DIGITALIZATION OF INFORMATION TRANSPARATION OF INDONESIAN OIL PRODUCTS EXPORT BY THREE MAIN DESTINATION COUNTRIES (JAPAN, SOUTH KOREA AND CHINA) THE PERIOD 2002-2020

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ABSTRACT

Digitization is the use of digital technology to change an export model in decision making through research results related to the development and value of the contribution of Indonesia's petroleum exports according to the three main destination countries (Japan, South Korea and China) for the period 2002-2020 where for Japan the average destination country is Japan. the average fluctuating trend fell by 13% with an average export value of 575 (billion US$) for South Korea an average development of 0.4% with an export value of 229.6 (billion US$) and for destination countries China an average the average development has increased by 25.7% with an export value of 203.5 (billion US$). Meanwhile, the contribution of each destination country (Japan, South Korea and China) to the total value of Indonesia's oil exports for the period 2002-2020 where the average contribution of Japan was 22.9% for South Korea, 11.6% for destination countries. China's 8.6% of research results can be used as a form of transparency through digital information so that it can encourage the government to make appropriate decisions for the stability of the nation's economy

KEYWORDS: *Petroleum export*

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Introduction

Indonesia is one of the countries that has abundant natural resources from various countries in the world, one of which is in the industrial sector, namely oil commodities which are managed domestically to be used in various useful things such as fuel, power generation. According to research (Hodijah, 2016) in the development of oil producers in Indonesia itself is very large which has an existence abroad, in the development of petroleum in Indonesia has long been tied to the search for natural resources is very closely related, from this development one of the the commodity sector which has great potential for the development of the state as well as as state revenue is exports in the industrial mining sector which need to be utilized in such a way.

The developing relationship in the destination of Indonesia's petroleum exports is divided into several countries that have become the destination countries with the most production levels over the last 10 years, including Japan, South Korea, and China. It can be calculated how large the value of the volume of petroleum produced during a certain period and calculate the exchange rate of production from eight export destinations for Indonesian petroleum and analyze the gross domestic product produced during a certain time interval. According to the data generated and from several sources of data obtained, we can find out the concrete results that occur in the development of Indonesian exports to other countries which already have a relationship with one another (Archibald, 2011).

The development of petroleum exports in Indonesia often changes with the costs generated in accordance with the relationship between the rupiah exchange rate against the dollar at different times so that in this case we can calculate how much the rupiah exchange rate is generated by the Indonesian state with oil export activities. Indonesia to seven countries that carry out oil export transactions with the Indonesian state and calculate the total income from oil exports for 10 years from the eight countries concerned, in other words calculate the gross domestic product for each of the last one year so that we can find out how much oil production earth produced by the Indonesian state for export activities in an annual period. International trade is important for the economy of every country in order to prosper its people. International trade has an important role because a country cannot meet all the needs within the country (Setiawan, 2016).

The ability of a country to produce goods and services per unit using fewer resources when compared to other countries is an absolute advantage. The absolute advantage of a country will not always export all the goods it produces (Boediono, 2000). Oil and natural gas today have become goods that are needed by humans. Because almost all facilities that can be enjoyed by humans now have to use oil and natural gas Such as cars, motorcycles and airplanes as means of transportation, both private and public, while electricity and stoves are household necessities. So it can be said that oil and gas are the main sources of world

energy.International trade plays an important role in meeting the needs of countries in the world. The occurrence of international trade, foreign exchange isneeded. International trade is defined as trade between or across countries, whichincludes exports and imports (Tambunan, 2001). International trade is importantfor the economy of every country in order to prosper its people. Meanwhile,according to research (Setiawan, 2016) states that international trade has animportant role because a country cannot meet all domestic needs, so based on thedescription above, the authors are interested in conducting research with the titledigitizing transparency of information on exports of Indonesian petroleumproducts according to the three main destination countries. (Japan, South Koreaand China) for the period 2002-2020 where the objective to be achieved is toanalyze the development and contribution of Indonesia's petroleum exports according to the three main destination countries (Japan, South Korea and China) during the period 2002-2020

THEORITICAL REVIEW

1. Digitization

   The digital age is not the digitization of media content to bits, but the dynamic life of "new media" content and interactive relationships with media consumers themselves as described by Lev Monovich. So lies in accessing it in real time (anytime easily). So new media is a term intended to cover the emergence of digital, computer, or networked information and communication technologies in the late 20th century. The definition of new media here can be limited as ideas, feelings, and experiences that a person gains through his involvement in new, different and more challenging mediums and ways of communicating (Wicaksono, 2017).

2. International Trade

   In many countries, international trade is one of the main factors to increasegross domestic product (GDP). For this reason, the history of the development of international trade has gone through time to time, including Preclassic, Classical and Modern. Economics as an organized science can be said to have been born since the publication of Adam Smith's book "The Wealth Of Nation" in 1776, although writings on international trade have appeared before in several countries such as England, Spain, France, Portugal and the Netherlands when these countries become modern nation states (Salvatore, 1997).

   This view then gave rise to an economic philosophy called Mercantilism. They argue that the only way for a country to become rich and powerful is to export as much as possible and import as little as possible (exports > imports). The export surplus generated will then be in the form of gold bullion flows, or precious metals, especially gold and silver. The mercantilists measure the wealth of a country by the stock or reserves of precious metals they have, thus encouraging many wars among European countries and starting the era of European imperialism to other parts of the world. In classical theory, internationaltrade was put forward by 2 economists, namely Adam Smith and David Ricardo. According to

Salvatore in his book entitled "International Economics" states that international trade is based on absolute advantage and on comparative advantage.

3. Export

According to (Mankiw, 2006), exports are goods and services produced domestically that are widely sold abroad. That way, exports include trade between islands or between regions within the country with as much as possible to be able to reach consumers as wide as possible. Meanwhile, according to (Sukirno, 2016), physically export is defined as the delivery and sale of domestically made goods to other countries. These shipments will cause a flow of expenditure into the corporate sector, thus aggregate expenditure will increase as a result of exporting goods and services and in the end this situation will lead to an increase in national income.

Many factors will determine and basically the interests of exports in one country are different from other countries. A country can export its production goods to other countries if the goods are needed by other countries and they cannot produce these goods or their production cannot meet domestic needs. According to (Mankiw, 2006), the factors that affect net exports (net exports) include, 1 Consumer tastes for goods produced at home and abroad; 2. Prices of goods abroad and within the country; 3The exchange rate (exchange rate) which determines the amount of domestic currency needed to buy foreign currency; 4. Consumer income at home and abroad; 5 The cost of bringing goods from one country to another; 6 Government policy on international trade. An even more important factor is the ability of the country to issue goods that can compete in foreign markets. What is meant is that the quality and price of the goods exported must be at least as good as those traded in foreign markets (Sukirno, 2016). Export-import is an activity that is quite important in every country. There is no country in this world that does not conduct foreign trade. In some countries, exports are very important, covering a fairly large part of national income, but in other countries, their role is relatively small.

Method

The research method is a scientific method and is used to obtain data with the aim of being able to describe, prove, develop and find knowledge, theories, to understand, solve, and anticipate problems in human life (Sugiyono, 2012). The analytical tool of this research is an analysis of the development of Indonesia's petroleum exports by main destination countries (Japan, South Korea, and China for the period 2002-2020, using the growth model) and to analyze the contribution of each of the three destination countries (Japan, South Korea and China) to the total value of Indonesia's oil exports for the period 2002-2020, using the formula $contribution$

Result

The results of the calculation of the development of Indonesia's petroleum exports by main destination countries (Japan, South Korea and China) for the period 2002-2020 are shown in the table below:

DIGITALIZATION OF INFORMATION TRANSPARATION OF INDONESIAN OIL PRODUCTS EXPORT BY THREE MAIN DESTINATION COUNTRIES (JAPAN, SOUTH KOREA AND CHINA) THE PERIOD 2002-2020

Table 1. Development of Indonesia's Petroleum Exports by Three Main Destination Countries (Japan, South Korea and China) for the Period 2002-2020

Tahun	Jepang	%	Korea Selatan	%	Tiongkok	%
2002	290,1	~	295,6	~	67,5	~
2003	487,8	68,1	218,4	(26,1)	148,6	120,1
2004	692,7	42,0	222,6	1,9	131,9	(11,2)
2005	1.074,8	55,2	128,9	(42,1)	143,2	8,6
2006	1.289,1	19,9	234,3	81,8	238,0	66,2
2007	1.415,4	9,8	208,5	(11,0)	157,4	(33,9)
2008	1.819,9	28,6	238,7	14,5	191,5	21,7
2009	540,4	(70,3)	306,1	28,2	255,5	33,4
2010	839,3	55,3	393,8	28,7	566,5	121,7
2011	1.147,0	36,7	368,7	(6,4)	362,5	(36,0)
2012	725,0	(36,8)	370,7	0,5	265,2	(26,8)
2013	291,0	(59,9)	175,9	(52,5)	636,7	140,1
2014	191,7	(34,1)	267,8	52,2	102,4	(83,9)
2015	103,1	(46,2)	187,0	(30,2)	65,4	(36,1)
2016	1,2	(98,8)	150,1	(19,7)	42,6	(34,9)
2017	3,9	225,0	130,5	(13,1)	141,2	231,5
2018	2,9	(25,6)	170,3	30,5	159,3	12,8
2019	6,1	110,3	177,4	4,2	77,8	(51,2)
2020	4,1	(32,8)	116,8	(34,2)	113,9	46,4
Rata	575,0	13,0	229,6	0,4	203,5	25,7

Source: BPS data processed 2022

Research findings on the development of Indonesia's petroleum exports according to the three main destination countries (Japan, South Korea and China) during the 2002-2020 period, where the average destination country for Japan experienced a fluctuating decline of 13% with an average export value of 575 (billion) US$) for the destination country, South Korea, the average development is 0.4% with an export value of 229.6 (billion US$) and for the destination country China, the average trend is increasing by 25.7% or with an export value of 203 ,5 (billion US$). The increase in exports is basically to increase state income through foreign exchange and will ultimately improve the welfare of the Indonesian people. Furthermore, to see fluctuations in the development of Indonesia's petroleum exports by main destination countries (Japan, South Korea, and China) during the 2002-2020 period, see the picture below:

DIGITALIZATION OF INFORMATION TRANSPARATION OF INDONESIAN OIL PRODUCTS EXPORT BY THREE MAIN DESTINATION COUNTRIES (JAPAN, SOUTH KOREA AND CHINA) THE PERIOD 2002-2020

Picture 1. Development of Indonesia's Petroleum Exports by Three Main Destination Countries (Japan, South Korea and China) for the Period 2002-2020
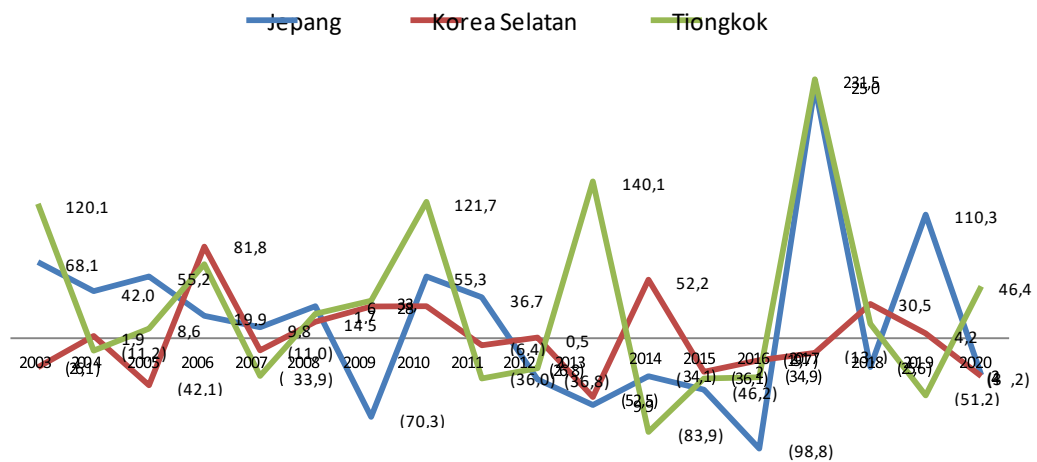
The results of the calculation of the contribution of each destination country (Japan, South Korea, and China) to the total value of Indonesia's oil exports for the period 2002-2020 are shown in the table below:

Table 2 Contribution of three Destination Countries (Japan, South Korea and China) to the Total Export Value of Indonesian Petroleum Products for the period 2002-2020

Tahun	Kon_Jepang	Kon_Korea Selatan	Kon_Tiongkok
2002	26,7	27,2	6,2
2003	37,8	16,9	11,5
2004	47,8	15,4	9,1
2005	59,8	7,2	8,0
2006	47,5	8,6	8,8
2007	50,4	7,4	5,6
2008	52,1	6,8	5,5
2009	24,6	13,9	11,6
2010	22,9	10,8	15,5
2011	25,8	8,3	8,2
2012	18,7	9,5	6,8
2013	7,1	4,3	15,6
2014	5,5	7,7	2,9
2015	6,1	11,1	3,9
2016	0,2	19,1	5,4
2017	0,3	9,3	10,1
2018	0,2	14,4	13,4
2019	0,4	12,9	5,6
2020	0,3	9,0	8,8
Rata	**22,9**	**11,6**	**8,6**

Source: BPS data processed 2022

The results of research findings on the contribution of three destination countries (Japan, South Korea and China) to the total value of Indonesia's oil exports for the period 2002-2020 where the average contribution of Japan is 22.9% for South Korea of 11.6% and 8.6% for destination countries, so from the findings of this study, Japan is the dominant country for Indonesia's oil exports, followed by South Korea and China. Basically, this contribution value describes the strength of relations between countries in a mutually beneficial economic situation, especially Indonesia and to see the fluctuations in the contribution of each destination country (Japan, South Korea and China)

Discussion

The conclusion of this study is that the development of Indonesia's oil exports according to the three main destination countries (Japan, South Korea and China) during the period 2002-2020 where for Japan the average fluctuated decreased by 13% with an average export value of 575 (billion US$) for the destination country, South Korea, the average development is 0.4% with an export value of 229.6 (billion US$) and for the destination country China, the average development is 25.7% or with an export value of 203.5 (US$). billion US$). Meanwhile, the contribution of the three destination countries (Japan, South Korea and China) to the total value of Indonesia's oil exports during the period 2002-2020 where the contribution of Japan's destination countries was on average 22.9% for South Korea of 11.6% and for China's destination countries by 8.6%.

Conclusion

The two findings of this study can become a medium of information through digitizing the transparency of Indonesia's export position and can be a continuity in determining economic policies as a whole and quickly according to the needs of the community. So that the results of this study provide the first suggestion for oil export actors, in this case, producers under Pertamina's control can increase oil production and increase production added value so that the value of petroleum exports becomes more competitive in the eyes of the international community and increases state revenues from export taxes. Both export policies, in this case the government, are able to enforce existing regulations so that parties involved in oil export activities are protected from oil and gas maps.

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