Indonesian Coconut Competitiveness in International Markets

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Abstract:Indonesia is one of the country's largest Coconut producer and exporter in the world market. The management efforts of Indonesia coconut not optimal, coconut export is still largely in the form of primary products, a type of derivative products coconut produced Indonesia is still limited. But in general, this research aims to analyze the Export Competitiveness of coconut Indonesia in international markets, specifically aims to analyze the position and competitiveness of Indonesia coconut commodities in the international market. Methods of data analysis using Trade Specialization Index (TSI), the analysis Revealed Comparative Advantage (RCA), and the Constant Market Share analysis (CMS). The results showed that during the period of 2005-2016, the development of supply and demand are relatively unstable and likely to rise. TSI values during the period of 2005-2016 have the value positive that shows that Indonesia is a country exporting coconut and belongs into the categories of very mature in the international market, indicated by the average value of the TSI of 1.00. The value of the RCA during the period of 2005-2016 have a value above 1 indicating that Indonesia Coconut has a comparative advantage for the commodity. While the analysis results in CMS during the period of 2005-2016 based on the four effects shows that the competitiveness of coconut Indonesia influenced by standard growth effects and efficient distribution where the coconut export growth in Indonesia is affected by the growth of coconut import world.

Index Terms: *Competitiveness, Coconut, International.*

I. INTRODUCTION

The effect of taxes on innovation is one of the crucial enquiries

Coconut is the plant can be used as follows: (1) fiber: coir fiber, mats, brooms, mats, from which spring bed; (2) shell: charcoal, activated carbon and crafts; (3) flesh: copra, coconut oil, coconut cream, coconut milk, grated coconut dried (desiccated coconut); (4) coconut water: vinegar. Nata de Coco; (5) palm trunk: building materials for frame or roof; (6) coconut leaf: sticks for brooms, wickerwork (party decorations or Virgin); (7) the sap of coconut: brown sugar (Anonim, 2007)

As a tropical archipelago with 17 thousand islands, Indonesia has a large number of coconut palms, the whole expanse of the country. Oil plants produce a lot of fruit, stems, and other tree parts. As one of the main producers and exporters of oil and other products derived from palm trees, Indonesia is a producer and exporter of reliable.

Indonesia producing and exporting various products of coconut trees, especially coconut, copra and other products made from coconut tree parts such as furniture, brush, coconut shell accessories, etc. The main export products are coconut oil, raw or processed. In 2005-2016, Indonesia is the largest exporter of copra/coconut crude oil which is followed by after the Philippines and Malaysia.
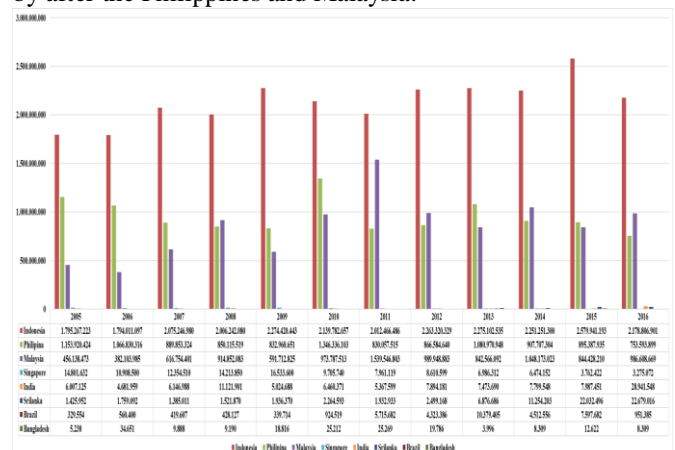

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Indonesia	1,795,367,223	1,794,011,097	2,075,246,980	2,006,242,080	2,274,428,443	2,159,782,687	2,012,466,406	2,263,238,329	2,275,102,535	2,251,251,300	2,579,941,193	2,178,886,901
Philipina	1,153,920,424	1,866,830,116	889,853,324	850,135,519	832,968,651	1,346,236,103	830,057,515	866,584,640	1,080,978,940	907,737,304	895,387,935	753,593,809
Malaysia	456,138,473	382,303,985	616,754,401	914,852,083	591,712,825	973,787,513	1,539,546,843	909,540,883	842,566,092	1,668,173,023	844,428,210	986,688,669
Singapore	14,801,632	18,908,500	12,354,510	14,213,059	16,533,608	9,795,740	7,961,119	8,619,599	6,986,312	6,474,152	3,762,422	3,275,072
India	6,807,125	4,681,959	6,146,988	11,121,901	5,824,688	6,468,271	5,367,599	7,894,191	7,473,699	7,799,548	7,987,451	28,941,548
Srilanka	1,425,982	1,789,892	1,385,011	1,521,879	1,936,270	2,264,593	1,852,933	2,499,168	6,876,686	11,254,203	22,032,496	22,679,016
Brazil	329,554	560,400	419,607	428,127	339,714	924,519	5,715,602	4,323,386	10,379,405	4,512,556	7,597,682	951,385
Bangladesh	5,238	34,651	9,888	9,390	18,816	25,212	25,249	19,786	3,996	8,399	12,622	8,399

Fig. 1 The development of the country's Coconut Exports to Brazil, India, Malaysia, Indonesia, Philippines, Singapore, Srilanka, Bangladesh, Tahun 2005-2016 (US$ 000)
Souce: United Nations Commodity Trade, 2018

Figure 1 shows that in 2015 Indonesia's exports that year reached a value of US $ 1,579,941,193, and the Philippine exports worth the US $ 895 387 935. The value of world exports in that year reached the US $ 2,579,941.193 million. Other major exporters are: Malaysia (US $ 844,428.210 million), Singapore (US $ 3762.422 million), India (US $ 7987.451 million); Srilanka (US $ 22032.496 million); Brazil (US $ 7597.682 million), Bangladesh (US $ 12.622 million). Furthermore, the average growth per year from the period 2005-2016 there was an increase year are Indonesia, Malaysia, India, Sri Lanka, Brazil, and Bangladesh respectively 1.63%, 6.64%, 14:00%, 25.93, 9.24% and 3.92%. whereas in the same period, a decline in the Philippines and Singapore at 2: 49% and 11.81%.

Indonesian palm plantation management is not optimal, oil exports are still largely in the form of primary products, the type of derivative coconut products produced by Indonesia is still limited. The condition is a challenge for the development of the oil industry in Indonesia in realizing coconut competitive commodities. Therefore, it will be carried out research into how the competitiveness of Indonesian oil commodity.

Factors causing the Indonesian oil commodity competitiveness is 1) The area of the world's largest coconut plantations with a total area of

3.808 million followed the Philippines 3,400,000, and 1,890,000 India. 2) Production of oil produced by Indonesia, in 2006-2014 according to (Food and Agriculture Organization, 2015) ranks number one in the world with a number of coconut production in 2010 was 17.125 million MT, followed by the Philippines and India amounted to 15.54 million MT of 10.8241 million MT. 3) Indonesia is a country that has a large population with cheap labor. From the data, BPS data showed that the total population of Indonesia in 2015 amounted to 237 641 326 inhabitants, of which 6.9 million households livelihood of coconut.

Indonesian oil commodity competitiveness, but when compared with the Philippines and Sri Lanka turned out to competitiveness coconut Indonesia is still below the Philippines and Sri Lanka. Comparison between the volume of oil exports between Indonesia, the Philippines, and Sri Lanka is known that Indonesian oil commodity export prices per kilogram of lower oil prices, the Philippines and Sri Lanka. The average price for the commodity Indonesian oil per kilogram in 2006-2010 was $ 0:51, the Philippines and Sri Lanka $ 1:26 $ 0.82. Oil higher commodity prices the Philippines and Sri Lanka from Indonesia, this has resulted in the Philippines and Sri Lanka's competitiveness is higher than Indonesia. Indonesian roommates oil commodity prices are lower due to, among others, According to (Anonymous, 2007; Nusyirwan&Bakce, 2017) Indonesian oil commodity exports are still weak and the weakness the caused by the fluctuating price levels and declining. This is Because Indonesia in trading of agro-products in the world market only acts as a receiver price (price takers).

Asian And Pacific Coconut Community (APCC) in Agro Innovation Agency for Agricultural Research and Development (2005) acquisition of Indonesian coconut product exports are still lower than the acquisition of a major competitor country (the Philippines). In fact, when compared to the level of export prices among coconut products in both countries, the prices of some oil products from Indonesia cheaper. This is because the factors of product quality, high transportation costs, and complexity of export procedures allegedly helped influence the acquisition of the benefits of trade (export) Indonesian palm products are not maximized.

Based on the above description of the background,the general aim of this study is to analyze the competitiveness of Indonesian palm oil exports in the international market while the specific objectives are: to analyze the position and competitiveness of Indonesian oil in the international market.

II. LITERATURE REVIEW

A. Theory of International Trade

International Economic Studies is part of economics that studies and analyzes of transactions and international economic issues, including international trade and finance (Monetary) and organizations (private and public) andeconomic cooperation between States (International). In this case, the problems of the economy will be discussed in the international scope, such as the allocation issues are analyzed in the relationship between economic agents of a State to another State. International economic science will study how the economic relations of a country with another

country may affect the allocation of resources between the two countries as well as between several countries. Thus, international economic relations might include trade, investments, loans, aid, and international cooperation (Rifai & Tarumun, 2005)

International trade is defined as trade between or cross-country, which includes the exchange of products between countries in exports and imports of both commodities (goods) and services, thus, international economic scope broader than the international trade (Rifai & Tarumun, 2005).
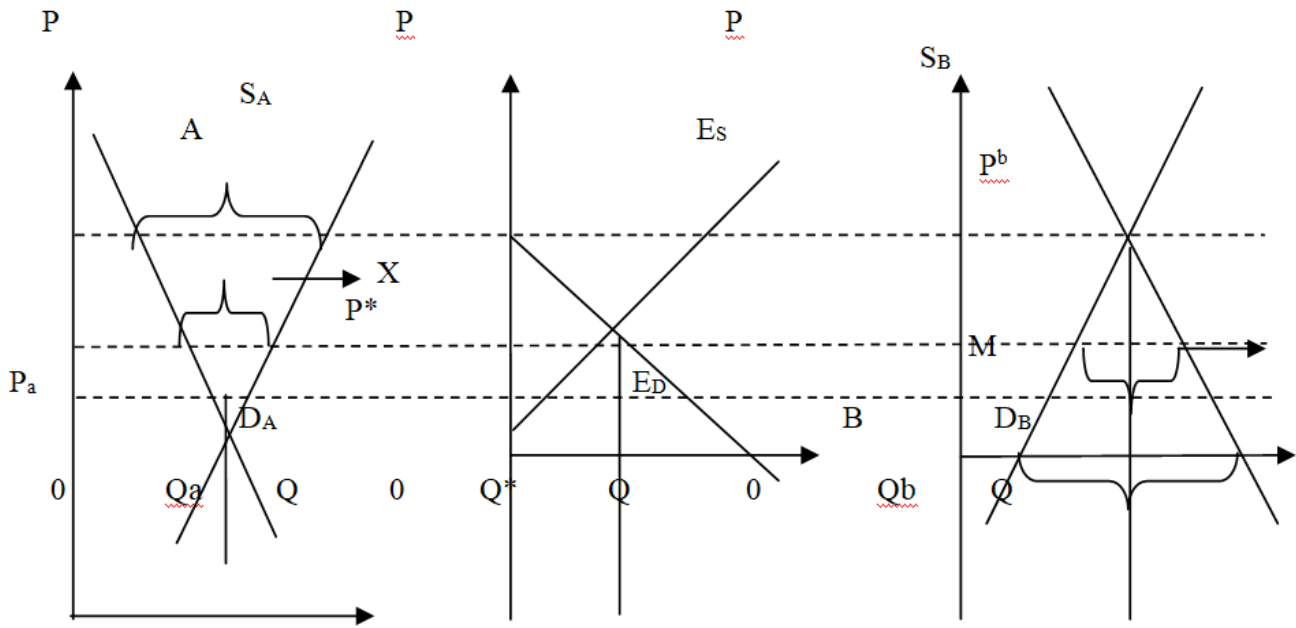
According to Salvatore (1997), there are many positive advantages provided by international trade for economic growth.

These advantages are:

1. Trade can increase the empowerment of domestic resources in a developing country. With the existence of international trade resources that were not initially absorbed in the domestic market can be empowered, thereby increasing efficiency.
2. Through increasing market size, international trade can also create a higher division of labor and economies of scale.
3. International trade also serves as a vehicle for the transmission of new ideas, better technology, and managerial skills and other areas of expertise needed for business activities.
4. Trade between countries also stimulates and facilitates the flow of international capital flows from developed countries to developing countries.
5. International trade is an effective instrument to prevent monopolies because trade basically stimulates an increase in the efficiency of each domestic producer in order to be able to face competition from other countries.

Country A and excess demand in Country B. In Country A the price of a commodity as big as Pa and in country B the price of the commodity is equal to Pb, cateris paribus. In the international market,, the price owned by Country A will be smaller, which is at the price of P * so that Country A will experience excess supply on the international market. In Country B, prices are greater than prices on international markets. So that there will be excess demand in the international market. On balance in the International market, that is on the ES curve. While the excess demand for Country B is a demand on the international market, which is equal to ED. The excess supply and demand will have a price balance of P *. This event will result in Country A exporting and Country B importing certain commodities at prices as large as P * in international markets. From the explanation above, it is found that international trade (export-import) occurs because there is a difference between domestic prices (Pa and Pb), and international prices (P *), demand (ED), and supply (ES) in certain commodities. In addition, the exchange rate on an international market between a country and another country will indirectly cause exports and imports in a country (Detri & Syamri, 2016; Salvatore, 1997).

Country A (Eksportir)   World Market
Country B
   Source: Salvatore, 1997
Figure 2. Relative Commodity Prices After Equilibrium of Trade.

2.2.2 Comparative Theory of Excellence

International trade is needed by a country, because there is no country that can fulfill its own needs. This trade is in accordance with the law introduced by David Ricardo, namely Law Comparative Advantage. This law states that a country still gains an advantage if it exports commodities that have smaller absolute losses even though the country is less efficient in producing a commodity (absolute loss). So that from these commodities the State has a comparative advantage (Salvatore, 1997).

David Ricardo explains the law of comparative advantage on a number of simplified assumptions, namely (1) there are only two countries and two commodities, (2) trade is free, (3) there is perfect labor mobility within the State but no mobility between the two countries. (4) the cost of production is constant, (5) there is no transportation cost, (6) there is no technological change and (7) using the labor value theory. According to the labor value theory, the value or price of a commodity depends on the amount of labor used to make the commodity. This statement implies that labor is the only production factor that is homogeneous in nature is incorrect and cannot be used in a comparative advantage (Salvatore, 1997).

David Ricardo revealed that trade between the two countries will occur if each country has the smallest relative cost for different types of goods. So David Ricardo's theory is more focused on Cost Comparative Advantage, where the comparison of relative costs in producing goods is the basis of trade between countries, so that in this case absolute costs become irrelevant as the only cause of trade between countries (Rifaidan Tarumun,2005).

Comparative Advantage theory proposed by David Ricardo is based on labor value (theory of labor value) which states that the value or price of a product is determined by the amount of time or hours of work needed to produce one unit of goods (MC = Px). understanding that a country will

benefit from international trade (gain from trade) if it specializes in production. This indicates, if a country can export goods, it means that the country can produce relatively more efficiently than other countries. Whereas if you import goods, then the country produces relatively less efficient than other countries (Rifai & Tarumun, 2005).

2.2.3 Theory of Competitive Advantage

Competitive advantage is a private indicator, which is based on a market price of the commodity or the current value of money in a country. A tip used to increase resource productivity used is a way to maintain and achieve competitive advantage, it is estimated that in a commodity producing country there is a market distortion or loss by producers due to an obstacle (Pearson, R. Scott., Gotsch & Bahri, 2005)

According to Kuncoro (2008), a company can be said to have a competitive advantage when the company is able to do something that other companies cannot do or have something that is not owned by competitors. (Detri & Syamri, 2016; Rifai & Tarumun, 2005) state that at least there are two main principles that must be owned by a company that must be owned by a company to achieve competitive advantage, namely the value of the customers/consumers and the uniqueness of a product.

Competitive advantage is determined by 4 (four) determinants, or known as Berlian Porters, namely: (a) comparative advantage (factor condition), (b) market demand (demand conditions), (c) strong domestic industry structure, in the meaning of the existence of support and related industries that allow linkages between production and industry and specialization based on international labor distribution, and (d) fully free market structure (Rifai & Tarumun, 2005).

2.2.4 Competitiveness Theory

According to Ahmad & Suardi, (2005), The competitiveness of a commodity's exports is the ability of a commodity to enter foreign markets which they have the ability to maintain that market. The competitiveness of a commodity can be measured by the comparison of market share (market share) of the

commodity in a fixed market condition. Competitiveness is the ability of a commodity to provide continuous benefits and the ability to improve market share. Therefore the measurement of competitiveness can be done by approaching profit and market share.

Whereas to find out the competitive advantage or export competitiveness in the world market from a relative to its competitors, it can be used Constant Market Share (CMS) analysis, model. The CMS analysis model will measure the dynamics of export competitiveness that illustrate the effects of export growth, so can be known whether the export of a commodity has increased or contraction in the world market based on the previous period's market share.

At present sharing the main determinants of the competitiveness of Indonesian exports by relying on factors of comparative advantage, especially price competitiveness, such as cheap labor costs and abundant natural resources so that the cost of procurement is cheap. However, in the era of free trade competitive advantage is also needed in determining competitiveness (Tambunan, 2004). Analysis to measure the level of competitiveness can be done using several approaches or methods:

Indeks Revealed Comparative Advantage (RCA)

The RCA index will describe the appearance of exports of a commodity from a country to the country's total exports of total world exports. This index shows a comparison between the share of commodity exports or a group of commodities in a country against the share of commodity exports from around the world. In other words, the RCA index shows the Comparative advantage (competitiveness) of exports from a country in a commodity to the world (Tambunan, 2004).

Trade Specialization Index (TSI)

Besides RCA, the Trade Specialization Index (TSI) is also often used as a measure of competitiveness. This index looks at whether for a type of product, a country tends to be an exporter and importer country (Tambunan, 2004).

RasioAkselerasi (RA) or Acceleration Ratio (AR

If the TSI measures the tendency of a country to be an exporter or importer, then the use of the acceleration ratio index or the increase in speed ratio (AR) is to show whether a country can win markets abroad (in the sense of defeating rival countries), or its position is getting weaker in the export or domestic market. So, this index looks more at a long-term dynamic process (Tambunan, 2004).

Constant Market Share (CMS)

Constant Market Share (CMS) is often used to measure the dynamics of the level of competitiveness or excellence of an industry or country in international trade. The CMS will measure the dynamics of export competitiveness that illustrate the effects of export growth so that it can be seen whether exports of a commodity have expansions or contractions in the world market based on the market share (share) of the previous period (Rifai & Tarumun, 2005).

CMS describes export growth with four composition effects:
1. The Growth Effect that describes the benefits gained by a country from export activities carried out due to the growth of commodity trade in the world market
2. The effect of commodity composition that describes the condition of the commodities exported by a country of interest or not in demand by the market.

3. The effect of market distribution (distribution market effect) which shows the ability to focus and accelerate the growth of the export market of a commodity from a country, and
4. The effect of competitiveness that describes the competitiveness of a country's commodities in the export market.

5. Policy Analysis Matrix (PAM)

Policy matrix analysis tool (Policy Analysis Matrix) is used to analyze competitiveness and the impact of government policies on farming in a place. The preparation of the PAM matrix is carried out after all data at the farm level and trading actors are obtained. The preparation of the PAM matrix is done by using input-output structures at the level of farming and trading actors. With this calculation can be obtained both financial and economic benefits. The results of the analysis using PAM will provide information about the profitability of competitiveness, the economic efficiency of a commodity and the impact of the government on the commodity system (Sadikin I, 2002).

2.3. Research Accomplished

Research related to the analysis of the competitiveness of agricultural commodity by using analytical tools Constant Market Share (CMS) and the Revealed Comparative Advantage (RCA) have been carried out. Some of these studies have been carried out by Adi, Putra, I, Ketut & Aswitari, Luh, 2015; Anggit, 2012; Da, 2014; Fitriana, 2014; Hagi, 2014; Hasibuan A.M, 2011; Kania, 2012; Kusuma, Rahma & Firdaus, 2015; Marlinda, 2008; Meryana, 2007; Nusyirwan & Bakce, 2017; Ogi, Suparsa & Martini, Dewi, 2016; Prasetyo & Marwanti, 2017; Ratna Sari & Tety, 2017; Satryana, Made & Karmini, 2016; Setiawan & Hartono, Slamet Suryantini, 2014; Syahputra, Tarumun, & Yusri, 2014; Utami & Yulianto, 2018; Zuhdi & Suharno, 2015; Zuliastri, Rindayati, & Asmara, 2015.

Methodology

This study uses secondary data, namely in the form of time series data for 10 years, 2005 - 2015. Secondary data collected for this study are statistical data: production data, land area data, coconut export and import data of Indonesia and Malaysia, Philippines, Malaysia, and Sri Lanka. This data was obtained from relevant agencies, including Central Statistics Agency (BPS), International Trade Center traced through the internet network, United Nation Trade, Directorate General of Plantation of the Republic of Indonesia, Commodity Futures Trading Regulatory Agency, and Food and Agriculture Organization (FAO) , Center for Data and Information Industry Ministry of Industry of the Republic of Indonesia.

Data analysis

Trade Specialization Index (TSI)

TSI is a measure used to analyze the position or stages of development of a product so that it can be seen the tendency

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of a country as an exporter or importer. The TSI will identify the growth rate of a product in trading into the following 5 stages (KementerianPertanian Indonesia, 2014):

1. Introduction stage, if the TSI value is between -1 and -0.50. When an Industry in a country (call A) exports new products and later arrivals in Country B imports of said product.

2. Import substitution stage, if the TSI value is between -0.50 to 0.00. At this stage, the industry in country B shows very low competitiveness because the production level is not high enough to reach its economies of scale. The industry exports products with poor quality and domestic production are still smaller than domestic demand. In other words, the commodity, in country B, imports more than it exports.

3. Growth stage, if the TSI value is between 0.01 and 0.80. Industry in country B produces large-scale production and begins to increase exports. In the Domestic Market, the offer for these commodities is greater than demand.

4. Maturity stage, if the TSI value is between 0.81 to 1.00. At this stage, the product in question is already at the stage of standardization concerning the technology it contains. At this stage country, B is the net explorer state.

5. The return stage is imported if the TSI value returns according to from 1.00 to 0.00. At this stage industry in country B loses its domestic competitiveness to the industry from country A, and domestic production is less than domestic demand.

Mathematically, the TSI is formulated as follow:

$$TSI = (X\_it-M\_it)/(X\_it+M\_it) \quad \dots\dots\dots\dots(1)$$

Where:

Xit = Total oil Indonesia commodity exports in year t (US$)

Mit = Total imports of commodities Oil Indonesia in year t (US$)

Analysis of Comparative Advantage

Comparative advantage can be measured by using analytical tools Revealed Comparative Advantage (RCA), which compares the export market share of a particular sector of a country with a market share of certain sectors other countries that showed industrial competitiveness of a country. This study used two countries as a comparison of comparative advantage of Coconut Indonesia in the international market. Both countries are among others include the Philippines and Malaysia. Formula RCA can be formulated as follows (Tambunan, 2004).

$$RCA\_1=(xo\_i/x\_ti)/(xwo\_i/xw\_t) \quad \dots\dots\dots\dots(2)$$

Dimana:

XOi : the export value of Indonesian Coconut (US$)

XWOi : total value of the world's coconut extract (US$)

Xti : total value of Indonesian exports (US$)

XWt: total value of world exports (US$)

If the value of the RCA is smaller than 1 or close to 0

then the State has no comparative advantages or competitiveness in the commodity. If the value is greater, then the RCA Country has comparative advantages or competitiveness in the commodity of coconut.

Analysis of Constant Market Share (CMSA)

To determine the effect of the most significant in affecting the competitiveness of a commodity then the Constant Market Share analysis is unambiguous or the constant market share analysis is used to measure the dynamics of the level of competitiveness of an industry of a country and he took the most effect.

To analyze the level of Indonesia's competitiveness per year and its growth distribution based on 4 effects, the CMSA method can be mathematically formulated as follows (Tambunan, 2004).

$$(E\_t)-E\_t\ -\_1))/(E\_t\ -\_1)) = r \dots\dots\dots\dots(3)\ \text{Standard Growth}$$

$$+ (\Sigma\_i\ (r\_i-r)\ 〖\ E\_i\ 〗\ \_((t-1)))/E\_((t-1)) \dots\dots\dots\dots(4)\ \text{Effect of commodity composition}$$

$$+ (\Sigma\_i\ (r\_i-r)\ 〖\ E\_i\ 〗\ \_((t-1)))/(E\_t\ -\_1)) \dots\dots\dots\dots(5)\ \text{Effects of Market Distribution}$$

$$+ (\Sigma\_i\Sigma\_j\ (E\_ij(t)\ -E\_ij\ (\_t\ -\_1\ )-r\_ijE\_ij\ (\_t\ -\_1))/(E\_t\ -\_1)) \dots\dots\dots(6)\ \text{Competitiveness}$$

$$*\ ri\ (E\_(t)i\ -E\_(t-\_1\ )i)/(E\_t\ -\_(1)\ i)\ )$$

$$**\ rij = (E\_ij\ (\_t)-E\_ij\ (\_(t-1)))/(E\_ij\ (\_(t-1)))$$

Where:

W(t) = the value of world exports for all commodities of the year t (US$)

W(t-1) = the value of total World exports for all commodities in year t-1 (US$)

r = standard growth (all commodities) (US$)

ri = the growth of coconut commodity standards (US$)

rij= growth of coconut commodity standards in the country j (US$)

Ei (t) = Indonesian coconut commodity exports year t (US$)

Ei (t-1)= Export of Indonesian Coconut commodity year t-1 (US$)

Eij (t) = Export of Coconut commodities from Indonesia to destination countries in year t (US$)

Eij (t-1) = Export of Coconut commodities from Indonesia to destination countries in year t-1 (US$)

Formulations for competitiveness with Constant Market Share (CMS) describes factors that affect the higher a country's exports equal to or lower than the growth of world exports. Negative deviation between the growth of a country's exports to growth could be due to the standard four things, demand growth is slowing, the commodity composition issues that are of interest or are not in demand by the market, distribution problems the world market from exporters and foreign power problems in price and quality. These four components can be analyzed:

Standard growth effect describes the growth of a

country's exports due to the increase in world imports. If the standard growth effect is positive, then an increase in exports in the exporting countries caused by the growth of world imports. Conversely, if negative, then the export setback occurs in the exporting countries due to a drop in imports in the importing country or world.

Composition effects associated with the interest of the international market for goods in question. If the value of the commodity composition effect Coconut based CMS analysis is positive, it indicates that the commodity Oil demand in international markets tend compared to other types of commodities and the export value is likely to increase compared to the total exports of a country. Conversely, if the effect is negative then the commodity composition of coconut tends to less demand by the world market and the value of its exports tend to be smaller than the total exports for the whole commodity.

Securities market distribution showed growth in oil exports was influenced by a country's ability to market the coconut commodity markets that have a high demand. If the value of the distribution effect is positive, then the country has been marketing the coconut commodity in countries that have a high demand. Meanwhile, if the value of the distribution effect is negative, then a country is considered not to market the coconut commodity to countries that have increased demand.

Request. Effects of competitiveness illustrates the competitiveness of exports of coconut a country that is not caused by the effect of a standard growth, the effect of the composition and distribution of the market, but because there is competitiveness due to the excellence of product quality or a better price, whereas if the competitiveness effect is negative indicating power Coconut weak competitiveness of a country from the aspects of quality and price.

The Ministry of Commerce did a modification of taking action against the formula so that this analysis of the CMSA is relatively new. Analysis of the website of the Ministry of trade of the CMSA Indonesia can be done online. It proved an advantage that is issued by the Ministry of Trade to see the capabilities of the competitiveness of a commodity from a country to a country of destination. The application analysis of the CMSA was only able to see the capabilities of the competitiveness of Indonesia's home country at some destination countries, namely ASEAN, United States, European Union, China, Australia, India, Japan, Taiwan, and the Korea Republic. According to (Rifai&Tarumun, 2005). CMSA is an analytical model to see Coconut export competitiveness in the world market, CMSA calculation decomposes at three criteria in accordance with the criteria used are:

1). Competitiveness effect, that is an indicator that shows the competitiveness of a country's products are formulated as follows:

$$\Sigma \_{jk} \Delta \ [X\_{ijk}/X\_{jk} \ ]\_IA*[(X\_{jk}^0)/X^0 \ ]\_IB \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots(7)$$

Where:

Xijk : the value of Indonesian coconut exports to the destination country (US$)

Xjk : Export value of Coconut destination country (US$)

X0 : the value of the export of the destination country of the previous year Coconut (US$)

X0jk: the value of the total export destination countries of the previous year (US$)

Calculated based on changes in export market share in the import destination market (IA) multiplied by the share of the initial import of partner countries in world trade (IB).

2). Initial Specialization, that is an indicator that indicates that certain products have the characteristics of a particular market to be developed, formulated as the following equation:

$$\Sigma \_{jk} \Delta \ [X\_{jk}/(X\dots)]\_IIA* \ [(X\_{ijk}^0)/(X\_{jk}^0)]\_IIB\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots(8)$$

Where:

Xjk : Export value of Coconut destination country (US$)

X... : the total export value of the destination country Coconut (US$)

X0ijk : the export value of Indonesian coconut to the destination country of the previous year (US$)

X0jk: the value of the total export of coconut in the destination country the previous year (US$)

Calculated as changes in imports of partner countries in world trade (IAA) multiplied by the initial share of Indonesia in the destination market (IIB).

3). Adaption, CMSA is an analytical model to see Coconut export competitiveness in the world market, CMSA calculation decomposes at three criteria in accordance with the criteria used are:

$$\Sigma \_{jk} \Delta \ [X\_{ijk}/X\_{jk} \ ]\_IIIA*\Delta \ [X\_{jk}/(X\dots)]\_IIIB\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots(9)$$

Where:

Xijk : the value of Indonesian coconut exports to the destination country (US$)

Xjk : the Export value of Coconut destination country (US$)

X0.... : the value of the total export destination countries of the previous year (US$)

Obtained through the calculation of variable cross-section of Indonesian export market share changes (IIIA) and changes in the market share of other countries for certain products in the world market (IIIB)

Results and policy implications

4.1. Trade Specialization Index (TSI)

Trade specialization index is an analysis tool that is used to analyze the position or phase of development of a product. TSI is able to describe whether for a type of product Indonesia tends to be exporters or importers. In accordance with international trade, the theory is the theory of surplus net, TSIs consider the demand side and the supply side where exports of goods occur when there is a surplus on the goods in the domestic market.

.	Based on calculations Trade Specialization Index

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(TSI) in Figure 4.1 shows that Indonesia during the period 2005 to 2016 had a positive TSI value. The average value of coconuts Indonesian TSI nearing 1 is equal to 0.99. This shows that Indonesia has a strong competitive edge or inclined as an oil exporting country in the world market. During the period 2005-2016, the value of the highest TSI Indonesia occurred in 2008-2015 with the TSI value of 1.00. The increase in value is attributable to the Indonesian TSI to import oil from other exporting countries in small quantities accompanied by the amount of export increased in these years.

But in 2005, 2007 and 2016 the value of the TSI Negara Indonesia had decreased slightly to reach 0.9 in 2016. This is because the State Indonesia tend to import coconut higher than the previous period by the number of exports which is also declining. Higher imports by Indonesia due to increasing domestic demand, especially Indonesia against oil palm oil imported from Malaysia by a considerable amount. Developments Trade Specialization Index (TSI) Coconut Commodity Indonesia, Bangladesh, Brazil, Malaysia, Philippines, Singapore, Sri Lanka, and India, the Year 2005-2016 can be seen in the picture below 4.1.

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Source: United Nations Commodity Trade, 2018 (be treated)

Figure 4.1. Developments Trade Specialization Index (TSI) Coconut Commodity Indonesia, Bangladesh, Brazil, Malaysia, Philippines, Singapore, Srilankadan India, Tahun 2005-2016.

Value TSI Bangladesh during the period 2005-2016 has a negative value throughout the year except for 2015 and 2016 have a positive TSI value, it indicates that Bangladesh has a weak competitive ability as an oil exporting country (domestic offer is less than the domestic demand) though still exports from other countries in insignificant amount. Bangladesh TSI highest value in 2015 with a value of 1. Increasing the value TSI TSI is attributable to Bangladesh tend to export in large quantities over the previous year with the number of imports slightly compared to the previous year.

While the value of the lowest TSI during the period 2005-2016 occurred in 2005-2014 with the TSI value of -1.00. This happens due to the increasing number of oil imports by country of Bangladesh with a significant number compared with the previous year and the number of exports which decreased in those years compared to the previous year.

Based on Figure 1 shows that the coconuts in Brazil based on the TSI during the period 2005 to 2016 are relatively unstable or weak with an average value of TSI reach a value of -0.96. This shows that the Brazilian State is likely to have a position as an oil importer. This means that the State of Brazil tends to import than the export of coconut oil, although Brazil had experienced a decline in production resulting in decreased export volumes were significant due to pest attack in Brazilian coconut. This is caused by rising prices in the world market due to limited export by oil-producing countries in the world and the increasing demand for oil in the world.

Furthermore, Singapore, Sri Lanka, and India are based on the value of the TSI during the period 2005-2016 also showed relatively weak with the average value of the TSI respectively -0.58, -0.24, and -0.88. This suggests that the State Singapore, Sri Lanka, and India are likely to have a position as world oil importer.

While Negara Malaysia and the Philippines based on the TSI during the period 2005-2016 Also Showed Relatively stable and has a value of positive TSI TSI to the average value of each of 0:18 and 0.92. This shows that Malaysia and the Philippines have strong competitiveness or inclined as an oil exporting country in the world market. This is in line with the state of Indonesia as an oil exporting country in the world market.

Analysis of the TSI in addition to being able to see the position of coconut Indonesia, Singapore, Sri Lanka, India, Malaysia, and the Philippines, TSI analysis can also be used to analyze the development of the commodity on the international market. Based on Figure 21, during the period from 2005 to 2016, the value of the TSI for oil commodity trade that has reached the stage of maturity is the state of Indonesia and the Philippines, with an annual average value of the TSI respectively 0.99 and 0.92. This means showing that at that stage the commodity from Indonesia and the Philippines are already at the stage of standardization regarding the technology it contains and suggests that Indonesia and the Philippines manufacturer had net exports of oil greater than the total trade and at this stage both the country is a net exporter, Furthermore, in the same period in the growth stage of the country is the country of Malaysia with an average value of 0.18 TSI. Meanwhile, in the period of 2005-2016 of Bangladesh, Brazil, Singapore, and India each TSI missing value of -0.75, -0.96, 0.58 and -0.88, which means still at the stage of import substitution. This shows that the state of Bangladesh, Brazil, Singapore, and India's competitiveness is very low because production levels are not high enough to achieve economies of scale. The industry exporting products with less good quality and domestic production is still smaller than in domestic demand. In other words, the commodity, on the country imports more than exports. In the same period, the Sri Lankan state is still in the stage of introduction of the magnitude of the average value of -0.24 TSI. This means that these countries export the new products and the industry in recent entrants (later come) in world oil importer.

4.2. Competitiveness
4.2.1. Revealed Comparative Advantage (RCA)

Revealed Comparative Advantage is a method of analysis that demonstrates the ability of competitiveness or comparative advantage of a state against a commodity that is viewed by the ability to export. If the RCA index of a country towards a commodity has a value of more than +1 this shows that the state commodity competitiveness above the world average. Conversely, when the value of the RCA index is less than one, then this indicates that the country's competitiveness against the commodity is below the world average.

Countries that have a

comparative advantage and strong competitiveness shown by the high value of RCA index. In this study, the state used as a benchmark to determine the comparative advantages of coconut Indonesia are Bangladesh, Brazil, Malaysia, Philippines, Singapore, Sri Lanka, and India is the world's largest oil exporting country. RCA index value calculation results of the state of Indonesia, Bangladesh, Brazil, Malaysia, Philippines, Singapore, Sri Lanka, and India can be seen in Figure 4.2 below.

Source: United Nations Commodity Trade, 2018 (be treated)

Figure 4.2. RCA Coconut Index in Indonesia, Bangladesh, Brazil, Malaysia, Philippines, Singapore, Sri Lanka and India, 2005-2016

Based on Figure 4.2, the calculation results in the country's third RCA i.e. Indonesia, the Philippines, and Malaysia have a positive value or more than the value of + 1. This means these three countries have a comparative advantage over 2005-2016. Based on Image 22 can be seen Indonesia and Brazil has a much different RCA with Viet Nam. During the period of 2005-2016, based on the results of the analysis of the country's third RCA producers the highest competitiveness rankings was occupied by the Philippines with an average of 8.33 RCA, it was occupied by Indonesia ranked second with an average value of RCA amounted to 7.08, and the third stage in the move by Malaysia with an average value of RCA amounted to 1.86. While Bangladesh, Brazil, Sri Lanka, Singapore, and India have RCA value less than 1. This indicates that the country has no comparative advantage during the years 2005-2016. The low value of the RCA Bangladesh, Brazil, Sri Lanka, Singapore and India due to the high number of the total export of all commodities as a whole compared to the total number of export for all commodities Bangladesh, Brazil, Sri Lanka, Singapore, and India.

RCA Philippines is relatively stable compared to Indonesia and Malaysia, which fluctuated but tended to decrease in the 2005-2011 period. That is because the growth of oil exports coupled with the growth of total export value for all commodities in the Philippines is increasing. Later in the period 2012-2016 the Philippines tend to increase. However, based on Figure 22, in 2011 had decreased RCA index value becomes 3.42 which is the lowest value over the last 12 years. This is caused by the total value of exports of all commodities of the Philippines have increased drastically while the value of Philippine coconut exports decreased. The decline in oil exports was caused by a reduction in Philippines oil exports due to the high level of domestic consumption in the year compared to the previous year.

Indonesian State RCA value lower than that of the Philippines and tends to fluctuate during the period 2005-2016 in which during the period 2005-2016, the average value of 7.08 RCA Indonesia, the Philippines RCA average of 8.33 and an average RCA Malaysia with 1.86. In 2016, Indonesia has the RCA index value of 11.43 which is the highest value over the last 12 years. That is because the increase in the value of oil exports was higher than the total value of exports to all Indonesian commodities. In 2012, the value of Indonesia RCA index by 1.96 which is the lowest

value of RCA index over the last 12 years. It is caused by the Indonesian oil exports decreased from US $ 2,139,782,657 in 2010 to $ 2,012,466,486 in 2011.

From this RCA index, we can see that the coconut Indonesia has a comparative advantage that is relatively stable compared to the Malaysian state where when viewed from its natural resources, Indonesia coconut land area is relatively spacious with favorable climatic conditions. But in terms of employment, average coconut farm cultivated by people with low labor quality due to lack of attention from the government, causing farmers still use traditional techniques in coconut cultivation. But in recent years the government began to provide counseling and assistance to the Indonesian palm farmers with improved seed distribution and plant revitalization program that is old considering the price of oil in the world is increasing.

In terms of technology, according to (Hagi, 2014) stated that farmers are not sufficient capital to implement technology well known because there is no financial institution that is easily accessible. (Tambunan, 2004) states that on average around 98.4% of Indonesian farmers still use their own capital to the rest of their family or neighbors borrow and cooperative. Coconut farming is a capital-intensive business where most capital issued is for the purchase of fertilizers and pesticides. If the price goes down, it will result in the next farming performance. For farmers who are able, will sell to the selling price of good coconut. In contrast to the farmers who are less able, the work is generally done is to reduce the use of fertilizer, seed or soil and reduce borrowing from oil traders. There are several reasons farmers do not want to borrow to official institutions, such as fear cannot return, high interest and requirements are difficult. This indicates that Indonesia palm in terms of capital and technology has a comparative advantage is still low.

Although there are still many weaknesses in terms of both workforce is less skilled, capital is still not enough, and the lack of the use of technology, the government began to take an active role through policies issued to coconut in Indonesia and is still their strengths and opportunities for development and improved competitiveness. Enough land available coconut cultivation technology of efficient, an opportunity to diversify their products if oil prices fall, as well as the public interest for the cultivation of palm oil is still high so the commodity is still very potential to be developed.

4.2.2. Analysis of Constant Market Share (CMSA)

Constant Market Share (CMSA) analysis is used to determine the most significant effect in influencing the competitiveness of a commodity. By using Constant Market Share (CMSA) Analysis which is seen from export performance, the ability of a country's competitiveness will be seen from the four effects that influence it, namely the effect of standard growth, the effect of commodity composition, market distribution effects and residual effects

Based on the results of the Constant Market Share analysis shows that Indonesia's ability in the competitiveness of coconuts is more influenced by the standard growth effect. This is indicated by the average value of standard

growth for 12 years, namely, the period 2005-2016 shows a positive value with an average value of 0.0729 except in 2009, 2012, 2013, 2014, 2015 and 2016. This means export growth Indonesian coconut is influenced by the growth of world coconut imports. This shows that the increasing demand for coconut in the world for Indonesian coconuts where Indonesian coconut is an important main ingredient for importing countries for industrial raw materials in the manufacture of herbal medicines, pharmaceuticals, and cosmetics as well as flavoring and flavoring for restaurants in the country importer. Then in 2009, 2012, 2013, 2014, 2015 and 2016 had experienced changes in the value of Indonesia's standard growth effects caused by the decline in the value of coconut exports from the previous year due to the volume of exports which also experienced a decline in the year.

Indonesian oil commodity composition effect on average showed a negative value during the period 2005-2016 which indicates that coconut Indonesia less attractive in the international market. This relates to the quality of the resulting oil Indonesia is still low so that the importing country reduce the amount of oil imported from Indonesia. According to (Nusyirwan&Bakce, 2017) low quality of Indonesian coconut caused coconut farmers Indonesia is still using farming techniques and post-harvest handling traditional, where the process of oil production using river water does not always flow or even water was murky so the oil produced by Indonesian farmers vulnerable contaminated by microorganisms, foreign material, moisture content, and the content of coconut oil is not eligible importing country. Moreover, a negative value is caused by the growth of world oil exports was slower than the growth of world export value. Commodity composition effect that has a positive value occurred in 2005, 2007, 2009, 2012, 2013, 2014 and 2015 despite having no significant effect value. This shows that the Indonesian oil demand by the world market in the year due to the improving quality of Indonesian palm in these years.

Indonesian oil market distribution effect during the 2005-2016 period on average has a value that is positive but not significant. This suggests that the development of the Indonesian oil export market in export destination countries quite well during the year. However, in 2007, 2011, 2014, and 2016 the value of the Indonesian market distribution effect is negative. The negative value due to the growth in imports of oil importing countries such as the Philippines slowed Indonesia, Malaysia, Sri Lanka, and India. Cause of Indonesian oil import growth slowed by the importing country can still be seen from the performance of Indonesia still lags behind competitor countries, namely the Philippines in doing business (Doing Business). According to the dataThe World Bank, (2014) Indonesia is a country that has ranked the 114 in doing business. Indonesia when doing business in terms of property registration (Registering Property), Indonesia ranks 117, and below the rank of the Philippines that influence the Indonesian oil import growth slowing. The licensing process is still cumbersome and relatively slow compared to competitor countries by employers or coconut farmers in Indonesia with a relatively high cost led to farmers or entrepreneurs Indonesian coconut It's too late in exports to the importing country, so that

importing countries prefer to import from other countries like the Philippines with amount of oil than Indonesia, so this affects the competitiveness of Indonesian palm terms of market distribution.

Based on the analysis Constant Market Share, the residual effect of the average Indonesian indicates negative values. It shows during the 2005-2016 period average Indonesian palm has coconut weak competitiveness, when viewed from the aspect of residuals. Weak competitiveness of Indonesian palm of the hand is affected by the residual effects of oil export price Indonesia less competitive. The condition is caused by oil production facilities are relatively expensive. According to Nusyirwan&Bakce (2017) the high cost of coconut production facilities is caused by coconut farmers in production centers such as Riau, Kalimantan, Papua and Maluku still experiencing obstacles in the required production facilities (urea, SP-36, KCL, dolomite, pesticides) which are generally only available in the capital city districts that are far from plantation locations and poor infrastructure so often they are not available when needed, such as in the rainy season. In addition, the increase in the price of fuel (fuel oil) also has an effect on the rising price of Indonesian coconut production costs such as the high price of fertilizers due to increased transportation costs. This is supported by opinions (Kuncoro, 2008) stated that at the farmer level the impact of the increase in fuel prices was direct, such as increased operational costs because the fuel was direct as one of the production inputs or indirectly through increased transportation costs such as fertilizers and pesticides, and there were adjustments to changing costs or prices such as planting wages and harvest wages adjusted for changes in tractor costs and prices of goods.

As a comparison from the results of CMS analysis in Table 1, in 2005-2016 the Philippines also made use of the effect of standard growth in export growth as indicated by positive standard effect values which showed that there was an increase in coconut exports due to the high demand for world coconut imports. Although the average value of the standard growth effect is positive there has been a change in value to be negative in 2008, 2009, 2011. 2015 and 2016. This is due to the decline in coconut imports by the importing country so that there is a decline in exports by exporting countries. In addition, Vietnam also utilizes market distribution effects even though the average does not have a significant effect, but the average value of the distribution effect of the Vietnamese market is positive and greater than that of Indonesia. This can also be related to the Doing Business process in the Philippines. According to data (The World Bank, 2014) shows that the Philippines is ranked 78th in terms of property registration (Registering Property). This shows that coconut entrepreneurs in the Philippines in the licensing process to export are more efficient than Indonesia so that the Philippines is able to export more quickly to the country of coconut importers on the world market.

As with Indonesia, the effects of the composition of the Philippines during the 2005-2016 period have negative values. This shows that the coconut commodity of the Philippines is less attractive in the international market due to

the low quality. When compared with Indonesia, during the period of 2005-2016 the value of the composition of the Philippines had more negative values than Indonesia. This shows that Indonesian coconuts are more in demand in the world market due to coconut Indonesia has its own advantages, namely taste and aroma that are not owned by other countries and Indonesian coconut brands have long been known by importing countries especially Hybrid coconut produced in Riau Province precisely in Indragiri Hilir Regency. While the residual effects of the Philippines during the 2005-2016 period as a whole showed a positive value. This shows that the competitiveness of Philippine coconut is influenced by the residual effect due to the price and quality weakness.

Tabel 1. Analysis Constant Market Share (CMS) Indonesia, India, Srilanka, Singapore, Philippina, Malaysia, Brazil dan Bangladesh Tahun 2005-2016.

YEAR INDONESIA   INDIA SRILANKA SINGAPORE

PS EK DP ER PS EK DP ER PS EK DP ER PS EK DP ER
20050.1967 0.0025 0.0130 -0.0132   0.3221 0.0000 0.0013 -0.0013   0.1268 -0.0002 -0.0002   0.0002 0.1562 0.0000 0.0000 0.0000
20060.1767 -0.0037   0.0209 -0.0196   0.2077 0.0000 -0.0001   0.0001 0.0974 0.0000 0.0941 -0.0942   0.1836 0.0000 0.0000 0.0000
20070.1320 0.0004 -0.0004   -0.0006   0.2038 0.0000 0.0001 -0.0001   0.1333 -0.0001   -0.0002   0.0002 0.1011 0.0000 0.0001 -0.0001
20080.2009 -0.0043   0.0089 -0.0080   0.2465 0.0000 0.0000 0.0000 0.0673 0.0000 -0.0001   0.0001 0.1299 0.0000 0.0001 -0.0001
2009-0.1497   0.0041 0.0051 -0.0039   -0.0280   0.0000 -0.0002   0.0002 -0.1291   0.0001 -0.0001   0.0000 -0.2021   0.0000 0.0005 -0.0005
20100.3542 -0.0081   0.0017 0.0000 0.2469 0.0000 0.0000 0.0000 0.1661 0.0000 -0.0001   0.0000 0.3040 0.0000 0.0010 -0.0010
20110.2898 -0.0047   -0.0037   0.0027 0.3678 0.0000 0.0007 -0.0007   0.2056 -0.0001   0.0000 0.0000 0.1638 0.0000 0.0000 0.0000
2012-0.0662   0.0019 0.7467 -0.7472   -0.0395   0.0000 0.0000 0.0000 -0.0641   0.0001 0.0000 0.0000 -0.0027 0.0000 0.0000 0.0000
2013-0.0394   0.0005 0.1134 -0.1130   0.1625 0.0000 0.0000 0.0000 0.0678 -0.0003   0.0000 0.0000 0.0045 0.0000 0.0000 0.0000
2014-0.0357   0.0003 -0.0013   -0.0002   -0.0566 0.0000 0.0000 0.0000 0.1290 0.0000 0.0000 0.0000 -0.0012   0.0000 0.0000 0.0000
2015-0.1458   0.0037 0.0008 -0.0006   -0.1674   0.0000 0.0000 0.0000 -0.0758   0.0010 0.0000 0.0000 -0.1541 0.0000 0.0000 0.0000
2016-0.0391   -0.0020   -0.0059   0.0043 -0.0153 0.0001 0.0004 -0.0003   0.0102 0.0000 0.0000 0.0000 -0.0484   0.0000 0.0002 -0.0002

Continue ….

YEAR PHILIPINA MALAYSIA   BRAZIL BANGLADESH

PS EK DP ER PS EK DP ER PS EK DP ER PS EK DP ER
20050.0397 0.0039 -0.0072   0.0054 0.1183 -0.0003   -0.0007   0.0001 0.2260 0.0000 0.0000 0.0000 0.1287 0.0000 0.0000 0.0000
20060.1492 -0.0063   0.6625 -0.6622   0.1345 -0.0010   0.0045 -0.0043   0.1626 0.0000 0.0000 0.0000 0.2535 0.0000 0.0000 0.0000
20070.0645 -0.0052   0.0201 -0.0205   0.0952 0.0012 -0.0002   -0.0002   0.1658 0.0000 0.0000 0.0000 0.1236 0.0000 0.0000 0.0000
2008-0.0275   -0.0003   0.5466 -0.5461   0.1292 0.0012 0.0033 -0.0034   0.2321 0.0000 0.0000 0.0000 0.1799 0.0000 0.0000 0.0000
2009-0.2168   0.0034 -0.0020   0.0012 -0.2089 -0.0007   0.0029 -0.0020   -0.2271   0.0000 0.0000 0.0000 0.0033 0.0000 0.0000 0.0000
20100.3398 0.0060 0.0124 -0.0117   0.2646 0.0014 -0.0030   0.0012 0.3198 0.0000 0.0000 0.0000 0.2360 0.0000 0.0000 0.0000
2011-0.0671   -0.0083   -0.0027   0.0023 0.1419 0.0022 0.1998 -0.2004   0.2681 0.0000 0.0000 0.0000 0.2643 0.0000 0.0000 0.0000
20120.0823 -0.0007   0.0140 -0.0134   0.0020 -0.0024   0.0029 -0.0028   -0.0526   0.0000 0.0000 0.0000 0.0082 0.0000 0.0000 0.0000
20130.0904 0.0026 0.0020 -0.0013   0.0038 -0.0007   0.0392 -0.0389   -0.0022   0.0000 0.0000 0.0000 0.0010 0.0000 0.0000 0.0000
20140.0902 -0.0048   -0.0014   0.0010 0.0255 0.0008 0.0005 -0.0004   -0.0700   0.0000 0.0000 0.0000 -1.0000   0.0000 0.0000 0.0000
2015-0.0512   0.0006 -0.0012   0.0004 -0.1449 -0.0002   0.0109 -0.0109   -0.1509   0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000
2016-0.0398   -0.0018   0.0015 -0.0013   -0.0539 0.0009 -0.0022   0.0018 -0.0308   0.0000 0.0000 0.0000 -1.0000   0.0000 0.0000 0.0000

Source: United Nations Commodity Trade, 2018 (be treated)

Information :

PS   : Standard Growth Effect
EK : Effect of Commodity Composition
DP : Effects of Market Distribution
ER   : Residual Effect

The next comparative country is Malaysia, of the seven comparison countries, Malaysia has a higher export growth than the growth of world exports. Based on the CMS analysis, the most influencing of the competitiveness of coconuts from Malaysia is the effect of standard growth, which is indicated by the increased export growth of exporting countries due to the increase in import growth by importing countries. When viewed from the effects of composition from 2005-2016, the average value of the effect of the composition of Malaysian commodities is positive, which means that it affects Malaysia's competitiveness due to the high interest of coconut in the import destination country compared to other export commodities.

In effect, the distribution of the market, compared with Indonesia has the same ability to expand the market because of the years 2005-2016 the average value of the distribution of the Malaysian market showed positive values that affect competitiveness. This means that Malaysia is able to market the coconut commodity to countries that have a high demand, such as Singapore, Sri Lanka, India, and Brazil. In 2005, 2007, 2010 and 2016 the market value of securities distribution Malaysia had been a change to negative values. The negative value due to the growth in imports of oil importing countries such as Singapore Malaysia slowing, Sri Lanka, India, and Brazil. When compared with Indonesia, the average value of the distribution of Indonesian commodity markets greater influence than Malaysia. That is because of the value of the distribution of the Indonesian market value significantly more than the country of Malaysia. In contrast to the state of the Philippines which have more influence than Indonesia and Malaysia which in 2016 were shown to increase exports to the importing country is fixed and is able to open up new markets. While the residual effect, during the period 2005-2016 the competitiveness of Malaysian palm is not severely affected by residual effects. This is indicated by the average value of the residual effects of negative Malaysia which is expected due to the low quality of quality and price that is less competitive.

The next comparator countries are India and Singapore. Based on the analysis of CMS, which most affect the competitiveness of coconuts from India and Singapore is a standard growth effect, as indicated by the increase in export growth due to the increased growth of the exporting country of import by the importing country. When viewed from the effects of the composition of the year 2005-2016, the average value of the commodity composition effect India and Singapore is positive which means that affect the competitiveness of India and Singapore because of the high interest in the oil import countries compared to other export commodities.

In effect, the distribution of the market, from years 2005-2016 the average value of the distribution of Indian and Singapore market shows positive values that affect competitiveness. This means that India and Singapore are able to market the coconut commodity to countries that have a high demand, such as Singapore, Sri Lanka, India, and Brazil. Country India In 2006 and 2009 the value of the Indian market distribution effect was a change to negative values. While the country Singapore market value of securities distribution does not change. Changes in the Indian state of negative value due to the growth in imports of oil importing countries such as India which slowed Singapore, Srilanka, Malaysia, and Brazil. While the residual effect, during the period 2005-2016 the competitiveness coconut market value distribution effects is not severely affected by residual effects. This is indicated by the average value of residual value distribution effects of the negative market is expected due to the low quality of quality and price is less competitive.

Furthermore, the next comparator countries are Brazil and Bangladesh. Based on the analysis of the CMS, the which most Affect the competitiveness of Brazilian coconut is standard growth effects, as indicated resources by the

Increase in export growth due to the Increased growth of the exporting country of import by the importing country. While Bangladesh is not from analysis of CMS there are really influential on competitiveness coconut. When viewed from the effects of the composition of the year 2005-2016, the average value of the commodity composition effect is positive, Brazil and Bangladesh are yet to be zero indicating that Affect the competitiveness of Brazil and Bangladesh because of the high interest in the oil imports Compared to other countries export commodities.

Conclusion

Based on the analysis and the previous discussion can be summed up as follows:

1. Based on the analysis Trade Specialization Index (TSI), the TSI is positive and close to +1 is Indonesia and the Philippines with the average value of each of the 1.00 and 0.97. This shows that Indonesia and the Philippines have strong competitiveness or a tendency to have a position as an oil exporting country classified into the category of very mature in the world oil trade

2. **Results of the analysis showed Competitiveness:**
   a. Based on the analysis of Revealed Comparative Advantage (RCA), during the period 2005-2016 country has a comparative advantage / strong competitiveness for coconuts is the Philippines and Indonesia. Meanwhile, Malaysia, Sri Lanka, India, Brazil, and Singapore is not competitive
   b. Based on the analysis Constant Market Share (CMS) shows that the competitiveness of Indonesia much influenced by the growth effect of standards and the effect of market distribution. This is shown by the average value of a standard growth for 12 years, namely the period 2005 to 2016 shows a positive value where it means the growth of exports of Indonesian palm oil import growth is influenced by the world. Coconut competitiveness Philippines, Malaysia, Sri Lanka, India, Brazil, and Singapore were also heavily influenced by the effect of a standard growth

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