

CHAPTER I

INTRODUCTION

1.1. Problem Identification

Economic inequality is one of the many complex and difficult economic problem to be handled because it influenced from various aspect (World Bank, 2016). These aspect do not only come from human resources, but also come from natural resources such as the differenced of geographical characteristic and natural potential. One of inequality problem that still exist in Indonesia is income inequality. According to Todaro (2006) income inequality problem should receive special attention because of the extreme regional inequality that caused economic inefficiency, inefficient asset allocation, weaken the social stability, increase the number of poor people, and strengthen the political power for the upper class to become stronger that can lead to injustice to the welfare society.

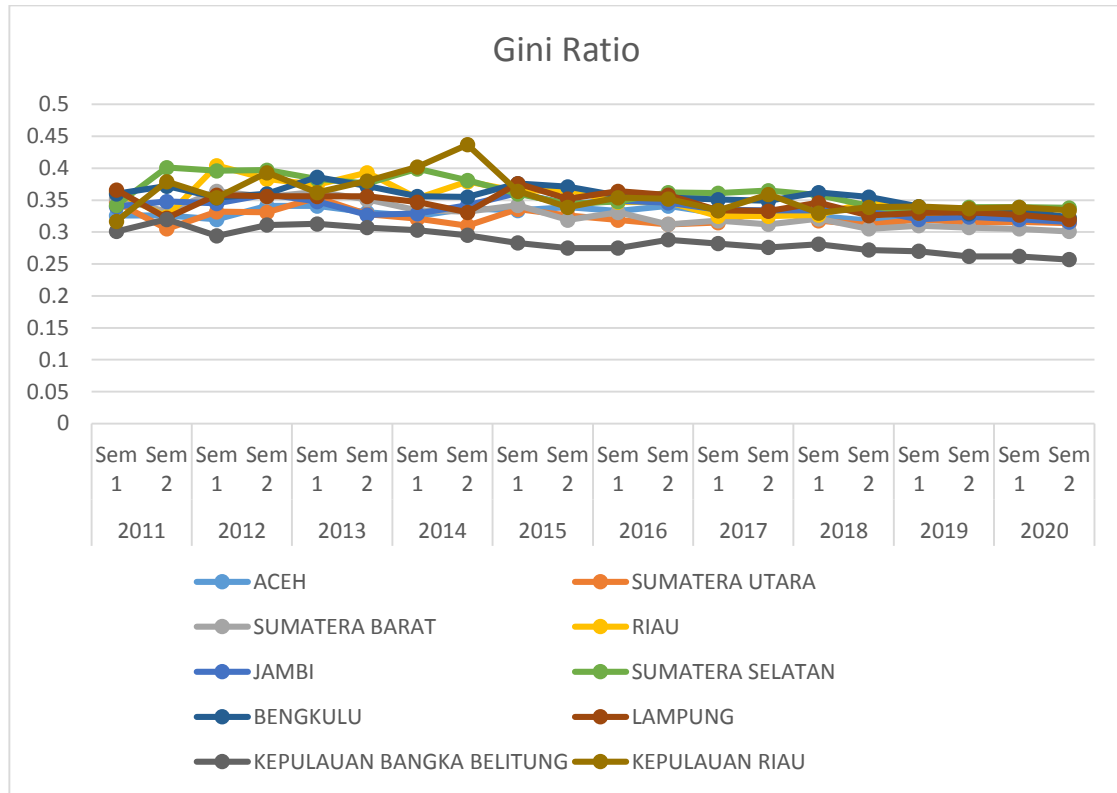
ADB (2012), found that higher income inequality can obstruct the economic growth in the country through social conflicts that occur in society. Besides, high income inequality will widen the gap between people that have higher income with middle class income people. Because, middle class people is one of the factor that can push the country's economic growth. According to Shorrocks et al (2019) in 2019, the 1% richest people in the world controlled 44% of global assets, while 55% of people that have assets no more than 10,000 US\$ controlled 2% of world assets.

One of the factor that can cause income inequality is structural poverty or economic status inherited between generations. Corak (2013) stated that where person begins life affects the outcome of the individual's future economic status. People who born from high-income family will have greater opportunity to enjoy various accesses to education and better health. This is in contrast to low-income families. Egawa (2013) found that people who born into poor families, as adults, the only receive 85% less income that people who born into rich families.

To find out how much income inequality occurs in a country, researchers generally use the Gini index as a measure of inequality. The greater the gini index value, the higher income inequality in a country.

Figure 1.1.

Graph of Percentage of Gini Ratio in Sumatera Island 2011-2020

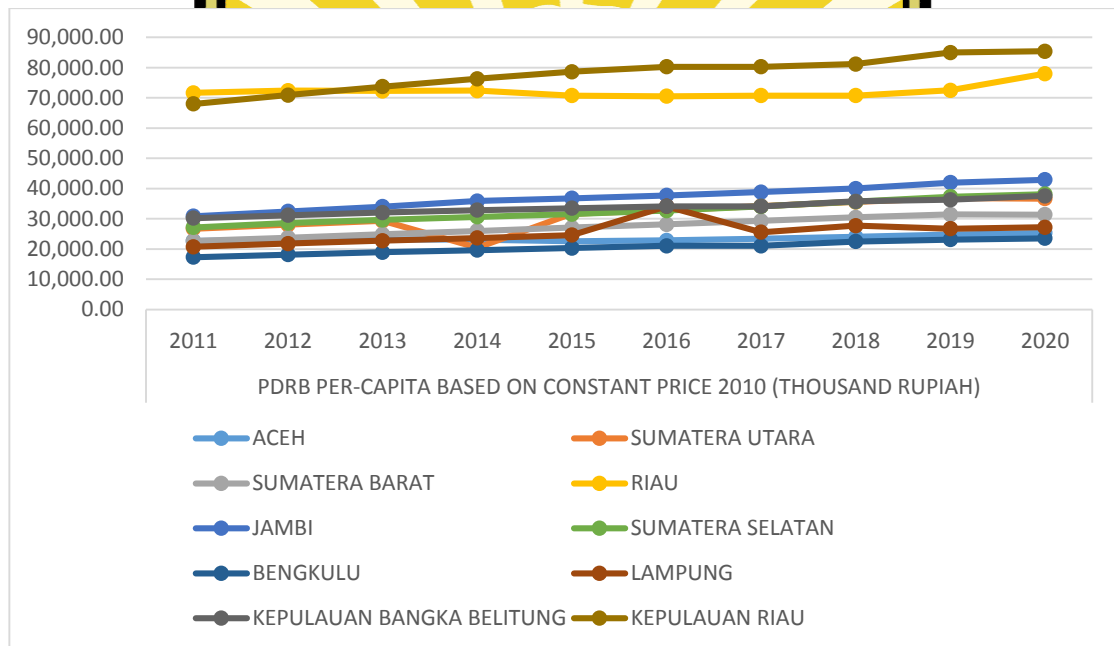


Source: Statistik Indonesia

It can be seen from the graph above, in the second semester of 2014 Riau islands have the highest gini ratio which is 0.437, and the lowest gini ratio in Sumatera Island is in Bangka Belitung Island which reach 0.275 in the second semester of 2015 and the first semester of 2015. The average gini ratio in the provinces of Sumatera Island are above 0.3. Although the provinces in Sumatera are so close and neighboring to each other, they have different gini index.

Income inequality can also be identified through per-capital GDRP data. GDRP per-capita is the average amount of income received by the community. Therefore, GDRP per-capita is able to show the level of welfare or prosperity of the population. A country can be said to be prosperous if the value of GDRP per-capita is high enough, and vice versa if the value of GDRP per-capita is getting lower, this indicates a higher level of inadvertence.

Figure 1.2
Graph of GDRP Per-Capita Based on Constant Price 2010 in Sumatera Island



Source: Statistic Indonesia (2021)

The graph above shows that the GDRP per-capita in 2011 Riau is the highest in Sumatera Islands and the lowest GDRP per-capita is Bengkulu. In 2020, the highest of GDRP per-capita is Riau Island with total amount is 85,425.89, and the lowest of GDRP per-capita is still Bengkulu. Although Riau island is one of the highest in gini ratio, but the gdrp per-capita is also high.

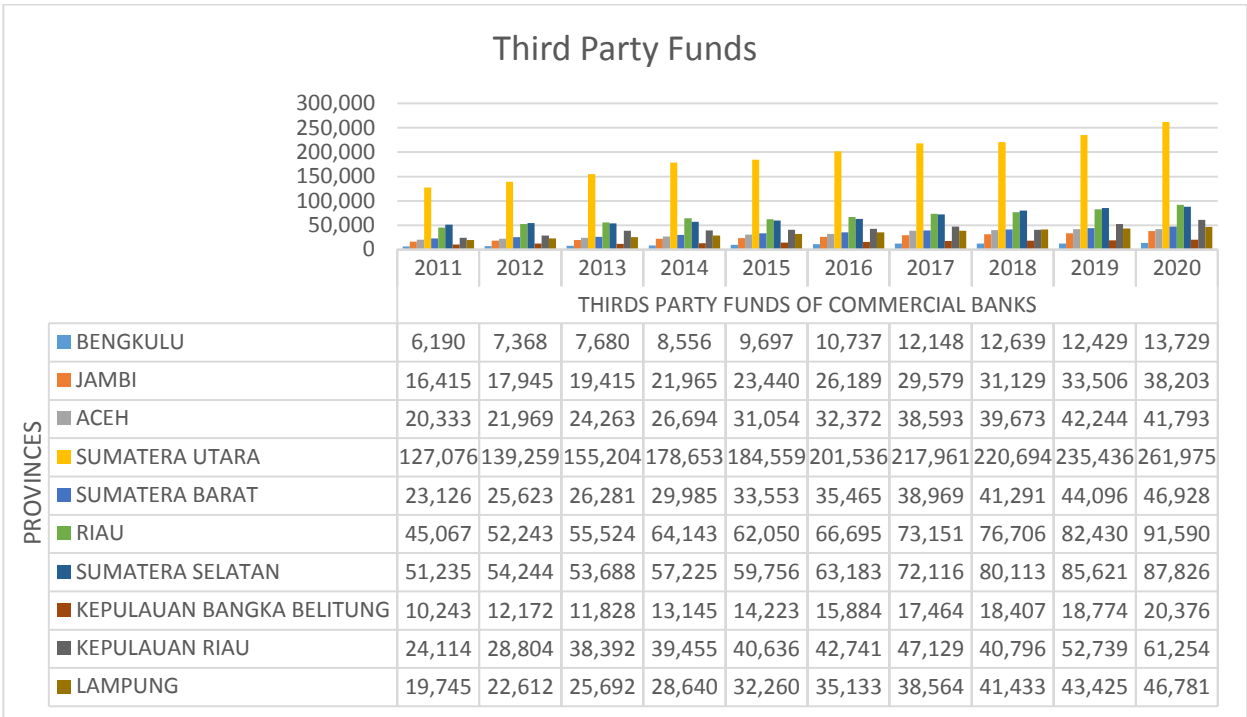
Another effort to overcome the income inequality can be done by increasing the financial inclusion. Park et al (2015) found that increasing financial inclusion can reduce poverty and income inequality in developing countries in Asia. However, a different finding by Ummah (2018) shows that income inequality and financial inclusion have one way relationship which means if income inequality increase, it will makes financial inclusion increase too. This is happen because people who use and access financial services only people with middle and higher income, and on the other hands people with lower income still find it difficult to access financial services. This obstacle is due to the low level of financial literacy.

According to World Bank, financial inclusion means that people have access to financial products and services such as transactions, savings, insurance, payment, and credit in a sustainable way. Nowadays, financial institutions shows a fairly rapid growth and it balanced with the modern technology advances. However, in reality the growth of financial institution is not accompanied with adequate financial access facilities in all regions. According to (Umar, 2017) the large opportunity for people to have access to financial and banking services reflects on the level of financial inclusion in the economy. Besides, Indonesia is included to the country with highest financial exclusion. From the data of Bank Indonesia (2011) it how that only about 24% of the percentage of household save in formal financial institutions and non-financial institutions. It is similar with data from World Bank (2014) which shows that only about 25% (age over 15 years) of Indonesians have access to formal financial institutions. This data indicates that public access to financial institution in Indonesia is still low and needs more improvement.

There is several dimension of financial inclusion according to G20 which are the usage of financial services, the access of financial services, quality of financial services. The figures below is the number of third party funds which includes savings, credits, borrows, which belongs to the usage dimensions.

Figure 1.3

Total Third Party Funds in Sumatera Island 2011-2020

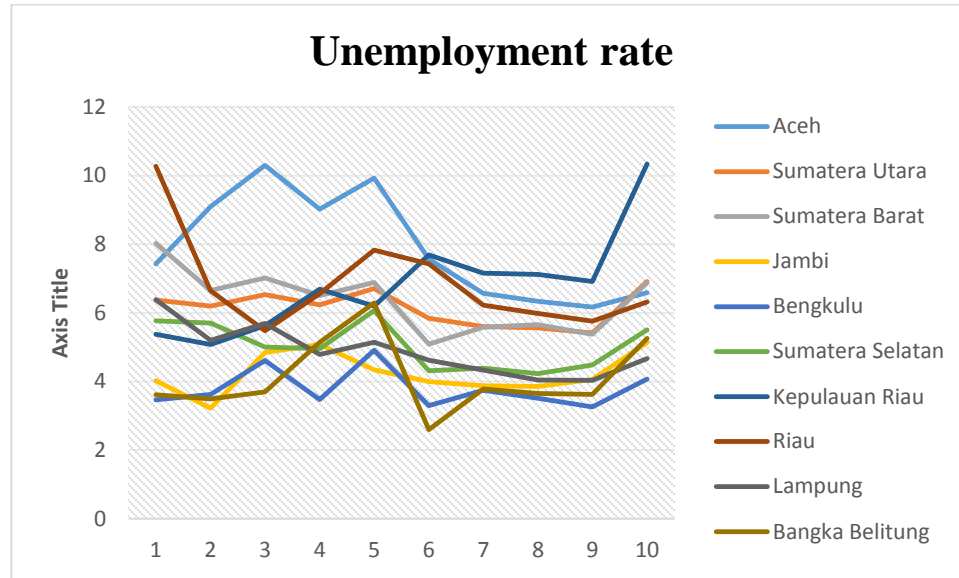


Sources: Financial Service Authority (2022)

Unemployment rate has a crucial role in reducing income inequality. The high unemployment rate can cause a person to not be able receive income or wages, this causes a widening gap between the rich and the poor. An increase in unemployment has an impact on aggravating income inequality (Cyene & Turchick, 2012). Therefore, if unemployment decreases, income inequality will also decrease

Figures 1.4.

Unemployment Rate in Sumatera Island 2011-2020



It can be seen from the table above, Riau leads the highest unemployment rate in 2011 with 10.27%. But in 2020 Riau islands has higher unemployment which reach 10.34. it has a significant increase from 2019 which only reach 6.91% This exceed the unemployment rate of Indonesia in 2020 which only reach 7.07%. The lowest unemployment rate is Bangka Belitung in 2016 which only reach 2.6%

According to Tobler's law everything is related with everything else, but something that is closer will have more effect than something that far away (Anselin, 1988). Inequality in the distribution of income which calculated using the Gini ratio cannot be separated from the influence of surrounding area. This indicates there is a spatial dependence. Spatial dependence occurs when the value of a phenomena is connected with the value of other phenomena in other regions (Anselin, 1988). If it be seen by substantive perspective spatial dependence plays an important and crucial role to create the geographical income distribution. In other hands, if it be seen from the

nuisance perspective, spatial dependence can be a tool to analyze the regional income inequality (Rey, S.J, 2004).

The relationship between the gini ratio with each region and city in Sumatera Island spatially can use spatial autocorrelation analysis. Spatial autocorrelation is used to identify that an area has a relationship with other area that are located close together. The scope of spatial analysis is the relationship between regions which is seen as a positive or negative autocorrelation. A positive autocorrelation happens when the areas with certain characteristics is in an environment that has the same characteristics, while a negative autocorrelation happens when an area with certain characteristics is in an environment with different characteristics from the region. Based on this problem identification, a research will be conduct with the title “Income Inequality and Financial Inclusion in Sumatera Region: A Spatial Panel Data Analysis”

1.2.Problem Statements

1. Do financial inclusion, unemployment, and economic growth affect income inequality in region/cities in the Sumatera Islands?
2. Is there a spatial relationship between regency/city in the Sumatera Island?

1.3.General Research Objectives

This research was conducted to find out how the influence of financial inclusion, unemployment, and economic growth on income inequality and to see how the spatial relationship between regencies/cities on the island of Sumatra.

