Economic Development,"*Ukrainian Black Sea Region Agrarian Science*, 2023, doi: 10.56407/bs.agrarian/1.2023.74.

[19] I. Glebova, S. Berman, N.A. Semenova, and R. Galiakhmetov, “Creative Industries in Russian Regions: Challenges of Establishment and Conditions for Development,”*Laplage Em Revista*, 2021, doi: 10.24115/s2446-6220202173d1726p.342-350.

[20] M. Sukma, D. Hartono, and S. Prihawantoro, "The Impacts Analysis of Creative-Products Export on the Economy,"*Footsteps*, 2018, doi: 10.15294/jejak.v11i1.11337.

[21] DA Fakhrian Zuhdi, MF Abdullah, MS Wahyudi Suliswanto, and ST Wahyudi, "The Competitiveness of Indonesian Crude Palm Oil in International Market,"*Journal of Development Economics*, 2021, doi: 10.29259/jep.v19i1.13193.

[22] F. Zuhdi, KR Rambe, and L. Rahmadona, "Analysis of Competitiveness and Forecasting of Indonesian Tea Exports to Main Destination Countries,"*Economics and Management Media*, 2022, doi: 10.24856/mem.v37i2.2888.

[23] C. Aura, S. Widayanti, and NH Idhoh Fitriana, "Export Position of Indonesian Mango Commodities in the International Market (Case Study in Seven Destination Countries),"*Agricultural Socioeconomic Research Bulletin, Faculty of Agriculture, Haluoleo University*, 2023, doi: 10.37149/bpsosek.v25i1.470.

[24] H. Sudirman, “Competitiveness of Indonesian Non-Human Consumption of Seaweed in the China Market,”*Marginal Journal of Management Accounting General Finance and International Economic Issues*, 2023, doi: 10.55047/marginal.v2i2.592.

[25] Ž. Đorić, “Creative Economy: Exploring the Concept and European Perspective,”*Biznisa School*, 2020, doi: 10.5937/skolbiz2-28894.

[26] A. Olim, I. Mota, and S. Silva, “The Influence of Creativity on Entrepreneurship: The Portuguese Case,” 2014, doi: 10.1007/978-3-319-12871-9_11.

[27] A. Vlassis and CD Beukelaer, "The Creative Economy as a Versatile Policy Script: Exploring the Role of Competing Intergovernmental Organizations,"*Media Culture & Society*, 2018, doi: 10.1177/0163443718810913.

[28] FJ Lopes Soares and JF da Silva, “Perceptions About Internationalization Barriers in the Creative Economy: A Multiple-Case Study With Brazilian SMEs,”*Internext*, 2022, doi: 10.18568/internext.v17i2.676.

[29] DS Vieira Jesus, D. Kamlot, and VJ Correia Dubeux, “A Critique of the Creative Economy, Creative City and Creative Class From the Global South,”*International Journal of Business Administration*, 2020, doi: 10.5430/ijba.v11n4p1.

[30] C. Chaiboonsri, “The Potential Analytical Impact of Significant Sectoral Creative Economy on Thailand's Economy: A Case Study of the IRS-CGE Model vs. The CRS-CGE Model for Both the National and Provincial Economies,"*Economies*, 2024, doi: 10.3390/economies12020044.

[31] IN Dubina, EG Carayannis, and DFJ Campbell, “Creativity Economy and a Crisis of the Economy? Coevolution of Knowledge, Innovation, and Creativity, and of the Knowledge Economy and Knowledge Society,"*Journal of the Knowledge Economy*, 2011, doi: 10.1007/s13132-011-0042-y.

[32] A. Mandić, L. Petrić, and S. Pivčević, “Film as a Creative Industry Constituent and Its Impacts on Tourism Development: Evidence From Croatia,” 2017, doi: 10.20867/tosee.04.14.

[33] M. Klein, P. Gutowski, L. Gerlitz, and E. Gutowska, "Creative and Cultural Industry in Baltic Sea Region Condition and Future,"*Sustainability*, 2021, doi: 10.3390/su13084239.

[34] V. Ndou, G. Schiuma, and G. Passiante, “Towards a Framework for Measuring Creative Economy: Evidence From Balkan Countries,”*Measuring Business Excellence*, 2019, doi: 10.1108/mbe-03-2018-0013.

[35] Y. Agustina, A. Winarno, H. Pratikto, BS Narmaditya, and F. Filianti, “A Creative Economy Development Strategy: The Case of Trenggalek Creative Network

forTrenggalek Regency, Indonesia," Journal of Asian Finance Economics and Business, 2020, doi: 10.13106/jafeb.2020.vol7.no12.1111.

[36] M. Klein and M. Spychalska-Wojtkiewicz, "Cross-Sector Partnerships for Innovation and Growth: Can Creative Industries Support Traditional Sector Innovations?,"*Sustainability*, 2020, doi: 10.3390/su122310122.

[37] Y. Firmansyah, "Cultural Innovation in Indonesia as a Development of the Creative Economy,"*Journal of Business Economics & Entrepreneurship*, 2024, doi: 10.55208/jebe.v18i1.539.

[38] V. Kovpak and N. Lebid, "Creative Industries as a Mechanism of Creative Economy and Strategic Communications,"*Baltic Journal of Economic Studies*, 2022, doi: 10.30525/2256-0742/2022-8-4-102-109.

[39] AS Khvorostyanaya, "Expediency Assessment of the Experience Used in the New Zealand Creative Economy Strategic Development,"*Russian Journal of Industrial Economics*, 2023, doi: 10.17073/2072-1633-2023-4-1251.

[40] A. da Silva Ferreira, HC Alegre Afonso, JA Villas Mello, and R. Amaral, "Creative Economy and the Quintuple Helix Innovation Model: A Critical Factors Study in the Context of Regional Development,"*Creativity Studies*, 2023, doi: 10.3846/cs.2023.15709.

[41] AK Gruia, A. Grecu, M. Marin, E.-A. Predescu, and C. Teodorescu, "Trends in the Spatial Distribution of Creative Economies in Romania," 2019, doi: 10.18509/gbp.2019.46.

[42] IS Kanó, Z. Vas, and S. Klasová, "Emerging Synergies in Innovation Systems: Creative Industries in Central Europe,"*Journal of the Knowledge Economy*, 2022, doi: 10.1007/s13132-021-00879-7.

[43] H. Majdúchová and MK Barteková, "Innovations in the Creative Industry Entities,"*SHS Web of Conferences*, 2020, doi: 10.1051/shsconf/20207402009.

[44] S. Rosyadi, AS Kusuma, E. Fitrah, NA Zayzda, and T. Pimoljinda, "Barriers of Public Policy Faced by SMEs of Creative Economy in Indonesia,"*International Journal of Law and Management*, 2021, doi: 10.1108/ijlma-02-2020-0061.

[45] R. Maulina, "Innovation and Creativity as Capital in the Creative Economy Sector," 2020, doi: 10.2991/assehr.k.200108.026.

[46] B. Surodjo, P. Astuty, and L. Lukman, "Creative Economic Potential of the Fashion, Crafts and Culinary Sub Sector in the New Normal Era," 2022, doi: 10.4108/eai.16-4-2022.2319729.

[47] M. Dergaliuk, S. Khanin, O. Popelo, S. Tulchynska, and N. Pakhota, “Intensification of the Development of Regional Economic Systems in the Conditions of the Creative Economy Formation,”*Laplage Em Revista*, 2021, doi: 10.24115/s2446-62202021731259p.80-88.

[48] D. Suherman, S. Aliya, A. Ariesmansyah, and DG Khaulani, "Patrakomala as Bandung City Government Innovation in Reorganizing the Creative Economy Post-Covid-19 Pandemic,"*Publica Journal of State Administration Thought*, 2022, doi: 10.15575/jpan.v14i2.21141.

[49] HQ Le and ND Dat, “Comparative Advantages of Vietnam's Seafood Exported to the Japanese Market,”*Journal of Trade Science*, 2022, doi: 10.54404/jts.2022.10.04.05.

[50] A. Qineti, M. Rajčániová, and E. Matějková, “The Competitiveness and Comparative Advantage of the Slovak and the EU Agri-Food Trade With Russia and Ukraine,”*Agricultural Economics (Zemědělská Ekonomika)*, 2009, doi: 10.17221/42/2009-agricecon.

[51] S.-L. Liew, MA Arip, and C.-H. Puah, “Determinants of Export Competitiveness of Agricultural Products in Malaysia,”*International Journal of Business and Society*, 2021, doi: 10.33736/ijbs.3747.2021.

[52] E. Czarny and M. Żmuda, “EU Membership and Exports Competitiveness – Benchmarking Exports Structures of Poland and Slovakia Versus Bulgaria and Romania, and Their Convergence to the German Pattern in the Years 2000–2014,”*International Business and Global Economy*, 2018, doi: 10.4467/23539496ib.18.035.9408.

[53] A. Ahmed, N. Nazeer, G. Zahid, and F. Nawaz, “Does Revealed Comparative Advantage Matter in the Gravity of FTAs?,”*Journal of International Logistics and Trade*, 2023, doi: 10.1108/jilt-06-2022-0018.

[54] Z. Saki, M. Moore, IT Kandilov, L. Rothenberg, and AB Godfrey, “Revealed Comparative Advantage for US Textiles and Apparel,”*Competitiveness Review an International Business Journal Incorporating Journal of Global Competitiveness*, 2019, doi: 10.1108/cr-03-2018-0025.

[55] P. Banerjee and Rajmal, “Revealed Comparative Advantage in Services Exports: How Is India Different From China?,”*The Indian Economic Journal*, 2022, doi: 10.1177/00194662221104762.

[56] E. Ćorović, Ž. Gligorijević, and A. Manasijević, “Revealed Comparative Advantages and Competitiveness of the Manufacturing Industry of the Republic of Serbia,”*Economic Themes*, 2019, doi: 10.2478/ethemes-2019-0018.

[57] F. Majidli, “International Comparative and Competitive Advantage of Post-Soviet Countries in Tourism,”*Research in World Economy*, 2020, doi: 10.5430/rwe.v11n5p369.

[58] MH Siddique, M. Ali, and MS Irshad, "Revealed Comparative Advantage and Pakistan's Global Leather Products Potential Among Selected Leather Exporters: New Evidence From Kaplan-Meier Survival Function,"*Annals of Social Sciences and Perspectives*, 2022, doi: 10.52700/assap.v3i1.155.

[59] M. Ali and Q. Wang, "Revealed Comparative Advantage of Textile and Clothing Industry of Bangladesh in the North American Market,"*Journal of Business Management and Economic Research*, 2019, doi: 10.29226/tr1001.2019.100.

[60] RT Al-Wasity, AF Ahmed, and SA Al-Badawi, "An Economic Analysis of the Competitiveness of Dates and Their Role in International Agricultural Marketing in Iraq for the Period 2005-2019,"*Iraqi Journal of Agricultural Sciences*, 2023, doi: 10.36103/ijas.v54i1.1691.

[61] K. Shahzad, S. Aslam, and A. Javaid, "Determining Competitiveness of Pakistan Sports Goods Industry Using Revealed Comparative Analysis,"*International Journal of Management Research and Emerging Sciences*, 2023, doi: 10.56536/ijmres.v13i2.445.

[62] A. Ahmed, N. Nazeer, G. Zahid, and F. Nawaz, "Does Revealed Comparative Advantage Matter in the Gravity of FTAs?,"*Journal of International Logistics and Trade*, 2023, doi: 10.1108/jilt-06-2022-0018.

[63] NQ Nguyen, "Analyzing Vietnam's Textile Garment Global Supply Chain With the Revealed Comparative Advantage,"*Journal of Enterprise and Development*, 2023, doi: 10.20414/jed.v5i3.7070.

[64] ZZ Idris, NW Ismail, and S. Ibrahim, "Comparative Advantage and Competitiveness of COVID-19-Related Medical Products Exporters,"*Journal of Competitiveness*, 2022, doi: 10.7441/joc.2022.01.04.

[65] M.J. Mansourzadeh, B. Shahmoradi, H. Dehdarirad, and E. Janavi, "A Note on Using Revealed Comparative Advantages in Scientometrics Studies,"*Scientometrics*, 2019, doi: 10.1007/s11192-019-03207-8.

[66] B. Matkovski, S. Zekić, D. Đokić, Ž. Jurjević, and I. Đurić, "Export Competitiveness of Agri-Food Sector During the EU Integration Process: Evidence From the Western Balkans,"*Foods*, 2021, doi: 10.3390/foods11010010.

[67] R. Groznykh, N. Davidson, O. Mariev, D. Chipchagova, and E. Vasilyeva, "Measuring the Potential of Economic Development of the Sverdlovsk Region Based on Comparative Advantages,"*Proceedings of Cbu in Economics and Business*, 2020, doi: 10.12955/peb.v1.20.

[68] AR Fidhayanti, "Analysis of the Competitiveness of Indonesian Rubber Exports in International Markets,"*West Science Interdisciplinary Studies*, 2024, doi: 10.58812/wsis.v2i01.608.

[69] MS Maqbool, HU Rehman, and F. Bashir, “Comparative Advantage in International Trade: A Study Based on Meat Exports in Pakistan,”*Review of Applied Management and Social Sciences*, 2022, doi: 10.47067/ramss.v5i1.207.

[70] H. Huang, “Rethinking Revealed Comparative Advantage With Micro and Macro Data,”*SSRN Electronic Journal*, 2023, doi: 10.2139/ssrn.4646675.

[71] M. Ali and Q. Wang, “Revealed Comparative Advantage of Textile and Clothing Industry of Bangladesh in the North American Market,”*Journal of Business Management and Economic Research*, 2019, doi: 10.29226/tr1001.2019.100.

[72] RN Rashid, S. Maqbool, A. Shafiq, and M. Afzal, “Revealed Comparative Advantages in the Services Trade of Pakistan: What Do They Tell Us?,”*Pakistan Journal of Humanities and Social Sciences*, 2022, doi: 10.52131/pjhss.2022.1002.0234.

[73] E. Ćorović, Ž. Gligorijević, and A. Manasijević, “Revealed Comparative Advantages and Competitiveness of the Manufacturing Industry of the Republic of Serbia,”*Economic Themes*, 2019, doi: 10.2478/ethemes-2019-0018.

[74] I. Hardi, TC Dawood, and PB Syathi, "Determinants Comparative Advantage of Non-Oil Export 34 Provinces in Indonesia,"*International Journal of Business Economics and Social Development*, 2021, doi: 10.46336/ijbesd.v2i3.137.

[75] R. Groznykh, N. Davidson, O. Mariev, D. Chipchagova, and E. Vasilyeva, “Measuring the Potential of Economic Development of the Sverdlovsk Region Based on Comparative Advantages,”*Proceedings of Cbu in Economics and Business*, 2020, doi: 10.12955/peb.v1.20.

[76] Widyantini, R. (2021). Analysis of the Competitiveness of Indonesian Export Products as an Entrepreneurial Strategy for Entering the Australian Market. Commerce Scholar, 5(2), 119-132. https://doi.org/10.52391/jcn.v5i2.581, "Analysis of the Competitiveness of Indonesian Export Products as an Entrepreneurial Strategy for Entering the Australian Market".

[77] MN Pabsdorf, C. Martínez-Alcalá, and EM Pajares, “Can International Trade Help Africa's Least Developed Countries Achieve SDG-1?,”*Sustainability*, 2020, doi: 10.3390/su12114470.

[78] AE Tyasti, "Electronics Industry Competitiveness Analysis and Export Potential Mapping Using Biplot Analysis,"*International Journal of Social Science and Human Research*, 2024, doi: 10.47191/ijsshr/v7-i01-101.

[79] B. Susanto and N. Sukadwilinda, "Analysis of Export Competitiveness of Textile and Apparel Indonesia, China, India,"*Dynasty International Journal of Economics Finance & Accounting*, 2020, doi: 10.38035/dijefa.v1i1.207.

[80] E. Saputro, "The Dynamics of Indonesia – Japan Economic and Financial Relations: A Review of the 60 Years Collaboration,"*Global & Strategic Journal*, 2021, doi: 10.20473/jgs.15.2.2021.409-428.

[81] EE Sumiyati, "Export Determinant Analysis: Indonesia S Export to Singapore and Japan Case Study,"*Pressacademia*, 2020, doi: 10.17261/pressacademia.2019.1042.

[82] MM Rahman, C. KIm, and P. De, "Indo-Pacific Cooperation: What Do Trade Simulations Indicate?,"*Journal of Economic Structures*, 2020, doi: 10.1186/s40008-020-00222-4.

[83] SP Nasution, "Analysis of Indonesia Coffee Exports Competitiveness in the United States and Japan to Promote Sustainable Market,"*Iop Conference Series Earth and Environmental Science*, 2024, doi: 10.1088/1755-1315/1302/1/012137.

[84] S. Herbigovina, "Competitiveness and Influence of Indonesia's Coal Exports on International Trade: Case Study of 5 Destination Countries," 2023, doi: 10.2991/978-94-6463-204-0_30.

[85] MI Prastika, J. Sutrisno, and E. Antriyandarti, "Export Performance of Indonesian Frozen Shrimp to Japan,"*European Journal of Agriculture and Food Sciences*, 2023, doi: 10.24018/ejfood.2023.5.1.632.