CHAPTER I

INTRODUCTION

1.1 Background

The development of metropolitan areas has become one of the main dynamics in regional economic development in Indonesia. As a center of agglomeration for industrial, trade, and service activities, metropolitan areas play a strategic role in driving both regional and national economic growth. The availability of relatively more complete infrastructure, capital concentration, and extensive market linkages make metropolitan areas the locomotive of economic growth. However, the pattern of development centered on metropolitan areas also harbors the potential for structural problems, particularly regarding inter-regional development inequality, both between metropolitan and non-metropolitan areas and within a single metropolitan area itself (Sulmiah & Widyawati, Herlina Sakawati Rukmana, 2024).

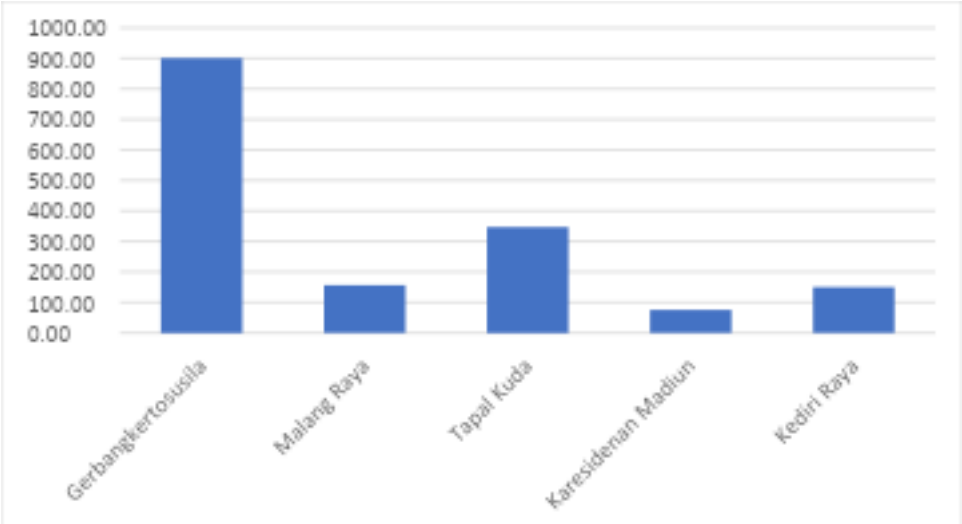
The phenomenon of economic activity concentration in large metropolitan areas also occurs in various regions of Indonesia, including in East Java Province. In the context of regional development, the strengthening of metropolitan areas in East Java is carried out through the designation of several strategic economic zones with the aim of improving regional efficiency and competitiveness. Theoretically, this approach is expected to create a multiplier effect for surrounding areas. However, in practice, the process of economic agglomeration does not always proceed in a balanced manner. Economic activities tend to concentrate in certain areas that possess initial advantages, thereby potentially giving rise to

disparities among strategic zones within a single province (Adryawning & Widiyanto, 2025).

East Java Province has several economic zones with different characteristics and capacities. These differences are reflected in the variation of each zone's contribution to the formation of the Regional Gross Domestic Product (RGDP) of the province. This condition indicates that not all strategic zones play an equal role in supporting the economy of East Java (Ayuningtyas et al., 2023).

Among these strategic zones, Gerbangkertosusila occupies the most prominent position. This area functions as a center of government, trade, industry, services, and logistics that connects East Java with national and international economic networks. Its geographical advantages, availability of transportation infrastructure, and the concentration of large-scale economic activities make Gerbangkertosusila the primary hub of economic output accumulation in this province (M. Simalango & R. Setiawati, 2024).

Figure 1. 1 Graph of Regional Gross Domestic Product (RGDP) of Economic Regional Groups in East Java 2025 In Trillion Rupiah Units



Source: BPS (2026)

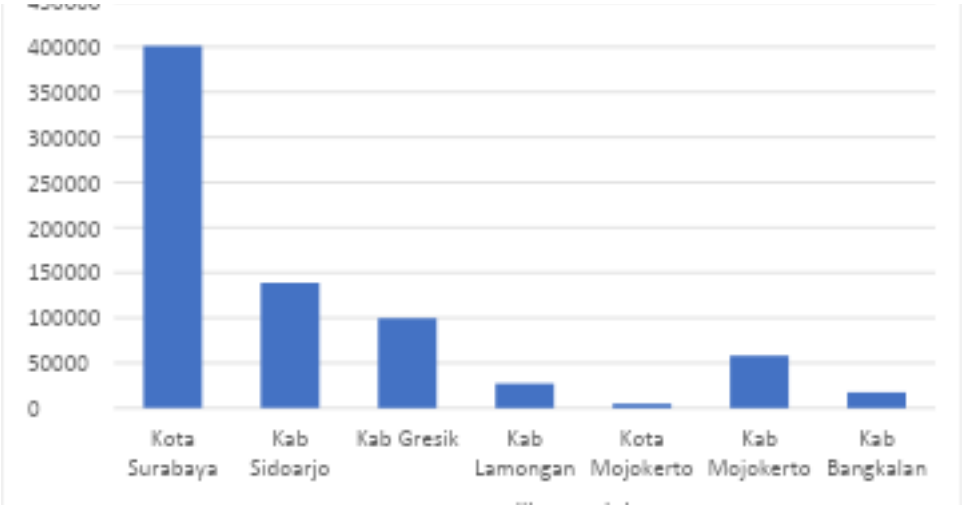
From the graph, a significant difference in economic capacity among strategic zones in East Java Province is evident. The Gerbangkertosusila region occupies the highest position with a RGDP value of approximately IDR 900,489 billion, far surpassing other strategic zones. While the average RGDP of strategic zones in East Java stands at around IDR 325 thousand billion, Gerbangkertosusila's RGDP is nearly three times greater than that average. Of all strategic zones, only Gerbangkertosusila and Tapal Kuda recorded RGDP levels above the average, while the remaining zones fell below it.

This condition indicates a strong concentration of economic activity in one main metropolitan area. The striking difference in RGDP values among zones is not marginal in nature, but rather reflects a structural gap in regional economic contribution. In other words, the economic structure of East Java shows a relatively high dependence on the economic performance of Gerbangkertosusila, while the role of other strategic zones in regional output formation remains limited.

The dominance of Gerbangkertosusila becomes even more apparent when analyzed based on its contribution to the total RGDP of East Java Province. This region contributes approximately 47 percent of the province's total RGDP, amounting to IDR 900,489 billion out of a total of IDR 1,935,896 billion. This means that nearly half of East Java's economic activity is supported by a single metropolitan area, while regions outside Gerbangkertosusila collectively contribute around 53 percent (BPS JATIM, 2025)

The magnitude of this contribution affirms Gerbangkertosusila's role as the backbone of East Java's economy. Nevertheless, this structure also indicates a dependency that potentially widens development inequality if economic growth is not accompanied by inter-regional equalization. Furthermore, the concentration of RGDP at the regional level does not automatically reflect equitable development within that region. Differences in economic contribution among regencies and cities within Gerbangkertosusila serve as an early indication of potential internal inequality, making it necessary to measure economic inequality systematically through a measurable approach (Ikhlasi et al., 2025).

Figure 1. 2 Graph of Average Regional Gross Domestic Product (RGDP) of Regencies/Cities in the Gerbangkertosusila Region, 2016–2025 In Billion Rupiah Units



Source: BPS (2026)

Based on the graph above, it is evident that the distribution of economic activity within this metropolitan area also reflects a sharply unequal pattern. The City of Surabaya dominates with an average RGDP of approximately IDR 400,818 billion over the 2016–2025 period, far surpassing other regencies and cities within the same region. In contrast, Bangkalan Regency recorded an average RGDP of

only around IDR 17,475 billion, representing merely a fraction of the economic achievement of the metropolitan core area.

This inequality becomes even more apparent when compared to the average RGDP of all regencies and cities in East Java Province, which stands at around IDR 50.9 thousand billion. This figure shows that Surabaya's RGDP reaches nearly eight times the provincial average, while several other areas within Gerbangkertosusila actually fall below or are close to the provincial average. This disparity demonstrates that economic dominance within a metropolitan area does not only occur at the provincial level, but is also reflected in internal inter-regional gaps within the region itself.

In general, these differences in RGDP values provide an initial picture of macroeconomic inequality based on the absolute measure of regional output. However, a nominal RGDP comparison does not fully reflect the level of inequality in quantitative terms, as it does not yet account for the relative distribution across regions nor differences in population size among each regency and city.

Therefore, a more systematic and measurable approach to inequality measurement is needed, using the Williamson Index, which is specifically designed to analyze inter-regional economic disparities based on per capita RGDP and population-weighted figures. The use of this indicator enables a more comprehensive assessment of inequality levels, thereby reflecting a more accurate picture of the distribution of development within the Gerbangkertosusila region (Williamson, 1965).

Theoretically, economic development is expected to promote equitable welfare through the mechanism of inter-regional growth diffusion, whereby progress in core areas can spread to surrounding regions through production linkages, trade, and factor mobility. However, from the perspective of unbalanced growth theory proposed by Albert O. Hirschman (1958), the development process tends to concentrate in areas that already possess initial advantages, such as more adequate infrastructure, broad market access, and a more developed industrial and service base. This concentration causes advanced regions to further strengthen their position as growth centers, while other areas face limitations in catching up.

In the context of Gerbangkertosusila, this tendency is reflected in the economic dominance of the core area, accompanied by high levels of internal inequality as indicated by the Williamson Index values. This condition reveals a gap between the goal of inclusive development and the reality of a still-centralized metropolitan economic structure.

Previous studies have examined regional economic inequality using various indicators and analytical approaches. Khairunnisa and Maryunani (2024), for instance, analyzed inter-provincial development inequality on the island of Java using the Williamson Index and panel data regression, emphasizing the role of investment, capital expenditure, and economic growth in influencing inequality. Their findings indicated that capital expenditure has a positive effect on inequality, while economic growth has a negative effect, suggesting that increased output does not always go hand in hand with equitable inter-regional development.

Meanwhile, Fitriyah and Rachmawati (2013) used the Williamson Index to examine regional development inequality in the Gerbangkertosusila area and its relationship with community welfare. Their findings showed that per capita RGDP affects inequality, with Surabaya playing the role of the main economic center that drives increasing inter-regional inequality. Nevertheless, that study placed greater emphasis on the relationship between inequality and general welfare indicators, and did not explicitly examine the simultaneous role of demographic, investment, labor market, and educational factors within a single integrated empirical framework.

Based on a review of these studies, it can be concluded that research on regional economic inequality has advanced, yet there remains analytical space that warrants further exploration. In particular, studies focusing on economic inequality among regencies and cities within a single functionally integrated metropolitan area, using the Williamson Index that accounts for population weights and combines income, demographic, investment, labor market, and educational factors within a single empirical model, remain relatively limited. Therefore, this study is directed at filling that analytical gap by examining the dynamics of economic inequality in the Gerbangkertosusila region over the 2016–2025 period in a more comprehensive manner.

Departing from the limitations of previous studies that have not comprehensively analyzed internal economic inequality within a single metropolitan area while accounting for differences in economic capacity and population distribution across regions, the use of the Williamson Index is particularly relevant in this research. The Williamson Index enables the measurement of economic inequality among regencies and cities based on

variations in per capita RGDP weighted by population size, thereby capturing the characteristics of regional economic inequality more accurately. This approach is highly suitable for the context of a metropolitan area such as Gerbangkertosusila, which exhibits a high degree of regional heterogeneity and strong economic linkages between core and buffer zones (J. Williamson, 1965).

Furthermore, given that economic inequality in metropolitan areas is not only influenced by differences in output capacity across regions, but also by interrelated structural factors, the analysis of economic inequality needs to be placed within a broader empirical framework. Differences in per capita income levels, population dynamics, investment concentration, labor market conditions, and variations in human resource quality all have the potential to influence the magnitude of inter-regional economic inequality in the Gerbangkertosusila region. Therefore, the measurement of economic inequality levels must be accompanied by an analysis of the factors that simultaneously explain the variation in such inequality (Myrdal, 1957).

Based on the foregoing, this study is directed at addressing two main research questions. First, what is the level and development of economic inequality among regencies and cities in the Gerbangkertosusila region during the 2016–2025 period based on the Williamson Index measurement. Second, what factors influence inter-regional economic inequality, particularly those related to per capita income, population size, investment, open unemployment rate, and education.aThus, this study is expected to provide a deeper empirical understanding of the dynamics of economic inequality in the Gerbangkertosusila metropolitan area, as well as serve

as a basis for the formulation of more targeted, inclusive, and equitable regional development policies.

1.2 Problem Statement

Based on the background described above, the research questions in this study are as follows:

1. Does Regional Gross Domestic Product per capita affect Economic Inequality in the Gerbangkertosusila region?
2. Does Population Size affect Economic Inequality in the Gerbangkertosusila region?
3. Does Investment affect Economic Inequality in the Gerbangkertosusila region?
4. Does the Open Unemployment Rate affect Economic Inequality in the Gerbangkertosusila region?
5. Does Education affect Economic Inequality in the Gerbangkertosusila region?

1.3 Research Objective

Based on the background and research questions above, the objectives to be achieved in this study are:

1. To analyze and prove the effect of Regional Gross Domestic Product per capita on Economic Inequality in the Gerbangkertosusila Region.
2. To analyze and prove the effect of Population Size on Economic Inequality in the Gerbangkertosusila Region.

3. To analyze and prove the effect of Investment on Economic Inequality in the Gerbangkertosusila Region.
4. To analyze and prove the effect of the Open Unemployment Rate on Economic Inequality in the Gerbangkertosusila Region.
5. To analyze and prove the effect of Education on Economic Inequality in the Gerbangkertosusila Region.

1.4 Scope of Research

The scope of this research is as follows:

1. The object of this study focuses on economic inequality among regencies and cities in the Gerbangkertosusila region as the dependent variable, along with Regional Gross Domestic Product per capita, population size, investment, open unemployment rate, and education as the independent variables.
2. The data used are annual data covering the 2016–2025 period, selected to reflect the dynamics of regional economic inequality before the pandemic, during the COVID-19 pandemic, and in the economic recovery phase, as well as coinciding with two regional development planning cycles, namely the Regional Medium-Term Development Plan (RPJMD) of 2016–2020 and the RPJMD of 2021–2025, whereby the research findings are expected to provide an overview of the development of economic inequality across two regional development planning periods.
3. The data used in this study are secondary data obtained from the Central Statistics Agency (BPS) of Indonesia, the BPS of East Java Province, and the Investment Coordinating Board (BKPM).

1.5 Benefits of Research

This research is expected to provide the following benefits:

1. Theoretical Benefits

   To serve as a reference for future researchers who wish to examine macroeconomic variables in the Gerbangkertosusila region using the most recent data coverage.

2. Practical Benefits

   To serve as strategic input for the East Java Provincial Government in formulating more effective economic policies.