

Poverty and the Curse of Natural Resources in Indonesia

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Abstract

This study aims to determine how a country's abundant natural resource wealth can be utilised to bolster its economy and alleviate poverty. This study focuses on the use of natural resources to expedite development. This investigation makes use of a library-based qualitative research strategy. Data was gathered by conducting a Scopus search for natural resources-related journal articles using titles, keywords, and abstracts as metadata search references, and then analysing the results with the VOSviewer tool. We used VOSviewer to determine how many articles had been published on natural resources and discovered that a country's natural resources exceed its economic development. The purpose of utilising VOSviewer is to use it as a resource to conduct precise content analysis based on the researcher's name, publication year, researcher productivity, and natural resource research trends. This analysis was conducted for the purpose of examining the author's collaboration in the natural resources and poverty fields. The results indicate that natural resource-rich regions do not guarantee increased economic growth or reductions in poverty. Poverty in Indonesia is a complex issue, despite the fact that a number of developing nations have been successful in implementing improvements in national production and income and in reflecting the level of well-being among the country's population. The conclusion demonstrates that the resource curse in Indonesia is a result of poor resource management, which causes poverty. The influence of the resource curse on government social spending emphasises the significance of government accountability and transparency in relation to natural resource wealth.

Keywords: *Economic Growth; Natural Resources; Poverty; Resource Curse*

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Introduction

Poverty is frequently associated with a country's weakness, deficiency, and powerlessness to manage its economic system (Rice, 2006; Watts & Bohle, 1993; Winters, 2002; Endrawati, 2022). Poverty exists in many countries, but it becomes a paradox when it occurs in countries with natural resources, such as the Central African Republic, South Sudan, and the Democratic Republic of the Congo, as well as Pakistan, Timor-Leste, and Indonesia. Poverty in countries with natural resources is caused by a high reliance on commodity prices, volatility in currency exchange rates, a lack of innovation in natural resource extraction processes, and a decrease in the competitiveness of other sectors due to over-reliance on natural resources. This is a serious problem that burdens the country's economic system, so the government must devote full attention to this poverty problem (Johnsen, 2012). However, the prevalence of poverty in developing countries with abundant natural resources demonstrates that poverty is difficult to eradicate, and despite the fact that various poverty alleviation programmes have been implemented, the results have fallen short of expectations (Gnangnon, 2021; Scheyvens & Russell, 2012).

Countries rich in gold, coal, oil, and gas, among others, do not benefit economically from their abundance of natural resources and struggle to establish political stability. Conflicts and civil wars break out in African countries like the Central African Republic, South Sudan, and the Democratic Republic of the Congo because of the presence of natural resources like gold, oil, uranium, and diamonds. (Ross, 2003). If a country's abundant natural resources are not accompanied by the ability of its human resources, it will become poor due to an economic slowdown in comparison to countries that are poor in natural resources but have good resources (Zain, Khalid, Nurudin, & Onimisi, 2021). Furthermore, while the presence of natural resources provides a high per capita income for the country, it is not distributed evenly, resulting in significant inequality between the rich and the poor. For example, the presence of natural resources, such as mining, does not contribute to regional income and thus does not result in local economic progress in mining areas (Humphreys, Sachs, & Stiglitz, 2007a).

Countries or regions with abundant natural resources should experience greater economic growth than those with limited natural resources (Ouoba, 2016). However, numerous studies indicate that countries with abundant natural resources, such as oil, natural gas, and other mining products, appear to have a lower level of economic development than nations with fewer natural resources (Brahmi, 2022; Marques & Pires, 2019). If a country's abundant natural resources are not accompanied by skilled human resources, it will become impoverished as a result of an economic slowdown, in contrast to countries that are poor in natural resources but rich in human resources (Zain et al., 2021). Moreover, although the presence of natural resources generates a high per capita income for the country, it is not distributed evenly, resulting in a significant disparity between the rich and the poor. In mining regions, the presence of natural resources, such as mining, does not contribute to regional income and therefore has no effect on local economic development (Humphreys et al., 2007a).

Otherwise, countries with an abundance of natural resources, such as gold, coal, oil, and gas, have no positive correlation with economic development and are incapable of achieving political stability. In African nations such as the Central African Republic, South Sudan, and the Democratic Republic of the Congo, the presence of natural resources such as gold, oil, uranium, and diamonds triggers conflicts and civil wars among communities (Ross, 2003). Social scientists refer to the phenomenon in which a region remains impoverished despite its abundance of natural resources as the "natural resource curse" (Boos & Holm-Müller, 2013).

The phenomenon when poverty persists even though the region has a wealth of natural resources is referred to by social researchers as the natural resource curse (Boos & Holm-Müller, 2013). Various studies show that a country's wealth is derived from natural resources such as oil, gas, and timber, as well as other natural resources (gold, wood, and timber), making it more impoverished than countries with a lower per capita GDP (Brahmi, 2022; Marques & Pires, 2019). This, in turn, strengthens the hypothesis that a country with a large amount of land must have a higher economic growth rate than a country with a smaller or lower amount of land (Ouoba, 2016).

The natural resource curse, by definition, depicts a situation in which a country or region has abundant natural resources, particularly in the mining industry, but is not followed by developments in other sectors, such as the social welfare of its people (Humphreys, Sachs, & Stiglitz, 2007b; Yilanci, Aslan, & Ozgur, 2021). This is a paradoxical phenomenon because countries with abundant natural resources have lower social welfare and economic growth rates than other nations (Henri, 2019). The mismanagement of natural resource revenues, which leads to other sectoral effects such as poverty, is one of the primary causes of this paradox (Warr, Menon, & Yusuf, 2012). Several academic studies have identified a correlation between natural resource abundance and economic development (Li, Deng, & Cheng, 2013). This can result in poverty, where "poverty" is a common word used to describe the state of a weak, marginalized, and vulnerable society (Ajibade & McBean, 2014; Bhan, 2014; Widarni & Bawono, 2022). Although no country wants its citizens to be in this situation, there is always a subset of people who live in poor economic systems and become impoverished (Pearce, Barbier, & Markandya, 2013). Natural resources are no longer regarded as a boon but rather as a hindrance to the creation of development and social welfare.

In the case of the Netherlands, the abundance of the mining industry hindered the growth of this sector, a phenomenon known as "Dutch Disease." (Ge & Kinnucan, 2017). A study of abundant natural resources in the United States, Canada, England, Australia, and Scandinavia conducted by Daniels & Moscovici (2020) shows that America's economic success surpassed that of Britain in the 18th century because of natural conditions that were more abundant in the United States than in Britain. In addition, the United States, together with Canada, Australia, and Scandinavia, can become successful countries because they can transform their country's abundant natural resources for economic growth and the welfare of its people through sustainable natural resource management based on technological advances and institutional quality improvement (Ben-Salha, Dachraoui, & Sebri, 2021; Kaznacheev, 2014).

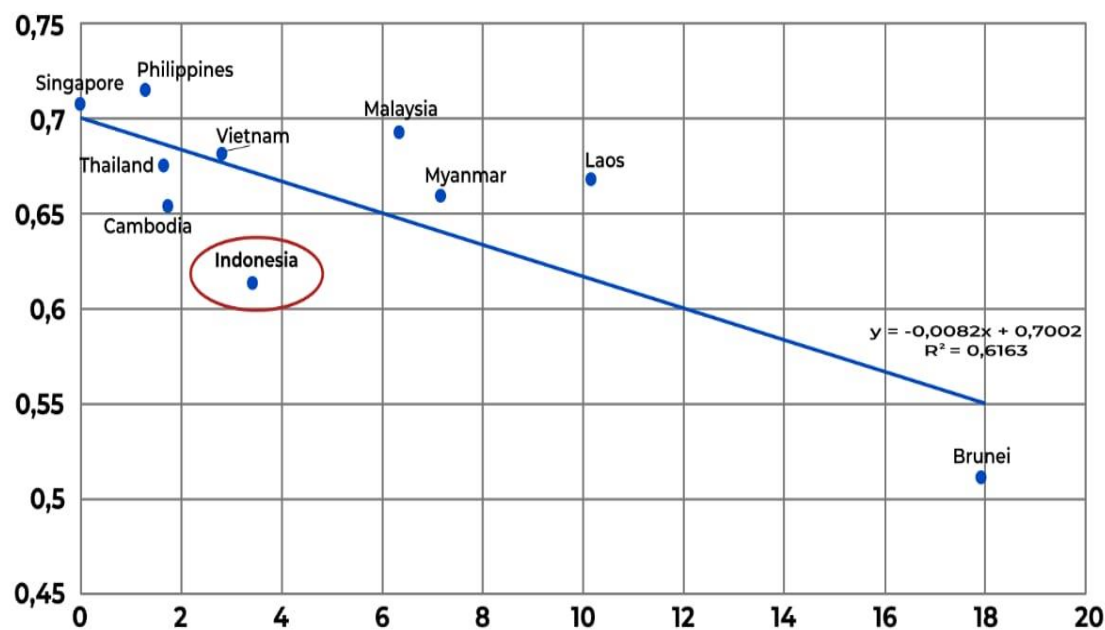


Figure 1. Dependence of the State's Natural Resources Sector
Source: Rahma (2019)

The natural resource curse hypothesis is substantiated through an analysis conducted at the country level. Countries and regions with abundant natural resource wealth tend to develop more slowly than countries or areas with limited natural resources (Humphreys et al., 2007b). However, the natural resource curse phenomenon can also be found in the United States, despite the fact that the United States is a prosperous country (Papyrakis & Gerlagh, 2007). Almost the same thing applies to Indonesia, which is well-known for its abundant natural resources. Figure 1 shows, however, that despite having the most natural resources of the five Southeast Asian countries, Indonesia has the lowest sustainable development index. Meanwhile, according to Dellink et al. (2017), high-income countries or regions tend to have slower economic growth than low-income groups. This implies that a country's low economic growth is more closely related to a lack of initial income than to reliance on natural resources (Ouoba, 2016; Suryana & Fatimah, 2012).

The Indonesian territory is rich in natural resources, some of which are untapped (Webster, 2007). Natural resource countries in general continue to lag behind other regions as a result of previous policies centred on Java development (Pravitasari et al., 2021; Soebagyo, Fahmy-Abdullah, Sieng, & Panjawa, 2019; Zuliastri, Rindayati, & Asmara, 2018). In Indonesia, regional autonomy is currently being implemented, giving regions the authority to manage and utilise existing natural resources in order to accelerate development. As a result, no region is left behind in development because the budget can be obtained and used in accordance with regional requirements. This situation is very different from the previous one, when, under President Soeharto's new order government, natural resources were managed centrally and fully controlled by the central government, and the producing regions did not receive an equitable distribution

of profits. As a result, areas that produce natural resources get a small share of the benefits the state gets from its natural resources.

Indonesia, as one of the countries blessed with abundant natural resources but where the poverty rate is still high, can be seen as proof that the curse of natural resources is real. Previous research discussing the curse of natural resources in Indonesia has been carried out by Rosser (2007). It demonstrates that Indonesia's economic performance was strong for three decades prior to the 1998 financial crisis when measured against the economic growth and socioeconomic indicators of other natural resource countries. However, this method is insufficient to demonstrate the curse of natural resources in a country. Consequently, it is necessary to conduct research on the wonder of the natural resource curse, particularly at the regional level in Indonesia.

Research Methods

The qualitative research method was used in strengthening investigations that are useful for analysing various trends in research topics, developments in the number of studies, and variations in publications from various sources that have theoretical depth from experts regarding the study of resource curse theory. Data was gathered by searching for articles in the Scopus database using the title, keywords, and article abstracts related to natural resources as metadata search references, followed by bibliometric analysis using VOSviewer visualization. (van Eck & Waltman, 2010). We examine how many articles on natural resources have been published using the VOSviewer and discover that a country's natural resources are disproportionate to the country's economic development.

This method is useful for determining novelty in future research by identifying key themes in previous studies, fields of knowledge, or research. This library method was chosen because the authors combined preliminary findings from the same article with current research (Henczel, 2014). This is intended to validate previous research and identify novel elements in future research. The goal of using VOSviewer is to use it as a reference for conducting accurate content analysis based on the researcher's name, year of publication, researcher productivity, and natural resource research trends. This analysis was carried out in this study to examine the author's collaboration in the fields of natural resources and poverty.

Results and Discussion

Natural Resources, Economic Growth, and Poverty

Since the 1960s, natural resources have been regarded as essential for economic growth because they can foster global economic growth in numerous nations (Yilanci et al., 2021). Natural resources continue to be viewed as a major contributor to a nation's economic growth. Renewable and non-renewable resources found in nature, such as energy, mineral resources, water resources, soil resources, and biological resources, are

examples of natural resources. Natural resources, particularly mining assets, are one of the ten most influential factors on long-term GDP growth rates in a number of countries. The Organization for Economic Cooperation and Development (OECD) calls natural resources in mining "natural capital" because their extraction and use have direct and indirect effects on a country's economic growth, such as providing essential raw materials for energy development, jobs, and income (Araji, 2018; Auty, 2007; Yasmeen, 2021).

In theory, economic growth can be obtained by utilising natural resources as capital for the country in order to achieve higher levels of economic growth. This differs from countries with limited natural resources, where economic growth is low, because this country faces constraints in exploiting natural resources for development and must instead focus on manufacturing and service industry businesses (Barbier, 2005). As a result, several natural resource studies have concluded that a country's economic well-being is positively correlated with the presence of its natural resources (Smith, 2005). Countries that have extracted their natural resources over time have much higher per capita incomes than countries that did not extract their resources. Many case studies show, however, that abundant natural resources are detrimental to economic growth (Rosser, 2007); for example, China and Indonesia, which are rich in natural resources, have economic growth rates that are lower than those of countries with limited natural resources, such as South Korea and Singapore (Auty, 2007; Brunnschweiler & Bulte, 2006; Gylfason, 2001). This condition is theoretically known as a natural resource curse because God's gift of natural resources should be a blessing for a country, not a curse, because it becomes a source of struggle, conflict, and poverty when not properly managed (Sachs & Warner, 2001).

Figure 2 depicts the VOSviewer analysis of natural resources from the Scopus database in 2022. The findings of VOSviewer research produce five colour clusters (purple, red, green, blue, and orange) that demonstrate the relationship between one topic and another. The VOSviewer visualises bibliometric mapping in three ways: network visualization, overlay visualization, and density visualization. Natural resources (red), the resource curse (blue), and natural resource rent are the most frequently appearing keywords (green). We analyse how many articles have been published about natural resources using VOSviewer and discover that natural resources in a country are not commensurate with the country's economic development and assist in identifying several locations in Indonesia experiencing what many experts call the natural resource curse, where the country is rich in natural resources but the people are poor.

Poverty is a development issue that must be addressed by many countries, including developed nations such as the United Kingdom, Germany, the United States, and Australia (Otieno, 2019). Even though the level of poverty is different from that in developing countries, where unemployment, underdevelopment, and setbacks are the main causes of poverty (Seran, 2017), poor people in developing countries also tend to be less entrepreneurial and have less access to facilities, infrastructure, capital, and other social and economic activities. This makes it more likely for those who fall behind to get even poorer.

High crime rates, moral and ethical decay, low productivity, and a lack of creativity are just some of the social problems that tend to emerge in a poor country like this one because of the strain that its economy places on the population. Furthermore, poverty in a country will stymie regional development, equitable development, and economic democracy. As a result, poverty alleviation programmes must be a top priority for the government. Poverty, of course, has many faces; it can be classified as chronic poverty, structural poverty, or temporary poverty (Nielsen, Pouliot, & Kim Bakkegaard, 2012). The following three factors contribute to chronic poverty: First, consider the social condition caused by sociocultural factors in the form of unproductive habits. Second, there is the situation of people who have limited resources because they live in remote areas with critical natural resources. Third, people who are economically disadvantaged due to a lack of education or poor health, which makes it difficult for them to find work and become unemployed (Thorbecke, 2013).

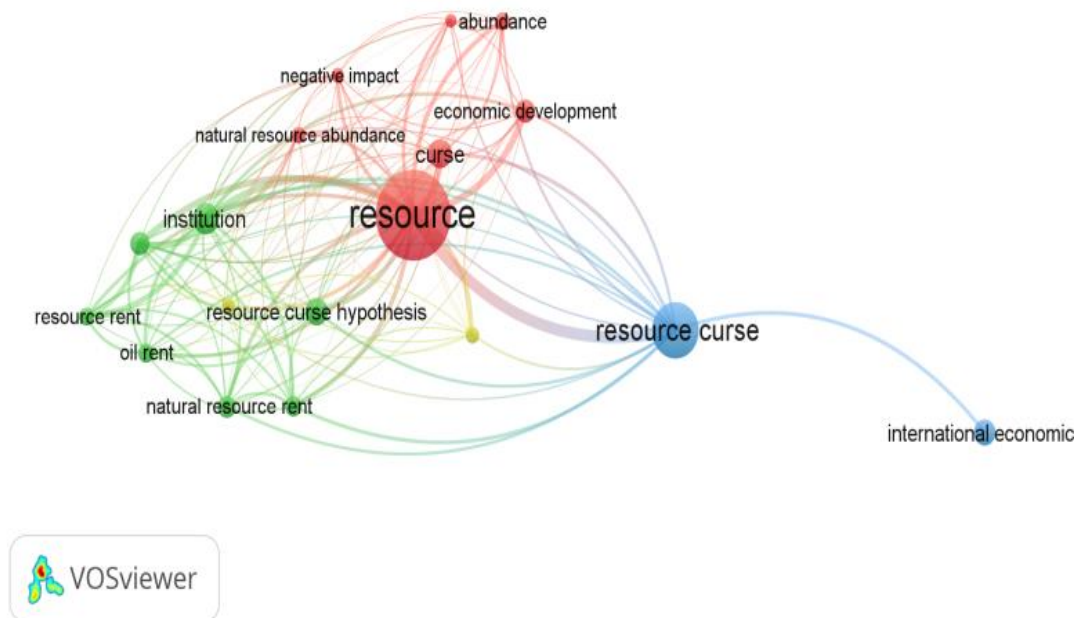


Figure 2. Resource Curse Study Map
Source: Processed by Authors using VOSviewer (2022)

Poverty alleviation programmes in a country face classic problems, such as reducing poverty while encouraging economic growth, which is practically impossible to do because capitalist economic growth is positively correlated with unequal economic distribution (Diffenbaugh & Burke, 2019; Warr et al., 2012). If economic growth is not occasionally slowed by considering the state of people's poverty, the gap in welfare between rich and poor will widen, potentially leading to conflict in the future (Rios-Aguilar, Kiyama, Gravitt, & Moll, 2011). As a policymaker, the government is responsible for ensuring economic growth. The community can share in the benefits equitably, narrowing the gap and lowering the poverty rate (Gyimah-Brempong, Paddison, & Mitiku, 2006). Economic growth and poverty alleviation are difficult to achieve simultaneously if

we rely only on a market financial system (Alvarez & Barney, 2014; Casse & Jensen, 2009). In productive economic activities dominated by an affordable group of people, poor groups can only wait for the crumbs of the economic pie to be shared without being able to participate actively (Godfrey, 2011). Government intervention via the trickle-down effect of economic growth by emphasising efforts to reduce poverty, income distribution, and unemployment leads to a decrease in the poverty rate (Cantillon, 2011).

The poverty profile in Indonesia cannot be said to be good because, even though it has a fairly high income figure, the per capita income of Indonesia is currently four times that of other developing nations (Dauda, 2017). The poverty rate tends to fluctuate up and down from March 2013 to September 2020, with an increase in the poverty rate. However, Indonesia's poverty condition has never decreased significantly, namely at a percentage of 28.17% (2013), 27.73% (2014), 28.59% (2015), 28.01% (2016), 27.77% (2017), 25.67% (2018), 25.14% (2019), and 27.55% (2020). Figure 3 shows that the percentage of the urban poor fell from 7.79% to 7.73%, while in rural areas it fell from 14.11% to 13.96%. However, despite this, the number of urban poor people increased by 0.15 million.

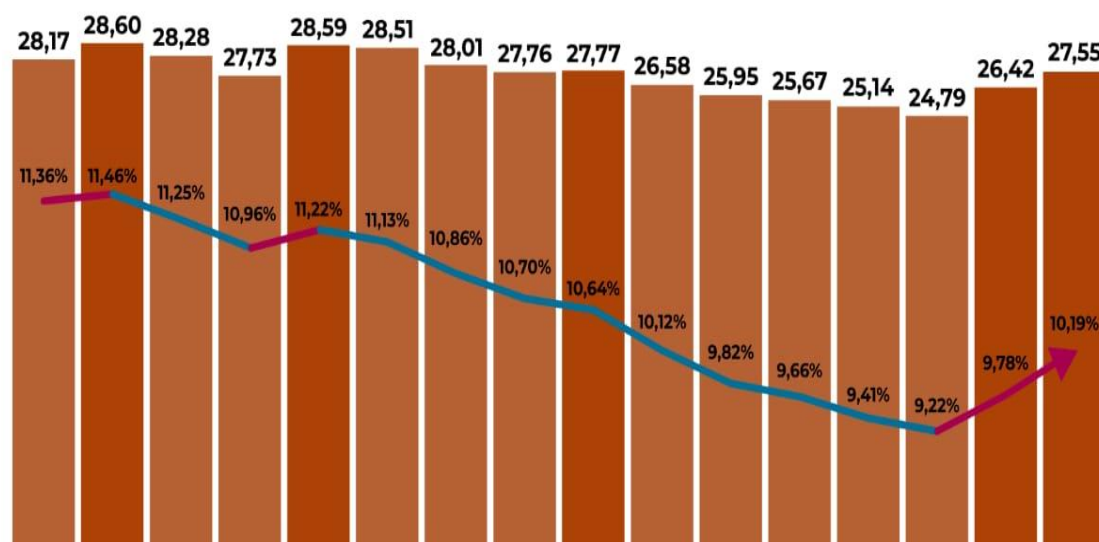


Figure 3. Poverty Profile in Indonesia 2013-2020

Source: Official Statistics News (2021)

Poverty in Indonesia is a fairly complex issue, despite the fact that a number of developing nations have been successful in achieving development in production and national income and in reflecting the level of well-being of the country's population (Susanti & Sartiyah, 2019). As a developing nation, Indonesia still has a 24% poverty problem if the poverty rate is below \$1 per person out of 240 million people. However, if the poverty rate is calculated using a standard of living below \$2, the rate increases to 35%. According to the Central Statistics Agency (2021), the number of poor people in Indonesia in 2020 was 22.77 million, or 10.64% of the country's total population (BPS, 2021). In addition, Indonesia is rich in natural resources. In actuality, some of Indonesia's natural resources do not belong to other nations. Gold, natural gas, and coal are added to

the oceans. However, there are still many poor people in mining-rich regions, the wealth gap remains wide, and conflicts have erupted in East Kalimantan, Aceh, and Papua, among other mining-rich regions.

Poverty in East Kalimantan is caused by low labour absorption. BPS Provinsi Kalimantan Timur (2022) data show that: (1) people do not work 46.32%; (2) people work in the agricultural sector 23.38%; and (3) people work in the farm sector 30.30%. East Kalimantan's economic sector is dominated by a tradeable sector, namely the non-oil and gas mining sector, but this sector does not have a significant impact on employment because this sector, especially coal, is exported in the form of raw (unprocessed) commodities, so it does not require a lot of labour. At the same time, most local people in East Kalimantan are workers in the agricultural sector. However, various strategies have been carried out by the regional government to spur economic growth, for example, by providing credit for plantation and livestock businesses through the Regional Development Bank and providing arable land certificates for farmer groups. However, poverty persists in East Kalimantan (Burke & Siyaranamual, 2019; Hilmawan & Amalia, 2020).

Unfortunately, Papua Province still has a high poverty rate. In terms of expenditures, the BPS Provinsi Papua (2022) defines poverty as "the inability to meet basic food and non-food needs" and reports poverty rates of 27.62% (2017), 27.74% (2018), and 27.53% (2019) for Papua Province in those years. The poverty centre in Papua is in mountainous areas that are difficult to access, namely Deyiai Regency (43.6%) and Intan Jaya (42.92%). This is due to several factors such as: (1) the human resource development index which has stagnated; (2) the regional gross domestic product maximally handles the regional economy; (3) the unemployment rate increases because the number of job seekers is not proportional to the number of available jobs; (4) the management of natural resources that are not used properly by the indigenous Papuans; (5) high mortality rate; (6) residents do not have a central position in the fields of education, health, economy, society, and culture (Ginting, Sudibia, Dewi, & Marhaeni, 2020; Hardinandar, 2019; Sofilda, Hamzah, & Sholeh, 2013).

The poverty that occurs in Aceh can be seen from the data of BPS Provinsi Aceh (2022), namely the number of poor people in the province, which is as high as 872,610 people, or 16.89% of the total population of Aceh, and has increased by 31 thousand people compared to the previous year, which was 841 thousand people (16.43%). In that case, Aceh is the poorest province in Sumatra, even though Aceh Province is the province with the highest APBD and an additional special autonomy fund of 88.43 trillion rupiahs (Jalil et al., 2019), since it was budgeted in 2008 until 2021, Aceh Province is still in the category of a poor province. Of course, this is an outlier; even with a large budget, poverty persists (Heger & Neumayer, 2019; Ikhsan, 2015; Safwadi, 2020).

Aceh's ability to escape poverty is hampered by a number of factors, including: (1) a lengthy history of conflict between the Free Aceh Movement and the Republic of Indonesia's government; (2) a dearth of talented human resources in poverty budget management; and (3) conflicts of interest among Aceh's local actors (Mursyidin, Hajad, & Ikhsan, 2022). The origin of this conflict could be a dispute over the ownership of natural

resources. In fact, according to Indonesian regulations, all natural resource products, including minerals and other mining products, are subject to state control and must be used for the benefit of the Indonesian people. Consequently, the government has unrestricted control over natural resources, which frequently conflicts with indigenous knowledge. Ultimately, this contradiction has a substantial effect on the dynamics of the Indonesian discourse on the struggle for national interests, national identity, and citizenship. When both parties are vying for access to natural resources, such as the state and the conflicting parties, namely the regions, as is the case in this situation (Aspinall, 2007).

The Curse of Natural Resources and Poverty in Indonesia

Numerous academics have criticised the term "resource curse" because it is not scientific. The "resource curse" describes the paradoxical circumstance in which a country's economy underperforms despite possessing valuable natural resources (Yilanci et al., 2021). Typically, an excessive concentration of a nation's capital and labour force in a small number of resource-dependent industries leads to the resource curse. (Ploeg, 2011). The resource curse is a paradox in which nations rich in non-renewable natural resources experience sluggish or even negative economic growth (Auty, 2018).

Tester et al. (2005) conducted an investigation and discovered that the natural resources on which countries rely for survival are being exploited irresponsibly. The result of this exploitation is the occurrence of horizontal conflicts that are becoming more widespread and prolonged in order to gain control of natural resource rights. The greater the political instability, the more difficult it is for the country to develop due to unresolved conflicts (Bazzi & Blattman, 2014). In addition, this political instability will impact the decline in the economy, which is characterised by rising poverty and unemployment rates (Sobotka, Skirbekk, & Philipov, 2011). Coupled with countries accustomed to high levels of corruption, this will cause leakage in the government budget (Western, Bloome, Sosnaud, & Tach, 2012).

Natural resources countries that have experienced similar experiences with the decline in the domestic economic sector are caught in a situation known as the "Dutch Disease." (Bjørnland & Thorsrud, 2016). The phenomenon that came to be known as the "Dutch Disease" in the Netherlands in the 1970s offers a valuable illustration of an important lesson that can be learned about developing a region that possesses an abundance of natural resources. The Dutch had just made the discovery of natural gas in the North Sea at the time, and they immediately incorporated it into their mining operations (Ghavidel Doostkouei, 2021; Vriezen, 2009). The Dutch have been successful in attracting market interest and exporting these natural resources by making use of the Dutch currency exchange rate because the amount of gas reserves is still sufficient (Osu, 2010). However, the manufacturing sector will be relatively more expensive and less competitive on international markets as a result of this (Pujiastuti, Satmoko, & Nugraha, 2020). In addition, the foreign currency earned from the sale of natural gas is put towards the acquisition of imported goods that are, on average, more affordable (Omolade &

Ngalawa, 2018). As a direct consequence of this, the domestic industry will continue to struggle due to the fact that it is difficult to compete.

The curse of natural resources is a word that has a negative connotation and indicates a situation in the form of a disaster or catastrophe. Proponents of natural resource wealth believe that natural resource wealth can make a country more developed and richer (positively), based on various development literature prior to the 1980s. However, subsequent findings show that the abundance of natural resources in an area tends to be detrimental, especially for low- and middle-income countries. If the natural resources are infinite natural resources, it will be a negative development result for an area (Auty, 2007). Sachs & Warner (2001) say that if countries are rich in natural resources (based on the ratio of natural exports to GDP), their economic growth is slower.

So far, most research on the "natural resource curse" has been done in Latin America, Africa, China, and the Middle East. (Badeeb, Lean, & Clark, 2017; Frankel, 2012; Gorenstein & Ortiz, 2018). Studies on the curse of natural resources in Southeast Asia, particularly natural resources (agriculture, forest products, oil, natural gas, coal, and minerals), remain scant. The abundance of natural resources, reliance on natural products for economic growth, and poverty resulting from the natural resource curse occurred dramatically in the Southeast Asian region, especially in Indonesia. Although several studies have included Indonesia as a research sample country for natural resources (Ouoba, 2016), few have comprehensively discussed Southeast Asia's natural resource curse.

Indonesia is an example of a nation whose per capita income is reliant on mining and oil sales (Rokhmad, 2020). in order for the nation to be perceived as capable of escaping the natural resource curse (Haryanto, 2018). After the enactment of decentralisation and regional autonomy laws in Indonesia, the "natural resource curse" is believed to have taken place (Perez-Sebastian & Raveh, 2012). Numerous districts and cities in Indonesia with an abundance of natural resources have high rates of poverty. The Indonesian regions of East Kalimantan, Papua, Aceh, Riau, West Papua, and the Riau Archipelago are highly dependent on natural resources.

There is a great influence between forestry, mining, and oil and gas resources on implementing fiscal decentralisation in Indonesia and on the gross regional domestic product (Komarulzaman & Alisjahbana, 2006). This condition shows that abundant natural resources are not economically independent and are highly dependent on profit sharing from natural resources. As a result, this mining dependence reduces household investment in human capital such as education and health, which can be seen through high school enrolment rates, test scores, and births assisted by skilled health workers despite the discovery of abundant mining products such as oil and gas. It also increases the GRDP of the local economy.

Conclusion

Poverty is a global issue that affects both developed and developing economies. Poverty in Indonesia contradicts the notion that a country's abundant natural resources

will inevitably lead to economic prosperity. In fact, based on the study's findings, it is possible to conclude that poverty, envy, and conflict result when natural resource wealth is not accompanied by equitable income distribution. Rich in natural resources, Indonesia faces the problem of poverty because the benefits of regional natural resources are not shared with producing regions, leading to an unequal distribution of economic income. Consequently, economic inequality is pervasive in Indonesia.

These three provinces (East Kalimantan, Papua, and Aceh) are portraits of regions with abundant natural resources but also high levels of poverty. This condition, known as the "curse of natural resources," occurs in countries or regions with abundant natural resources but whose inhabitants are not prosperous and poor. In removing the "natural resource curse" in Indonesia, the government of Indonesia contributes significantly to efforts to alleviate poverty through the fair management of natural resources and the equitable distribution of results to producing regions. The following are recommendations and suggestions for the Indonesian government: (1) reducing the gaps in economic growth caused by natural resource exploitation by being more prudent in establishing natural resource regulations so that communities near mining areas are not marginalised and benefit from the natural resources produced; and (2) being transparent and accountable in the management of natural resources.

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References

- Ajibade, I., & McBean, G. (2014). Climate Extremes and Housing Rights: a Political Ecology of Impacts, Early Warning and Adaptation Constraints in Lagos Slum Communities. *Geoforum*, 55(1), 76–86. <https://doi.org/10.1016/j.geoforum.2014.05.005>
- Alvarez, S. A., & Barney, J. B. (2014). Entrepreneurial Opportunities and Poverty Alleviation. *Entrepreneurship Theory and Practice*, 38(1), 159–184.
- Araji, S. M. (2018). Natural resources, incentives and human capital: reinterpreting the curse*. *Middle East Development Journal*, 10(1), 1–30.
- Aspinall, E. (2007). The Construction of Grievance: Natural Resources and Identity in a Separatist Conflict. *Journal of Conflict Resolution*.
- Auty, R. M. (2007). Natural Resources, Capital Accumulation and The Resource Curse. *Ecological Economics*, 61(4), 627–634.
- Auty, R. M. (2018). From Resource Curse to Rent Curse. In *Natural Resources and Economic Growth* (pp. 26–53). <https://doi.org/10.4324/9781315769356-2>
- Badeeb, R. A., Lean, H. H., & Clark, J. (2017). The Evolution of The Natural Resource Curse Thesis: A Critical Literature Survey. *Resources Policy*, 51, 123–134. <https://doi.org/10.1016/j.resourpol.2016.10.015>

- Barbier, E. B. (2005). *Natural Resource and Economic Development*. Cambridge: Cambridge University Press.
- Bazzi, S., & Blattman, C. (2014). Economic Shocks and Conflict: Evidence from Commodity Prices. *American Economic Journal: Macroeconomics*, 6(4), 1–38.
- Ben-Salha, O., Dachraoui, H., & Sebri, M. (2021). Natural Resource Rents and Economic Growth in the Top Resource-Abundant Countries: a PMG Estimation. *Resources Policy*, 74, 101229. <https://doi.org/10.1016/j.resourpol.2018.07.005>
- Bhan, G. (2014). The Impoverishment of Poverty: Reflections on Urban Citizenship and Inequality in Contemporary Delhi. *Environment and Urbanization*, 26(2), 547–560.
- Bjørnland, H. C., & Thorsrud, L. A. (2016). Boom or Gloom? Examining the Dutch Disease in Two-speed Economies. *Economic Journal*, 126(598), 2219–2256.
- Boos, A., & Holm-Müller, K. (2013). The Relationship Between the Resource Curse and Genuine Savings: Empirical Evidence. *Journal of Sustainable Development*, 6(6). <https://doi.org/10.5539/jsd.v6n6p59>
- BPS. (2021). *Statistik Indonesia 2021*. Jakarta: Badan Pusat Statistik.
- BPS Kalimantan Timur. (2022). *Analisis Isu Terkini Provinsi Kalimantan Timur 2022*. Samarinda: Badan Pusat Statistik Provinsi Kalimantan Timur.
- BPS Provinsi Aceh. (2022). *Profil Kemiskinan Penduduk di Provinsi Aceh September 2022*. Banda Aceh: Badan Pusat Statistik Provinsi Aceh.
- BPS Provinsi Papua. (2022). *Indikator Penting Provinsi Papua Edisi Desember 2022*. Jayapura: Badan Pusat Statistik Provinsi Papua.
- Brahmi, M. (2022). Governance of Abundant Natural Resources, Mining and Energy, and Their Economic Impacts on Developing Countries: Theoretical Controversies. *International Journal of Public Sector Performance Management*, 9(4), 1.
- Brunnschweiler, C. N., & Bulte, E. H. (2006). *The Resource Curse Revisited and Revised: A Tale of Paradoxes and Red Herrings* (No. No. 06/61).
- Burke, P. J., & Siyaranamual, M. (2019). No One Left Behind in Indonesia? *Bulletin of Indonesian Economic Studies*, 55(3), 269–293.
- Cantillon, B. (2011). The Paradox of the Social Investment State. Growth, Employment and Poverty in the Lisbon Era. *Journal of European Social Policy*, 21(5), 432–449. <https://doi.org/https://doi.org/10.1177/09589287114188>
- Casse, T., & Jensen, S. (2009). Do We Understand the Linkages between Economic Growth, Poverty Targets and Poverty Reduction? *Review of African Political Economy*, 36(122), 539–553. <https://doi.org/10.1080/03056240903346145>
- Daniels, T. L., & Moscovici, D. (2020). Protected Land Management and Governance in the United States: More Than 150 Years of Change. *Society and Natural Resources*, 33(6), 711–720. <https://doi.org/10.1080/08941920.2019.1688899>
- Dauda, R. S. (2017). Poverty and Economic Growth in Nigeria: Issues and Policies. *Journal of Poverty*, 21(1), 61–79. <https://doi.org/10.1080/10875549.2016.1141383>
- Dellink, R., Chateau, J., Lanzi, E., & Magné, B. (2017). Long-term economic growth projections in the Shared Socioeconomic Pathways. *Global Environmental Change*, 42, 200–214. <https://doi.org/10.1016/j.gloenvcha.2015.06.004>

- Diffenbaugh, N. S., & Burke, M. (2019). Global Warming has Increased Global Economic Inequality. *The Proceedings of the National Academy of Sciences (PNAS)*, 116(20), 9808–9813. <https://doi.org/https://doi.org/10.1073/pnas.181602011>
- Endrawati, D. (2022). Determinants of working poverty in Indonesia. *Journal of Economics and Development*, 24(3), 230-246.
- Frankel, J. A. (2012). The Natural Resource Curse: a Survey of Diagnoses and Some Prescriptions. In *HKS Faculty Research Working Paper Series*.
- Ge, W., & Kinnucan, H. W. (2017). The Effects of Mongolia's Booming Mining Industry on its Agricultural Sector: a Test for Dutch Disease. *Agricultural Economics (United Kingdom)*, 48(6), 781–791. <https://doi.org/10.1111/agec.12374>
- Ghavidel Doostkouei, S. (2021). Can Natural Resources Revenue Start Industrialization? (A Model for Dutch Disease). *SSRN Electronic Journal*.
- Ginting, T. A., Sudibia, I. K., Dewi, N. P. M., & Marhaeni, A. A. I. N. (2020). The Effect of Education and Dependency Ratio on Economic Growth and Poverty in Papua. *American Journal of Humanities and Social Sciences Research (AJHSSR)*, 4(6), 186–195.
- Gnangnon, S. K. (2021). Poverty Volatility and Poverty in Developing Countries. *Economic Affairs*, 41(1), 84–95. <https://doi.org/10.1111/ecaf.12445>
- Godfrey, P. C. (2011). Toward a Theory of the Informal Economy. *Academy of Management Annals*, 5(1), 231–277. <https://doi.org/10.5465/19416520.2011.585818>
- Gorenstein, S., & Ortiz, R. (2018). Natural Resources and Primary Sector-Dependent Territories in Latin America. *Area Development and Policy*, 3(1), 42–59. <https://doi.org/10.1080/23792949.2018.1431555>
- Gyimah-Brempong, K., Paddison, O., & Mitiku, W. (2006). Higher education and economic growth in Africa. *Journal of Development Studies*, 42(3), 509–529. <https://doi.org/10.1080/00220380600576490>
- Gylfason, T. (2001). Natural Resources and Economic Growth: What Is the Connection? In *CESifo Working Paper* (No. 530). Center for Economic Studies and ifo Institute (CESifo), Munich.
- Hardinandar, F. (2019). Determinan Kemiskinan (Studi Kasus 29 Kota/Kabupaten di Provinsi Papua). *Jurnal REP (Riset Ekonomi Pembangunan)*, 4(1), 1–12.
- Haryanto, J. T. (2018). Is the Curse of Natural Resources Occuring in Indonesia? A Preliminary Finding. *Jurnal BPPK*, 11(1), 15–27.
- Heger, M. P., & Neumayer, E. (2019). The Impact of the Indian Ocean Tsunami on Aceh's Long-Term Economic Growth. *Journal of Development Economics*, 141(1), 1–17. <https://doi.org/https://doi.org/10.1016/j.jdeveco.2019.06.008>
- Henczel, S. (2014). The Impact of Library Associations: Preliminary Findings of a Qualitative Study. *Performance Measurement and Metrics*, 15(3), 122–144. <https://doi.org/10.1108/PMM-07-2014-0025>
- Henri, P. A. O. (2019). Natural Resources Curse: a Reality in Africa. *Resources Policy*, 63, 101406. <https://doi.org/10.1016/j.resourpol.2019.101406>
- Hilmawan, R., & Amalia, S. (2020). Coal and Mineral and Its Impact on Human

- Development Index: An Empirical Study in South and East Kalimantan Region, Indonesia. *International Journal of Energy Economics and Policy*, 10(1), 488–494. <https://doi.org/10.32479/ijeep.8711>
- Humphreys, M., Sachs, J. D., & Stiglitz, J. E. (2007a). Future Directions for the Management of Natural Resources. In *Escaping the Resources Curse* (pp. 322–336). New York: Colombia University Press.
- Humphreys, M., Sachs, J. D., & Stiglitz, J. E. (2007b). What is the Problem with Natural Resource Wealth? In *Escaping the Resources Curse*. (pp. 1–20). New York: Colombia University Press.
- Ikhsan, I. (2015). Relasi Otonomi Khusus dan Pengurangan Kemiskinan di Provinsi Aceh. *Jurnal Public Policy*, 1(1), 1–13. <https://doi.org/10.35308/jpp.v0i0.698>
- Jalil, H., Yani, T. A., & Kurniawan, A. (2019). Optimization of Special Autonomy Funds Allocation to Alleviate Poverty in Aceh (a Case Study in Districts/Cities). *International Journal of Innovation, Creativity and Change*, 9(4), 93–108.
- Johnsen, Åg. (2012). Why Does Poor Performance Get So Much Attention in Public Policy? *Financial Accountability and Management*, 28(2), 121–142.
- Kaznacheev, P. F. (2014). Resource Rents and Economic Growth. Economic and Institutional Development in Countries with a High Share of Income from the Sale of Natural Resources. Analysis and Recommendations Based on International Experience. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.2437871>
- Komarulzaman, A., & Alisjahbana, A. S. (2006). Testing the Natural Resource Curse Hypothesis in Indonesia: Evidence at the Regional Level. In *Working Paper in Economics and Development Studies* (No. 200602). Bandung.
- Li, Z. Bin, Deng, H. J., & Cheng, A. S. (2013). The Study of the Relationship between Natural Resource Abundance and Economic Growth. *Advanced Materials Research*, 734–737(1), 3337–3341.
- Marques, A. C., & Pires, P. S. (2019). Is There a Resource Curse Phenomenon For Natural Gas? Evidence From Countries With Abundant Natural Gas. *Resources Policy*, 63, 101466. <https://doi.org/10.1016/j.resourpol.2019.101466>
- Mursyidin, M., Hajad, V., & Ikhsan, I. (2022). Aceh's Local Elite Power Strategy. *Journal of Governance and Public Policy*, 9(2), 124–136.
- Nielsen, M. R., Pouliot, M., & Kim Bakkegaard, R. (2012). Combining income and assets measures to include the transitory nature of poverty in assessments of forest dependence: Evidence from the Democratic Republic of Congo. *Ecological Economics*, 78, 37–46. <https://doi.org/10.1016/j.ecolecon.2012.03.009>
- Omolade, A., & Ngalawa, H. (2018). Oil Price Movements, Exchange Rate and Nigerian Manufacturing Sector Growth: a Short-Run Analysis. *Investment Management and Financial Innovations*, 15(3), 329–342.
- Osu, B. O. (2010). Currency Cross Rate and Triangular Arbitrage in Nigerian Exchange Market. *International Journal of Trade, Economics and Finance*, 345–348.
- Otieno, D. (2019). After making peace, Ethiopia and Eritrea now focus on development: Both countries say they must make up for lost times. *Africa Renewal*, 32(3), 30–31. <https://doi.org/10.18356/951306ca-en>

- Ouoba, Y. (2016). Natural Resources: Funds and Economic Performance of Resource-rich Countries. *Resources Policy*, 50(1), 108–116.
- Papayrakis, E., & Gerlagh, R. (2007). Resource Abundance and Economic Growth in the United States. *European Economic Review*, 51(4), 1011–1039.
- Pearce, D., Barbier, E., & Markandya, A. (2013). Sustainable Development: Economics and Environment in the Third World. In *Sustainable Development: Economics and Environment in the Third World*. <https://doi.org/10.4324/9781315070254>
- Perez-Sebastian, F., & Raveh, O. (2012). The Natural Resource Curse, Fiscal Decentralization, and Agglomeration Economies. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.1742482>
- Ploeg, F. van der. (2011). Natural Resources: Curse or Blessing? *Journal of Economic Literature*, 49(2), 366–420. <https://doi.org/10.1257/jel.49.2.366>
- Pravitasari, A. E., Rustiadi, E., Priatama, R. A., Murtadho, A., Kurnia, A. A., Mulya, S. P., ... Wulandari, S. (2021). Spatiotemporal Distribution Patterns and Local Driving Factors of Regional Development in Java. *ISPRS International Journal of Geo-Information*, 10(12), 812. <https://doi.org/10.3390/ijgi10120812>
- Pujiastuti, T., Satmoko, A., & Nugraha, E. K. (2020). The Influence of Inflation, Interest Rate, Exchange Rate, and Gross Domestic Products (GDP) on Joint Stock Price Index (CSPI) in Indonesia Stock Exchange (BEI) Period 2009-2018. *Proceedings of the International Conference of Business, Economy, Entrepreneurship and Management*, 359–366. <https://doi.org/10.5220/0009966903590366>
- Rahma, H. (2019). *Fenomena Natural Resource Curse dalam Pembangunan Wilayah di Indonesia*. Dissertation, IPB University.
- Rice, S. E. (2006). The Threat of Global Poverty. *The National Interest*, 83(1), 76–82.
- Rokhmad, A. (2020). Configuration and The Role of Community Leaders in The Conflict of Natural Resources of Limestone Mining for The Cement Industry in Rembang Indonesia. *International Journal of Energy Economics and Policy*, 10(2), 521–528. <https://doi.org/10.32479/ijeep.8321>
- Ross, M. (2003). *Oil, Drugs, and Diamonds: How Do Natural Resources Vary in Their Impact on Civil War? In Beyond Greed and Grievance: The Political Economy of Armed Conflict* (B. and Sherman, Ed.). CO: Lynne Rienner Publisher.
- Rosser, A. (2007). Escaping the Resource Curse: the Case of Indonesia. *Journal of Contemporary Asia*, 37(1), 38–58. <https://doi.org/10.1080/00472330601104557>
- Sachs, J. D., & Warner, A. M. (2001). The Curse of Natural Resources. *European Economic Review*, 45(4–6), 827–838. [https://doi.org/10.1016/S0014-2921\(01\)00125-8](https://doi.org/10.1016/S0014-2921(01)00125-8)
- Safwadi, I. (2020). The Impact of the Special Autonomy Fund on the Convergence of the Human Development Index in Aceh. *Jurnal Ilmiah Peuradeun*, 8(1), 179.
- Scheyvens, R., & Russell, M. (2012). Tourism and Poverty Alleviation in Fiji: Comparing the Impacts of Small and Large Scale Tourism Enterprises. *Journal of Sustainable Tourism*, 20(3), 417–436. <https://doi.org/10.1080/09669582.2011.629049>
- Seran, S. (2017). Hubungan Antara Pendidikan, Pengangguran, dan Pertumbuhan Ekonomi dengan Kemiskinan. *Jurnal Ekonomi Kuantitatif Terapan*, 10(1), 59–71.

- Smith, S. C. (2005). *No Title Ending Global Poverty*. New York: St. Martin's Press.
- Sobotka, T., Skirbekk, V., & Philipov, D. (2011). Economic Recession and Fertility in the Developed World. *Population and Development Review*, 37(2), 267–306. <https://doi.org/10.1111/j.1728-4457.2011.00411.x>
- Soebagyo, D., Fahmy-Abdullah, M., Sieng, L. W., & Panjawa, J. L. (2019). Income Inequality and Convergence in Central Java under Regional Autonomy. *International Journal of Economics and Management*, 13(1), 203–215.
- Sofilda, E., Hamzah, M. Z., & Sholeh, A. S. (2013). Human Development and Poverty In Papua Province (an Analysis of Simultaneous Approach on Panel Data Regression). *OIDA International Journal of Sustainable Development*, 6(6), 51–62.
- Suryana, A., & Fatimah, F. (2012). Tinjauan Awal Alokasi Pemanfaatan Sumber Daya Batubara Kalori Rendah Di Sumatera. *Buletin Sumber Daya Geologi*, 7(3), 118–123. <https://doi.org/10.47599/bsdg.v7i3.111>
- Susanti, E. N., & Sartiyah, S. (2019). Determinan Kemiskinan di Provinsi Kepulauan Riau. *Jurnal Dimensi*, 8(2), 249–265. <https://doi.org/10.33373/dms.v8i2.2156>
- Tester, J. W., Drake, E. M., Driscoll, M. J., Golay, M. W., & Peters, W. A. (2005). Sustainable energy: Choosing among options. In *AIChE Annual Meeting, Conference Proceedings* (pp. 13133–13139). <https://doi.org/10.5070/g312310664>
- Thorbecke, E. (2013). Multidimensional Poverty: Conceptual and Measurement Issues. *The Many Dimensions of Poverty*, 3–19. https://doi.org/10.1057/9780230592407_1
- van Eck, N. J., & Waltman, L. (2010). Software Survey: VOSviewer, a Computer Program for Bibliometric Mapping. *Scientometrics*, 84(2), 523–538.
- Vriezen, G. (2009). Amendment of the Dutch Mining Act: Fallow Acreage and Gas Storage. *Journal of Energy & Natural Resources Law*, 27(2), 179–192.
- Warr, P., Menon, J., & Yusuf, A. A. (2012). Poverty Impacts of Natural Resource Revenues. *Journal of Asian Economics*, 23(4), 442–453.
- Watts, M. J., & Bohle, H. G. (1993). The Space of Vulnerability: the Causal Structure of Hunger and Famine. *Progress in Human Geography*, 17(1), 43–67. <https://doi.org/10.1177/030913259301700103>
- Webster, D. (2007). From Sabang to Merauke: Nationalist secession movements in Indonesia. *Asia Pacific Viewpoint*, 48(1), 85–98. <https://doi.org/10.1111/j.1467-8373.2007.00332.x>
- Western, B., Bloome, D., Sosnaud, B., & Tach, L. (2012). Economic insecurity and social stratification. *Annual Review of Sociology*, 38, 341–359.
- Widarni, E. L., & Bawono, S. (2022). Technology Investment, Consumption, and Economic Growth in Poverty Eradication Efforts in Indonesia. In *Modeling Economic Growth in Contemporary Indonesia* (pp. 217–223). Emerald Publishing Limited.
- Winters, L. A. (2002). Trade Liberalisation and Poverty: What are the Links? *The World Economy*, 25(9), 1339–1367. <https://doi.org/10.1111/1467-9701.00495>
- Yasmeen, H. (2021). Discovering The Relationship Between Natural Resources, Energy Consumption, Gross Capital Formation With Economic Growth: Can Lower Financial Openness Change The Curse Into Blessing. *Resources Policy*, 71.

- Yilanci, V., Aslan, M., & Ozgur, O. (2021). Disaggregated Analysis of The Curse Of Natural Resources in Most Natural Resource-Abundant Countries. *Resources Policy*, 71, 102017. <https://doi.org/10.1016/j.resourpol.2021.102017>
- Zain, Z. M., Khalid, N. S. M., Nurudin, S. M., & Onimisi, T. (2021). Poverty Alleviation Policies in Malaysia and Nigeria: a Review. *Environment-Behaviour Proceedings Journal*, 6(16), 239–246. <https://doi.org/10.21834/ebpj.v6i16.2694>
- Zuliasri, F., Rindayati, W., & Asmara, A. (2018). Analisis Faktor Yang Memengaruhi Aglomerasi Industri Unggulan Daerah Dan Hubungannya Dengan Daya Saing Industri Daerah. *Jurnal Ekonomi Dan Kebijakan Pembangunan*, 2(2), 113–134.