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Preface

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The Second International Conference on Environmental Geography and Geography Education (ICEGE) 2019

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We would like to express our gratitude to all participant who were joining "The Second International Conference on Environmental Geography and Geography Education" (ICEGE). It is the 2nd International conference held by the Department of Social Science Education held by FKIP-University of Jember on 28-29 September 2019. This conference becomes a dissemination forum for scientists who are working on theoretical and empirical research of environmental geography, transportation geography, geography education, social science and its application. The mission of this conference is to become an annual international forum in the future, where civil society organization and representative research students, academics and researchers, scholars, scientists, teachers and practitioners from all over the world could meet and exchange an idea to share and discuss about research. The aim of the second conference is to present and discuss the latest research that contributes to the new ontological, epistemological and axiological knowledge and to a better understanding in the area as follows: (1) Environmental Geography; (2) Geography Information System and Remote Sensing; (3) Geomorphology; (4) Natural Disaster; (5) Economics; (6) History; (7) Education; (8) Humanities; (9) Social Sciences and (10) Global Science and Studies.

The participants of this ICEGE 2019 were 310 participants consisting research students, academics and researchers, scholars, scientist, teachers and practitioners from many countries. The selected papers to be published on IOP Conference Series: Earth and Environmental Science are 151 papers.

On behalf of the organizing committee, finally we gratefully acknowledge the support from the FKIP-University of Jember of this conference. We would also like to extend our thanks to all lovely participants who have been joining this unforgettable and valuable event.

Assoc. Prof. Sumardi, M.Hum



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The committees of the Second International Conference on Environmental Geography and Geography Education would like to express gratitude to all Committees for the volunteering support and contribution in the editing and reviewing process.



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Peer review statement

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Peer review statement

All papers published in this volume of *IOP Conference Series: Earth and Environmental Science* have been peer reviewed through processes administered by the proceedings Editors. Reviews were conducted by expert referees to the professional and scientific standards expected of a proceedings journal published by IOP Publishing.



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Indonesia and OPEC: why does Indonesia maintain its distance?

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Indonesia and OPEC: why does Indonesia maintain its distance?

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Abstract. Indonesia withdrew its membership in the Organization of Petroleum Exporting Countries (OPEC) in 2008. However, in 2015 Indonesia reactivated its membership in OPEC followed by the second withdrawal in 2016. This paper aims to analyze the underlying factors of Indonesia's decision towards OPEC. This study used a process-tracing approach to address the research problem. Indeed, the analysis was based on the geopolitical approach to the political economy of natural resources. This study found that the underlying factor of Indonesia's decision to reactivate and to withdraw its membership in OPEC was for saving its energy security and also for maintaining the stability of its domestic economy.

1. Introduction

Oil plays a vital role as one of the leading energy sources in the world. All countries including oil-producing and oil-importing countries, need oil for supporting their industrial growth and also for fulfilling vital objects such as public transportation and lighting. However, a high level of oil consumption can also threaten the sustainability of the resources. In the long term, the excessive level of oil consumption may lead to the scarcity of energy sources. In addition, oil can also cause resource dependence and trigger a clash of political-economic interest between oil-producing and oil-importing countries. The oil-producing countries govern the oil market under an institution namely the Organization of Petroleum Exporting Countries (OPEC).

OPEC was established during the Baghdad conference in September 1960 by the five founding countries namely Iran, Iraq, Kuwait, Saudi Arabia, and Venezuela, and followed by Qatar, Indonesia, the United Arab Emirates, Nigeria, Algeria, Libya, Ecuador, Angola and Gabon which joined OPEC a few years later. Currently, 40% of the world's oil is produced by OPEC member countries [1]. While oil-importing countries are in the process of diversifying energy sources to reduce dependence on oil, the member countries of OPEC have the power to influence international political economic resources governance.

This study focuses on Indonesia's membership in OPEC especially Indonesia's attitude towards OPEC. It seems that Indonesia has been inconsistent as a member of OPEC. Indonesia has been in and out of its membership in OPEC. As an oil-exporting country, Indonesia joined OPEC in 1962. However, the significant change occurred in Indonesia as Indonesia has become an oil importer since 2003. As a result, in 2008,



Indonesia officially decided to terminate its membership status in OPEC. While in 2008, Indonesia withdrew its membership, in 2015, Indonesia formally resubmitted its request to be an active member of OPEC. However, in November 2016, Indonesia decided to dismiss its membership status in OPEC. However, this study aims to investigate the underlying factors of Indonesia's decision to maintain its distance towards OPEC.

There has been an abundance of studies on OPEC. Nevertheless, the studies on Indonesia's membership in OPEC were limited. Hence, this study brings significant contributions especially for enriching knowledge in the academic literature. Linquti (1982) wrote an article entitled '*Indonesia and OPEC: the economic cost of cartel membership*'. It investigated the reason why Indonesia had cut its oil production in 1982. Accordingly, Indonesia considered the cost of being a member of OPEC. Oil market price determined whether Indonesia continued or cut oil production [2]. In addition, Badaruddin (2015) noted that Indonesia's reactivation of its full membership in OPEC brings benefits for both Indonesia and OPEC. It supports Indonesia's development program, securing energy supply and also for attracting foreign investment [3].

While this research also discusses the topic of OPEC and Indonesia, it has a different point of view compared to those of previous studies. This study used a concept of resources political economics as a theoretical approach to address the research problem discussed in the previous section. From international relations, the study on resources politics can be understood from two different points of view i.e., geological approach and global governance [5]. The geopolitical approach views that the relations among countries on energy are based on a zero-sum game within which countries compete with each other to meet their interest in resources. On the other hand, global governance approach argues that countries tend to make cooperation in governing the resources. Yet, the global energy governance approach promotes cooperation and interdependence among countries [5].

This paper argues that the geopolitical approach is appropriate to address the research problem. It assumes that conflicts between countries over energy resources such as oil cannot be avoided even within the interdependence relations [6]. Resource security is an integral part of foreign policy within which energy resources are at risk of being threatened by other countries. Thus, many countries formulate their foreign policies based on geopolitical stability framework, especially for protecting their energy security. The foreign policy primarily related to international resources politics, nevertheless, might be occurred due to securitization [4].

The paper is organized into four sections as follows. Following this introductory section, this paper discusses the method utilized for addressing the research problems. It is followed by a section of result and discussion which is divided into two subsections, namely *the Reactivation of Indonesia's membership in OPEC in 2015* (subsection 3.1) and *Indonesia has re-terminated its membership status in OPEC in 2016* (subsection 3.2). Lastly, this paper provides a conclusion in section 4 that highlights the findings of the study.

2. Methods

This research is a case study of Indonesian resources politics. It used secondary data such as books, reports, journals, articles and other various data as a primary resource. The data were gathered through a literature study. The main idea in secondary data analysis is to apply knowledge, theory and concept using pre-existing data, which is then processed to answer the problem of the research [8]. In addition, this study used a process-tracing approach to trace Indonesian policies toward OPEC. In the context of the study, it traces

the process within which Indonesia maintains its membership in OPEC. The analysis or result of the study was presented in a chronological order based on a time series [9].

Process tracing analysis could be applied in this case by examining spiral actions and reactions between structure and agency as follows. *Firstly*, resource securitization is related to the economic, regime, and also geopolitical security. Governments seek to protect economic security especially for particular privileged actors in energy resources. In addition, as resources have provided a huge revenue, the government uses the issue of resources to protect its regime and also to grab legitimation from its people. In a broader sense, resources politics is also related to the security of a region within which a particular state uses resources as a tool for influencing other countries [4].

Second, securitization is related to ‘resources nationalism’ within which the government plays significant roles in governing the resources. As opposed to the liberal approach or market-led approach, in the framework of resource nationalism, the government intervenes the management of resources. In this respect, oil-producing countries tend to create nationalist economic policies such as the nationalization of foreign oil companies to become state-owned oil companies, tightening import policies and various fiscal policies [7]. Yet, all of these policies aim to earn income to protect their interests. *Lastly*, as a result of securitization and nationalist economic policy, states perceive their relations based on a zero-sum game approach. States raise the issue of sovereignty cost within intergovernmental cooperation over resources especially questioning the distribution of benefit or cost in the cooperation [4].

3. Results and Discussion

Oil is still one of the primary sources of Indonesian income derived from the revenue and also from tax and non-tax sectors. This study explains the political economy of Indonesian capabilities in exporting oil. More specifically, it investigates the relations between resource politics and the Indonesian economy. This analysis is useful for making justification regarding Indonesian policies towards OPEC.

3.1 The Reactivation of Indonesia's Membership in OPEC in 2015

Since the early 2000s, Indonesia has no longer been an important actor either in the OPEC or the world oil market. It was a turning point for Indonesia when the level of domestic oil consumption exceeded the level of Indonesian oil production in 2003. Indeed, in 2004 Indonesia was officially recognized as a net oil importer country by OPEC. As a result, Indonesia officially decided to terminate its membership status in OPEC in 2009.

Nevertheless, Indonesia has changed its policy towards APEC in 2015. Indonesia seeks to be reactivated in OPEC membership as shown in the proposal of the Minister of Energy and Mineral Resources (ESDM) [10], and also its participation in the OPEC conference in December 2015. While British Petroleum (BP) said that in 2015 oil consumption is too far exceeding the production, as shown in figure 1, Indonesia still eager to become a member of OPEC. Sudirman Said, as the Minister of ESDM, explained that even though the number of oil imports has been exceeding the oil export, Indonesia still has capabilities to produce and export oil. On the other hand, Indonesia also needs an income generated from oil export [11]. The result of the conference shows that OPEC has re-accepted Indonesia's membership starting from January 2016.

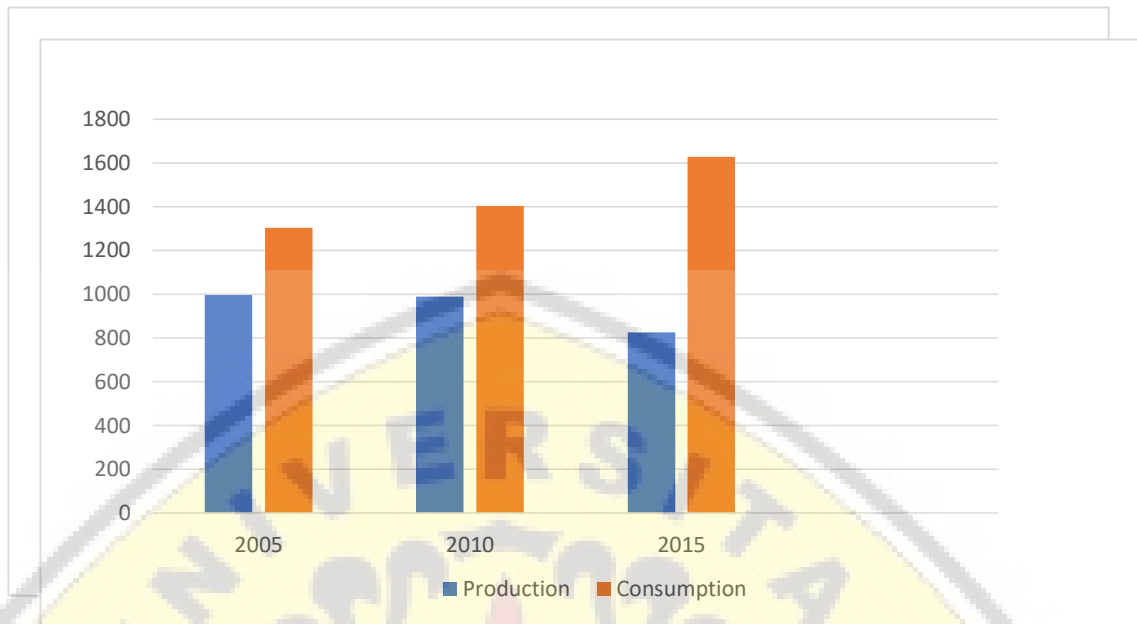


Figure 1. Indonesia's Oil Production and Consumption (Millions Barrel/Day) [12, 14]

It can be said that the reactivation of Indonesia in OPEC is part of the strategy in the economic development program [13]. Indonesia obtained an increase in Gross Domestic Product (GDP) to approximately 5 or 6%. Indeed, it was expected that the increase would continue in the next few years. Building on this condition, Indonesia needs a lot of energy to maintain its economic growth. On the other hand, as a net oil importer, Indonesia needs a guarantee that oil-producing countries especially the member of OPEC continue to export their oil to Indonesia.

In addition, the other underlying factor that encourages Indonesia to reactivate its membership in OPEC is the oil market especially the decline of the oil price. By joining OPEC, Indonesia seeks to make a better relationship with oil-producing countries, hence, Indonesia would get cheaper price of the oil. Furthermore, Indonesia's decision is based on long-term economic planning primarily related to investment. By reactivating its membership in OPEC, Indonesia planned to attract investment in the oil sector from OPEC member countries. Currently, the level of investment in the oil sector is fluctuating and declining, for instance, from approximately IDR 19.3 billion in 2013-2014 to IDR 14.8 billion in 2016 [14].

3.2 Indonesia had re-terminated its membership status in OPEC in 2016

It was not until a year after Indonesia was active in OPEC, Indonesia withdrew its membership status in OPEC in November 2016. This paper argues that Indonesia considers the cost and benefit in this cooperation as explained in the 'geopolitical' approach in resources politics. Indonesia disagrees with OPEC's recommendation to reduce the level of oil production approximately 5% (370,000 barrels/day) [15].

The purpose of OPEC in reducing oil production for about 1.2 million barrels is to control world oil prices. However, this fact is not in accordance with the condition of Indonesia. Indonesia through its Minister of Energy and Mineral Resources argued that Indonesia still needs the income generated from the oil exports. It is especially for

pursuing GDP growth of up to 7%. Hence, Indonesia offered to reduce its oil production by no more than 5000 barrels/day [16].

Building on the consideration of benefit (and cost) in its membership in OPEC, Indonesia seeks to get benefits in its role in either oil-producing and importing country. On one side, Indonesia seeks to be active in the dynamics of international energy politics as an oil-producing country. Indonesia gained its prestige especially in Asia from its status as an oil-producing country and also as an essential part of OPEC. According to Wilson, Indonesia applies resource nationalism as a strategy in preventing market control the availability of energy resources. Indeed, it is also useful for increasing state revenue [4].

On the other hand, since Indonesia has limited production in oil, the exports of oil are no longer making a significant contribution to the current Indonesian economy as shown in Figure 2. It is because more than 60% of oil production in Indonesia arises from late-life cycle resources [17]. Moreover, the number of oil fields are inactive and needs renovation due to its age. Therefore, Indonesia needs investment to renew the oil fields which need huge capital and technological investment [17]. Hence, the instant way to ensure the availability of oil is by importing oil from producing countries.

Year	State Revenue	Oil & Gas Revenue	% of contribution
		IDR Trillion	
2004	403	85	21.09 %
2005	494	104	21.05 %
2006	636	158	24.84 %
2007	706	125	17.71 %
2008	979	212	21.65 %
2009	847	126	14.88 %
2010	992	153	15.42 %
2011	1205	193	16.02 %
2012	1338	205.8	15.38 %
2013	1438	203.6	12.56 %
2014	1538	216.9	14.11 %
2015	1508	78.2	4.46 %
2016	1555	44.1	2.84 %

Figure 2. Oil and Gas Revenue Contribution (%) to Indonesia Economy (11).

Energy resources such as oil are still part of the economic pillar in Indonesia. Nevertheless, Indonesia both as a producer and importer of oil is also vulnerable to dependence on world oil prices. As an oil-importing country, Indonesia is vulnerable to the fluctuation of world oil prices which can trigger a crisis as happened in 2008. The fluctuation of oil price whether increasing or declining can bring negative impacts on the oil-producing countries and oil-consuming countries since it causes a deficit of trade balance and also rising inflation.

In addition, although revenues from Indonesia's oil and gas exports only contribute 2.84% to Indonesia's GDP, Indonesia still relies on revenues from oil exports. According to Abhimanyu [18], who uses a fiscal policy approach, Indonesia can obtain revenues from oil exports through tax and non-tax revenues. Tax revenues from the oil and gas sector are sourced from income tax (PPH) and value-added tax (VAT) schemes both for domestic VAT and imported VAT.

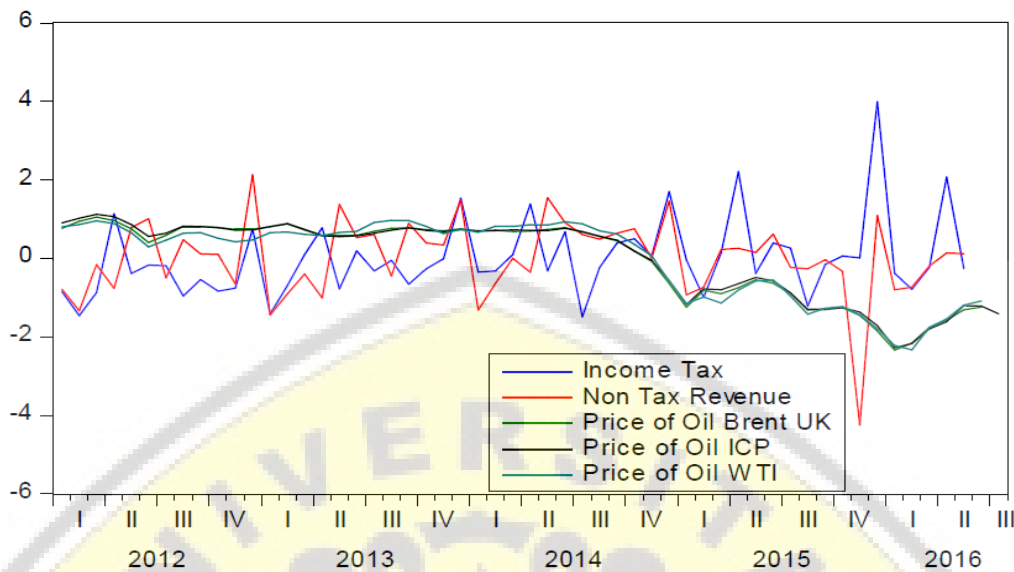


Figure 3. Comparison Between Prices of Oil and The Income Tax and non-Tax Revenue for Indonesia [18].

Nevertheless, evidence on Indonesia's revenue shows that the income generated from the tax and non-tax sector is also fluctuating, as shown in Figure 3. From 2006 to 2011, income tax from the oil and gas sector (PPh Migas) contributed approximately 9.9% of total domestic tax revenue. The oil and gas PPh consists of 63% natural gas PPh and 37% petroleum PPh [18]. Meanwhile, non-tax state revenue (PNBP) is also dominated by the oil and gas sector as it optimizes revenues through increased production especially by lifting crude oil production, and also by increasing efficiency in cost recovery. However, the oil and gas sector only contributed 6-7% in 2016 and rose by 34.7% of Indonesia's total PNPB in 2017. The volatility of world oil prices strongly influenced this fluctuation. Oil price touched the lowest point at the end of 2014 to the beginning of 2016, whereas it rose again at the end of 2016 to 2017 [18]. Building on this fact, Indonesia plays strategic policies in governing the oil especially its relations to OPEC. Indonesia seeks to play save as an oil-producing and oil-importing country. This situation makes Indonesia keeps its distance towards OPEC.

4. Conclusion

This study proposes arguments for explaining Indonesia's attitude in its membership in OPEC building on of the geopolitical approach to energy politics. Indonesia's policies were shaped by the need for securing its energy security i.e., the availability of energy resources. In addition, it is also essential to maintain the stability of the domestic economy in Indonesia. While oil production in Indonesia has been declined since decades ago, the oil and gas sector still has significant impacts on the Indonesian economy especially due to its contribution to state income. Since Indonesia is both an oil importer and exporter country, Indonesia cannot keep its membership in OPEC. Thus, Indonesia's decision not to be active in OPEC is to maintain the Indonesian economy.

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