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Poverty Curse Hypothesis of Resource-Rich Regions, a Development Paradox in Indonesia

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Abstract

This study aims to examine the hypothesis of natural resources curse in Indonesia in the era of regional autonomy. Poverty is the victim of an uncommon economic system within their limitations. Poor is a term that we often hear in everyday life. Poverty is usually connoted with a condition or state of being weak, deprived and vulnerable. The management of key resources, if properly managed will be a blessing, but if it does not really work it could be a curse. This research used the qualitative descriptive analysis method. The government is expected to re-examine the policies of natural resources related to the natural resources exploitations which are done massively in the era of regional autonomy. If the same condition persists, the massive exploitation of natural resources will only make Indonesia lose its natural resources that merely need a long time to recover, without getting the optimum advantages from the loss of natural resources.

Keywords: Natural Resources Curse, Institution Quality, Economic Growth, and Poverty

1. Introduction

The hypothesis of natural resources curse refers to a paradox that countries with abundant non-renewable resources such as minerals and fuels tend to have lower economic growth and poorer development outcomes than countries with fewer natural resources. This is due to some factors including institutional failure conflicts and economic disruptions, opinions volatility, corruption and violations of human rights.

A country with huge amount of natural resources (SDA) should have a relatively better economic performance towards a country or region with limited natural resources. Wright and Czelusta (2004), the success of American economy surpassed England in the 18th century due to the condition that the United States had more abundant natural resources than Britain. America along with Canada, Australia and the Scandinavian countries are being the successful countries that turn their abundant natural resources

into welfare and economic growth through the sustainable natural resources management based on technological advancements and improved institutional quality.

Indonesia is one country endowed with abundant natural resources, so that the study about the phenomenon of natural resources curse is worth to conduct. Previous studies discussing the hypothesis of natural resources curse in Indonesia were done by Rosser (2004), Komarulzaman & Alisjahbana (2006) and Feryawan (2011). Rosser (2004) argues that Indonesia is one example of a successful country avoiding natural resources curse. It is shown by the good performance of Indonesia's economy for 3 decades before the 1997/1998 economic crisis. To come up with that conclusion, Rosser (2004) compared the performance of Indonesia's economic growth and socio-economic indicators to other resource-rich countries. This approach, however, is not sufficient to prove the phenomenon of natural resources curse in a country. Further study at the regional level is needed to support the results. Papyrakis and Gerlagh (2007) deployed that the phenomenon of natural resources curse is found existed in the United States, although America so far is considered as the third country that gained prosperity due to the natural resources supports. The hypothesis of natural resources curse is proved through the analysis conducted at the state level.
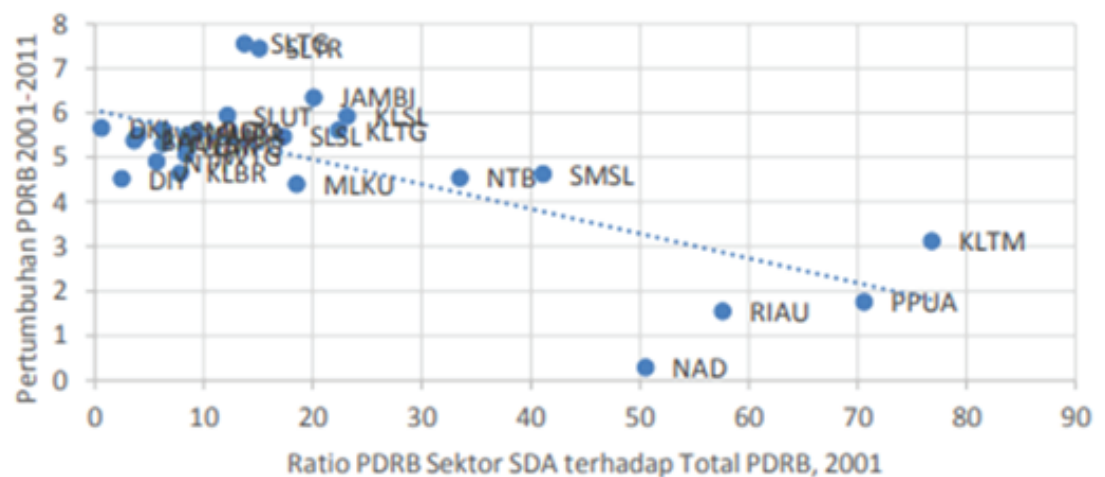

Figure 1: Dependence of Natural Resources Sector and Economic Growth of Regional Autonomy Period (2001-2011). Source: Processing, Badan Pusat Statistik.

Based on the above picture, according to Barro (1991) countries or regions with high income levels tend to have a relatively slow economic growth compared to those with low income levels. The resource-rich provinces most likely possess high income levels as well. This indicates that low growth level in the resource-rich provinces may be the impact of low initial income not the natural resources dependence.

There is an absorbing phenomenon that social scientists refer to as the natural resources curse [1]. Countries with abundant natural resources such as oil and gas,

somewhat show the poorer economic development and good governance perfor-mances than countries with fewer natural resources. Although the great expectation on the richness and vast opportunities come up together with the findings and oil extractions and other natural resources, paradoxically, that such blessing more often becomes an obstacle rather than creates a stable and sustainable development.

2. Where Does That Curse Come From?

To comprehend the paradox of natural resources, we first need to understand what makes the richness of natural resources differ from other types of wealth. There are two main obvious differences. First, distinct from other sources of wealth, natural resources do not need to be produced. This wealth only needs to be extracted or dug (despite the extraction process itself is not simple). As it is not produced from the production process, the end result of natural resources can be gained without relating to other economic processes happening in a country; this activity is quite similar to that of a separate or isolated area. As for example, the economic process could happen without being connected with other industry sectors, and does not require the large amount of domestic labor's participations. The extraction of natural resources can also take place independently from the political process. For example, a government could easily access the natural resources, regardless of whether it will dominate the relation with its people or controls the state institutions effectively. The second major difference comes from the fact that many natural resources, especially oil and gas, are non-renewable. Seen from the economic aspect, that richness is less feasible to be denoted as a source of income but rather categorized as an asset indeed.

The natural resources curse is a paradox known in economics to refer to a country with a huge amount of natural resources, but in fact, has a poor public welfare as well as a lower economic growth than other countries. One main cause of this paradox is a mismanagement of natural resources acceptance that results in other sectoral impacts. Some academic researches including Sachs Warner (1995, 1997 a b c, 1999 a, b. 2001) and Auty and Miksell (1998) have found a negative relationship between natural resources wealth and economic growth.

Poor is a word that we hear a lot in our everyday life. Poverty is usually connoted with a condition or state of being weak, deprived and vulnerable. No one want to be in that condition, but in economical system, there is always a group of people living in that condition. They are victims of an economical system that tends to be impartial to the limitations of the poor society. Poverty is a serious problem and will always be

a burden in an economy, thus, it needs to be taken into attention too. The continuous problem in this economic state, especially developing countries, shows that poverty is hard to handle. Poverty reduction programs have been widely conducted but many of these are either unsuccessful or not as expected.

Indonesia consists of several areas spread out from Sabang to Merauke, where some of these areas have the natural resources wealth and some do not. Areas that are rich for their natural resources are commonly still left behind from other regions due to the past policies that tend to centralize any development in Java Island. Hence, it is no longer surprising if in today regional autonomy, the regions having the great number of natural resources are now vying to catch up their lag by establishing many developments in various fields. The funds used for this development are mostly taken from natural resources revenue that has quite big value. This condition is way distinct from the previous regional autonomy, in which the results of natural resources are centrally managed and allocated based on the central government's priorities, without any clear share between the producing regions and the central government. Therefore, it does make sense if there is a region of natural resources producer only gains a small or not comparable portion to what has been produced.

3. Literature Rreview

3.1. Poverty

Poverty is a problem in development that must be faced by both the advanced and less advanced areas. Poverty is generally characterized by unemployment, backwardness and deterioration. The poor people are usually weak in their ability to try and are mostly limited in facilities and infrastructures access, capital and other socio-economic activities, so then they are left behind to those who have a higher potention. This such condition will generally lead to new problems, such as high crime level, moral and ethical decadence, low productivity and creativity and other social problems due to the heavy burden of the community's economy. Besides, poverty will hamper regional development, development equity and also economic democracy. Therefore, poverty alleviation programs should become the main priority in the regional development. Basically, poverty can be divided into two chronic poverty or structural poverty and transient poverty (Adisasmita, 2005). Chronic poverty or structural poverty is caused by; 1) Socio-cultural conditions that trigger people to unproductive attitudes and habits; 2) Limited resources and isolation especially for people who live in critical areas of

natural resources and remote areas; and 3) the low education level and health status, the limited employment and the community weakness in the market economy activity.

3.2. Economic growth and poverty

Poverty reduction programs in an economy will likely encounter the classic problem, that is, how to balance economic growth and poverty levels. This becomes a problem due to the positive correlation between economic growth and poverty as the result of the unequal income distribution. If it is ignored, this condition will finally widen the gap between the poor and the rich and potentially lead to social conflict in the future. Here, the government as a policy maker is demanded to guarantee that the economic growth must arise and the results can be enjoyed equally by the community, so that the gap can be narrowed and the poverty level can be decreased. Economic growth and poverty reduction are quite hard to be done simultaneously if we just rely on the market economy system.

To develop and advance an economy situation, the growth is a must. The growth could occur if there is only a productive activity. This productive activity could be done only by a "capable" group of people. With this opportunity, the "capable" community group will dominate the economic activity. The poor in this case can only wait for their "part" of the activities of "capable" community group. This phenomenon is known as the trickle down effect. With the effect of these bottom 5 droplets, the income redistribution is expected to exist and the poor will benefit from the economic growth.

3.3. Dutch disease and resource curse

The resource-rich countries that have undergone similar experiences with the decline of the domestic economic sectors, are traped in the "Dutch Disease" situation [7]. One important lesson in accordance to the development of areas with abundant natural resources could be noticed in Netherlands in the 1970s, which is later known as the "Dutch Disease". At that time the Dutch discovered natural gas in the northern sea and then they took it into the mining process. Since the amount of reserved gas is still enough, the Dutch exported. The export activity of those natural resources had successfully gained the market's interest, which then hooked up the appreciation towards the real exchange rate of the Dutch currency. This appreciation of the exchange rate will obviously lead to the price of domestic products in this case the manufacturing

sector would become relatively more expensive and less competitive among the international market. As the result, the domestic industry would be slack because it was hard to compete. In addition, the foreign exchange of natural gas exports were then used to buy imported products that become relatively cheaper.

4. Research Methods

This local economic development research is conducted through qualitative approach with explanatory research type. Bryman (2008, p.373) states that qualitative research is generally inductive, but some researchers carry out qualitative research to test theories, so that in qualitative research being deductive is also possible and there is no reason why qualitative research cannot be used to test the theories that are determined before data collection. This is in line with Batektine (2008), Silverman (2011), Creswell (2009) opinions. Qualitative research methods have been widely used in various social studies. There seems some confusion in terms of understanding qualitative methods which are often regarded as a complement to quantitative methods. This research would like to discuss some varied issues related to the advantages and disadvantages. We conclude that qualitative methods are potentially useful in its contribution to the development of social science theories and methodologies in the context of the case.

5. Discussion

5.1. Critics on the the resources curse paradigm

The first critic is definitely objected to the use of the term curse or the curse which is by no means a scientific term. In the 2007 Oxford dictionary edition, the curse is defined as a condition in which there is a series of calamities, catastrophes, disasters, or unpleasant events and happens continuously without being known when it lasts. By using causal analogy, the curse is reflected as a sin to be borne. What are the sins of those countries with such abundant natural and mineral resources?

The investigation and study results conducted by Auty (1993) provide exposures with the keywords of survival with natural and mineral resources dependence.These countries do depend their life sustainability on the natural wealth they own to be exploited in unwise ways. As a result, there is an increasingly widespread and prolonged horizontal conflict to take over the control on the rights of natural resources and minerals. Political instabilization is getting larger, causing the country hard to

develop due to the never-ending conflict. The impact of political instabilization causes the economy to decline, marked by increasing levels of poverty and unemployment. It is also stated that those countries will be familiar with their high corruption level, causing massive leakage in the government budget (Ross, 2006).

Indonesia is seen capable to get out of the curse of natural resources at the national level. The empirical findings indicate that Indonesia and Nigeria are two countries that have the same per capita income and are equally dependent on oil sales. Nevertheless, the current Indonesia's per capita income is four times higher than that of Nigeria [9]. The natural resources curse is considered to happen after the decentralization era and regional autonomy. Many regencies / municipalities receiving natural resource revenues experience low GDP (Gross Domestic Product) growth, high poverty rates, and low quality of human resources (HDI). To examine whether the natural resources curse in Indonesia occured at the sub-national level (regencies / municipalities), a correlation analysis between income-sharing fund (BDH) -SDA is conducted as well as welfare indicators such as economic growth, HDI, poverty, and local government performance.
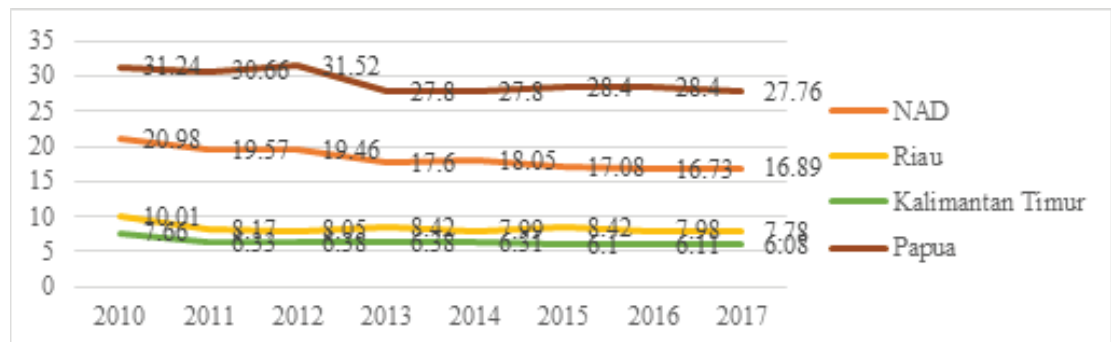

Figure 2: The Percentage of Poor people in the rich Area Resources Period 2010-2017. Source: Badan Pusat Statistika.

Table 1 shows the percentage of poor people in resource-rich areas (SDA) in 4 (four) provinces, that is Nangroe Aceh Darussalam (NAD), Riau, East Kalimantan and Papua. Papua is the province with the highest percentage of the population compared to the other four provinces that possess abundant natural resources. Although Papua is well-known as a rich region in its natural resources, but the percentage of poor people in Papua is very high. Along 2010-2107 period, the average percentage of poor people in Papua for 8 (eight) respectively is 29.20%.

The percentage of poor people in Papua is the highest in 2012 at 31.52%, and the lowest percentage of poor people in Papua occured in 2013 and 2014 at 27.8%. The poverty in a region is caused by several reasons, those are: Population growth rate, The

labor force, the working population, and the unemployement, Low education level, Lack of government attention dan Uneven income distribution

East Kalimantan is the province with the lowest percentage of poor people compared to the other three resource-rich provinces, the average percentage of poor people in East Kalimantan from 2010-2017 goes around 6.42%. The percentage of poor people in East Kalimantan was highest in 2010, at 7.66% and the lowest occured in 2017 at 6.08%.

Table 1 shows that Nangroe Aceh Darussalam is a province with abundant natural resources but it has a quite high percentage of poor people, with the average of 18.3% in 2010-2017, the highest percentage of poor people in Nangroe Province Aceh Darussalam took place in 2010 standing at 20.98%, and the lowest percentage of poor people in 2016 goes in 16.73%.

Riau is one of the provinces in Java Island owning abundant natural resources (SDA), but the percentage of poor people during 2010-2017 was noticed at 8.35%, the highest percentage of poor people in Riau Province happened in 2010, which was 10.01%, and the lowest occurred in the year 2017 with 7.78%.

TABLE 1: PDRB On the Basis of 2010 Constant Price In Resource-Rich Area From 2010 to 2017.

Tahun	Provinsi				Indonesia
	NAD	Riau	Kalimantan Timur	Papua	
2010	86 077 845.10	388 578 230	383 293 002.21	110 808 176.61	6 864 133 100
2011	92 729 148.30	410 215 840	407 435 383.39	106 066 723.39	7 287 635 300
2012	99 035 462.50	425 626 000	428 877 710.64	107 890 942.59	7 727 083 400
2013	106 455 515.10	436 206 000	438 532 906.74	117 118 818.9	8 156 497 800
2014	115 100 821.10	447 986 780	446 029 048.84	121 391 230	8 564 866 600
2015	124 080 817.22	448 991 960	440 676 356.22	130 459 910	8 982 517 100
2016	133 067 981.98	458 997 360	439 087 521.74	142 476 350	9 434 632 300
2017	141 727 536.93	471 419 900	452 847 479.45	148 823 629.06	9 912 749 300
Source: Badan Pusat Statistika					

Table 2 shows gross regional domestic product (GRDP) in provinces with abundant natural resources in Indonesia from 2010 to 2017. Riau is one of the provinces that possess the great amount natural resources and has the highest gross regional domestic product (GRDP) compared to the other three provinces, with the average of 436002758.8 million rupiahs, and the average share of 5.21% against Indonesia's Gross Domestic Product (GDP). The gross regional domestic product (GRDP) of Riau Province had increased steadily over the past seven years, the highest increase is noticed in 2011, arising at 5.6% from 2010.

Nangroe Aceh Darussalam (NAD) is the province with the lowest gross regional domestic product (GRDP) when compared to the provinces with abundant natural resources (based on Table 2). The average gross regional domestic product (GRDP) of Riau Province was noted at 112 284 391 million rupiahs during the year 2010-2017 or had a share value to Indonesia's GDP of 1.34%. The highest increase in gross regional domestic product (GRDP) of Riau Province occurred in 2014, rising about 8.12% from 2013.

Table 2 shows that the gross regional domestic product (GRDP) of East Kalimantan Province from 2010-2017 was fluctuative, with the average of gross regional domestic product (GRDP) of 429 597 426.2 million rupiahs. The highest increase occurred in 2012 by 6.30% from 2010, the decrease in gross regional domestic product (GRDP) was drastically happened in 2015 at around 1.2% from 2014.

Gross regional domestic product (GRDP) of Papua from 2010-2017 underwent fluctuation, the highest increase occurred in 2016, which is about 9.21% from 2015 or increased up to 142 476 350 million rupiahs. The most dractic decline in gross regional domestic product (GRDP) of Papua was noticed in 2011, down by 4.28% or decreased to 106 066 723.4 million rupiahs. The average gross regional domestic product (GRDP) of Papua from 2010-2017 was about 123 129 472.6 million rupiahs and had a share value at 1.47% of Indonesia's GDP.

Table 3 shows the percentage distribution of gross regional domestic product (GRDP) in resource-rich areas (SDA), such as Nangroe Aceh Darussalam (NAD, Riau, East Kalimantan and Papua in 2017. Nangroe Aceh Darussalam (NAD) is one of the agrarian province in Indonesia simply because in the percentage distribution of gross regional domestic product (PDRB), agricultural business field, plantation and fishery has given the biggest contribution in the PDRB of Nangroe Aceh Darussalam, at the point of 29.63%, while the field of Water Procurement, Waste Management, Waste and Recycling has provided the smallest contribution to the GRDP of Nangroe Aceh Darussalam (NAD) in year 2017 at 0.04%.

Business field giving the biggest contribution to the Riau's GRDP is Manufacturing Industry with 29.71%, while the smallest is the field of Water Procurement, Waste Management, Waste and Recycling and Services Company at only 0.01%. In East Kalimantan, the Mining and Quarrying business field has contributed 46.31 to the overal GDP of East Kalimantan Province in 2017, and the field of Electricity and Gas Procurement is the business field providing the smallest contribution to the East Kalimantan Province GRDP by 0, 03%.

TABLE 2: Percentage Distribution of PDRB On the Basis of Constant Price In Resource-Rich Area According to 2017 Business Field (percent).

Kategori dan Uraian	Provinsi			
	NAD	RIUH	KALTIM	PAPUA
Pertanian, kehutanan dan perikanan	29.63	25.30	796	10.80
Pertambangan dan penggalian	4.64	20.68	46.31	41.78
Industry pengolahan	5.14	29.71	19.07	1.94
Pengadaan listrik dan gas	0.13	0.06	0.05	0.03
Pengadaan air	0.04	0.01	0.05	0.05
Konstruksi	9.40	8.12	8.07	10.90
Perdangangan besar dan eceran	16.28	9.19	5.30	8.00
Transportasi	6.96	0.86	3.62	4.24
Penyedian akomodasi	1.52	0.46	0.93	0.67
Informasi dan komunikasi	2.97	0.87	1.26	3.56
Jasa keuangan	2.00	0.93	1.53	1.39
Real estate	4.08	0.90	0.88	2.36
Jasa perusahaan	0.62	0.01	0.21	1.11
Administrasi pemerintah	9.99	1.76	2.03	8.56
Jasa pendidikan	2.59	0.48	1.55	2.06
Jasa kesehatan	2.63	0.19	0.59	1.51
Jasa lainnya	1.39	0.49	0.62	1.03
Produk Domestik Regional Bruto	**100**	**100**	**100**	**100**

Table 3 shows that the Mining and Excavation business field gives the highest contribution to PDRB of Papua Province in 2017 by 41.78%, and the field of Procurement of Electricity and Gas becomes the smallest field to contribute to PDRB of Papua Province with 0.03%.

6. Closing

Basically, poverty is the problem of every economy in the world, both the economy of advanced or less advanced countries. The poverty problem usually comes up due to an unfair income distribution from the economic growth result. So far, the current view tends to contradict the rate of economic growth with equal income distribution. The policy makers are required to select one to be the purpose of development because it is regarded unable to be realized simultaneously. However, these two things are actually not contradictory to each other, even both can be combined together to reduce the

poverty level. To make it happen, the government must commit to reduce the gap that arises due to the economic growth.

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