V. CONCLUSIONS AND IMPLICATIONS

A. Conclusion

Based on the above research, it can be concluded into several points as follows:

1. Analysis of development inequality between provinces in Java from 2017 to 2023, measured by the Williamson Index, shows a high inequality classification. East Java Province is the region with the highest level of development inequality, followed by West Java, Central Java, Banten, DKI Jakarta, and Yogyakarta, which are classified as high. Meanwhile, D.I. Yogyakarta is the province with the lowest inequality even though it is still included in the category of moderate inequality.
2. The variables of the open unemployment rate, the Human Development Index, capital expenditure, and the growth rate of the industrial sector have a positive and significant effect on development inequality in Java in 2017-2023.
3. Capital expenditure variables are the most effect variable on development inequality in Java Island in 2017-2023.

B. Implications

1. Theoretical Implications

This research reinforces the main economic development theories related to regional development inequality. The persistent inequality of development on the island of Java, especially in East Java, shows that rapid economic expansion does not always translate into balanced regional development. In addition, this study has an effect on Myrdal's understanding of the theory of cumulative causation, especially in discussing HDI which has a positive effect. According to the theory of Cumulative Causation, an increase in HDI can worsen development inequality. Developed areas will continue to develop rapidly (self-reinforcing growth), while disadvantaged areas are increasingly difficult to pursue due to limited human resources and investment. This occurs due to the backwash effect, where economic growth tends to be faster in developed areas than in disadvantaged areas. Then this study also provides an understanding of the growth pole theory which emphasizes that high unemployment and disparities in capital expenditure allocation can exacerbate regional economic disparities.

2. Practical Implications

The findings of this study have several implications for regional development planning in reducing regional inequality, especially on the island of Java as explained below:

a) The findings of this study show that the unemployment rate has a significant and positive effect on regional development inequality. These results show that governments or policymakers should have labor market reforms and more job creation. The significant positive relationship between open unemployment rates and development inequality explains the need for more open job creation. Government interventions, such as skills training programs, capital or investment for labor-intensive industries, and support for small and medium-sized enterprises (SMEs), can help reduce inequality driven by unemployment.

b) The results of this study show that the increase in the Human Development Index (HDI) has a significant and positive effect on development inequality due to the lack of equitable distribution of development and human resources. The main implication of this finding is the need for development policies that are not only focused on growth poles region, but are specifically directed at strengthening regions that still have low HDI, especially in underdeveloped and rural areas. In order to generalize development strategies, the government needs to recognize and strengthen the unique characteristics of each region. Regions with low HDI generally have structural challenges such as limited access to education, low quality of health services, and lack of economic opportunities. Therefore, the development approach should be more place-based, which means tailoring policies to the local potential and specific needs of each region. Then the government must create inclusivity in the three sectors in disadvantaged or rural areas that can reduce inequality. With better access to education, people in these areas can get better skills and wider competitiveness. On the other hand, adequate health facilities will improve people's quality of life and productivity.

c) The results of this study have findings that capital expenditure has a significant and positive effect on regional development inequality. Therefore, the government can distribute capital expenditure more evenly because capital expenditure has the most significant effect on development inequality. The government can make policies that must ensure a more balanced allocation of infrastructure and development funds in all regions, especially in areas with high inequality and areas that tend to be left behind.

d) The effect of industrial sector growth has a positive and significant effect on regional inequality. This suggests that the uneven pace of industrial growth can exacerbate regional inequality if not balanced with policies that encourage equitable development. Therefore, the government can create several policies such as more industrial zoning based on the potential of the area, improving the quality of the workforce by, and attracting investment by providing flexibility in regulation and local economic planning.

e) The government can distribute capital expenditure fairly because capital expenditure has the most significant effect on development inequality. Policymakers must ensure a more balanced allocation of infrastructure and development funds across regions, especially in areas with high inequality such as East Java.

C. Limitations of Research

The author realizes that this research still has many limitations. Therefore, it is hoped that further research that discusses development inequality can minimize the limitations that exist in this study, namely:

1. This study has limitations in terms of spatial and temporal data, which are limited to the provincial level, thus not capturing the dynamics of inequality at a more detailed level such as district/city.
2. This study has limitations due to uncontrollable factors such as variables that cause inequality without considering other factors such as government policies, program effectiveness, budget governance, and local context.