

THE INFLUENCE OF HDI, MSMES, SOCIAL EXPENDITURE, CAPITAL EXPENDITURE, AND WORKFORCE ON INCOME INEQUALITY IN MAGELANG CITY

Keisha Zaharani Salsabil^{1*}, Dwita Aprillia Floresti², Istiqomah³, Suparjito⁴

¹⁻³ Development Economics, Jenderal Soedirman University, Indonesia

⁴ Directorate General of Treasury Central Java, Indonesia

*Corresponding author: dwitafloresti@unsoed.ac.id

Abstract

This study aims to examine the influence of the Human Development Index (HDI), the number of Micro, Small, and Medium Enterprises (MSMEs), social expenditure, capital expenditure, and number of workforce on income inequality in Magelang City. A quantitative approach was employed using multiple linear regression analysis based on time series data. The classical assumption tests confirm that the model meets the statistical requirements, including normality, absence of multicollinearity, heteroscedasticity, and autocorrelation. The findings reveal that HDI has a positive and significant effect on income inequality, suggesting that the benefits of development are not yet equitably distributed among all social groups. The number of MSMEs shows a positive but insignificant effect, indicating that their presence has not directly contributed to reducing inequality. Conversely, social expenditure, capital expenditure, and number of workforce have a negative and significant impact on income inequality, highlighting their role in fostering income distribution equity. These results suggest that local governments should prioritize inclusive and sustainable policies that promote equal access to development outcomes and economic opportunities.

Keywords: Income Inequality, HDI, MSMEs, Social Expenditure, Capital Expenditure, Workforce.

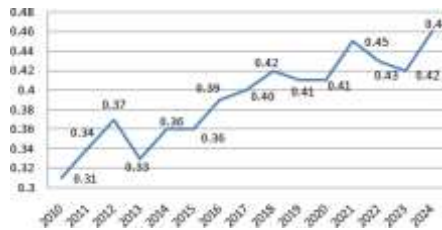
INTRODUCTION

Economic development is a series of strategic efforts aimed at strengthening a country's economic structure and improving the standard of living of its people. While economic growth is one of the main indicators of development success, it is no longer considered sufficient unless accompanied by equitable distribution of wealth, reduction of interregional disparities, and the narrowing of income inequality among various social groups (Suharno & Anwar, 2023). In this context, economic development must be implemented systematically and directed toward sustainable growth, the creation of employment opportunities, and the enhancement of education and health quality, factors that ultimately increase public welfare.

Over time, economic growth should theoretically lead to higher per capita income. However, in practice, the benefits of growth are often unequally distributed. High-income groups tend to accumulate the majority of economic gains, while low-income communities receive a disproportionately small share of national wealth. This imbalance can result in the inefficient allocation of resources, rising poverty levels, weakened social cohesion, and long-term economic instability. Income inequality, therefore, becomes a significant barrier to inclusive and sustainable development (Todaro & Smith, 2006).

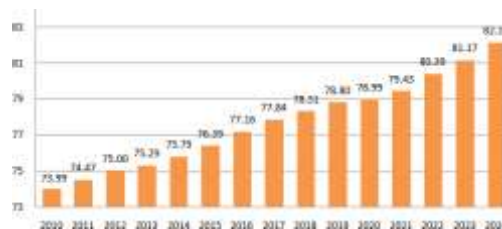
Income inequality is a condition in which income distribution among individuals or groups within a region or country is highly uneven. The Gini Ratio is commonly used to quantify this inequality, ranging from 0 (perfect equality) to 1 (perfect inequality). In Indonesia, a country with diverse natural resources and development potential, economic activities remain concentrated in major urban centers, particularly on Java Island. Cities such as Jakarta, Bandung, and Semarang have become magnets for growth, while smaller cities and rural areas continue to lag in infrastructure,

economic opportunity, and access to education and healthcare. Here is the Gini Ratio data in Magelang City:



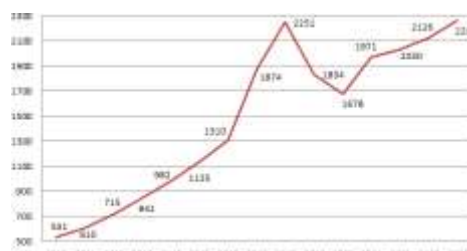
Source: Central Statistics Agency (2025)
 Figure 1. Gini Ratio Magelang City 2010-2024

Income inequality is one of the main indicators that reflects the uneven distribution of development outcomes. Inequality arises when income distribution within a region is unbalanced, creating stark differences between wealthy and poor populations. According to Figure 1, this condition is reflected in the Gini ratio. In 2023, Indonesia's national Gini ratio was recorded at 0.382, while Central Java Province stood at 0.367. However, Magelang City reported a much higher figure of 0.440, making it the region with the highest income inequality among the 35 regencies/cities in Central Java over the past four years. In fact, the Gini ratio in Magelang City sharply increased to 0.46 in 2024, indicating a widening economic gap among its residents. Several factors are presumed to influence the high level of inequality in Magelang City. One of the things that influences income inequality is the Human Development Index. Here is the HDI data in Magelang City:



Source: Central Statistics Agency (2025)
 Figure 2. HDI Magelang City 2010-2024

According Figure 2, the HDI reflects the quality of human capital through three key dimensions, health (life expectancy), education (average and expected years of schooling), and a decent standard of living (per capita expenditure). Magelang City's HDI increased from 73.99 in 2010 to 82.15 in 2024. However, this improvement did not automatically lead to reduced income inequality. The benefits of human development appear to be disproportionately enjoyed by middle to high income groups, indicating uneven access to developmental gains. Income inequality isn't only influenced by HDI, but also by MSMEs. Here is the MSMEs data in Magelang City:



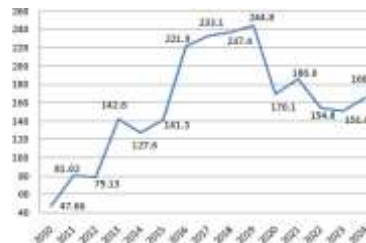
Source: Magelang City Industry and Trade Agency (2025)
 Figure 3. MSMEs Magelang City 2010-2024

According Figure 3, MSMEs play a vital role in creating jobs and empowering local economies. In Magelang City, the number of MSMEs grew from 531 businesses in 2010 to 2,263 in 2024. However, the majority are micro-enterprises operating informally in sectors like street vending and basic services. Their limited scale and access to capital constrain their capacity to reduce inequality. Without improvements in productivity and competitiveness, the expansion of MSMEs may even exacerbate income disparities among economic actors. In addition to MSMEs, one of the government's efforts to encourage economic equality is through social expenditure. Here is the Social Expenditure data in Magelang City:



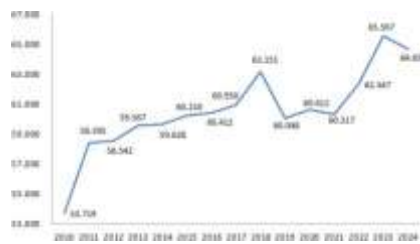
Source: Direktorat General of Financial Balance (2025)
 Figure 4. Social Expenditure Magelang City 2010-2024

According Figure 4, Social expenditure serves as a fiscal instrument aimed at supporting the poor and vulnerable through cash transfers, subsidies, and social protection programs. In Magelang City, social expenditure has fluctuated significantly, from IDR 6.57 billion in 2010, dropping to just IDR 0.20 billion in 2021, increasing again to IDR 12.16 billion in 2023, and then falling back to IDR 2.88 billion in 2024. This instability reflects suboptimal planning and allocation of social budgets. If implemented in a targeted and consistent manner, social expenditure could be a highly effective tool for reducing income inequality. Income inequality is also caused by differences in economic activity due to uneven distribution of infrastructure through capital expenditure. Here is the Capital Expenditure data in Magelang City:



Source: Direktorat General of Financial Balance (2025)
 Figure 5. Capital Expenditure Magelang City 2010-2024

According Figure 5, Capital expenditure represents local government investments in physical development and public infrastructure such as roads, health facilities, and schools. Magelang City's capital expenditure peaked at IDR 244.8 billion in 2019, before declining due to the COVID-19 pandemic. Adequate infrastructure is essential for expanding access to essential services and economic opportunities for the poor. When properly and equitably allocated, capital expenditure can significantly reduce income disparities. Income inequality can also be caused by employment factors. Here is the Workforce data in Magelang City:



Source: Central Statistics Agency (2025)
 Figure 6. Workforce Magelang City 2010-2024

According Figure 6, The workforce is a key indicator of the extent to which the population is involved in economic activities. In 2024, the number of employed individuals in Magelang City rose to 64,651. However, the labor market is largely dominated by informal employment with low job quality. BPS data shows that 78.81% of the workforce is employed in the service sector (e.g., retail, hospitality), while only 19.45% are in industry. This imbalance suggests that despite high employment rates, the current job structure has yet to effectively support income equality.

Given these conditions, it is important to conduct further research that examines how HDI, the number of MSMEs, social expenditure, capital expenditure, and workforce affect income inequality in Magelang City during the period 2010–2024. This study aims to provide deeper insights into the determinants of income distribution in a small, densely populated urban area and offer relevant policy recommendations to sustainably reduce economic inequality.

LITERATURE REVIEW AND HYPOTHESIS FORMULATION

Income inequality refers to the disparity in income distribution among individuals or groups within a region or country. According to Dongoran et al. (2024), inequality emerges when certain population groups receive substantially higher income than others. The Kuznets Inverted-U Hypothesis explains the dynamic relationship between economic growth and inequality, initially, growth increases inequality, but over time it reduces it as development spreads (Todaro & Smith, 2006). The Gini Ratio, introduced by Corrado Gini (1912), is commonly used to measure inequality, where values closer to 1 represent higher inequality and values near 0 indicate more equal distribution (Charles et al., 2022).

The Human Development Index (HDI) evaluates development outcomes across health, education, and income dimensions (Karyono et al., 2021). As an indicator of human quality, HDI affects productivity and wage disparity. Improvements in HDI can reduce inequality by enabling broader access to education and health, though some studies (e.g., Fergiawan, 2018) note that the benefits may initially concentrate among higher-income groups. According to Salsabila (2024), HDI has a negative effect on income inequality. Education and health improve labor productivity, in line with human capital theory, which ultimately contributes to increased income and reduced inequality.

MSMEs play a crucial role in job creation and equitable economic participation, especially for low-income populations (Hartarto, 2021; Tambunan, 2017). According to Winarni & Hartono (2023) the number of MSMEs has a negative effect on income inequality, the growth of MSMEs contributes significantly to reducing income inequality by absorbing labor and boosting local income, particularly in labor-intensive sectors.

Social expenditure is a government fiscal policy tool to redistribute income and mitigate social risks. Dharmakarja (2017) and Alfath et al. (2025) state that social expenditure can reduce inequality if efficiently targeted. However, its effectiveness depends on accurate allocation, accessibility, and infrastructure support, as noted by Yasni (2020). According to Ramdani (2024), social expenditure has a negative effect on income inequality, as it increases access to basic needs for the poor.

Capital expenditure (CapEx) includes investments in long-term assets such as infrastructure.

According to Todaro (2000), Capital Expenditure has a negative effect on income inequality, emphasized that equitable CapEx can enhance public services and job opportunities, promoting economic inclusion. Nonetheless, Yasni & Yulianto (2020) warned that poorly targeted capital expenditure may increase inequality by favoring already developed sectors or regions. The workforce significantly influences income distribution. High participation and employment levels can lower inequality by increasing income access across broader populations (Caesario et al., 2021). However, disparities in wages and employment quality can persist, especially if job creation lags behind population growth (Majid, 2021). According to Pradnyaswari et al. (2020), the higher the workforce participation, the greater the economic output produced, which leads to increases in GDP and GRDP per capita, as well as a reduction in inequality.

Based on theoretical foundations, previous research, and an assessment of the IPM, number of MSMEs, social spending, capital spending, and number of workers with income inequality, the conceptual framework for this study is as follows:

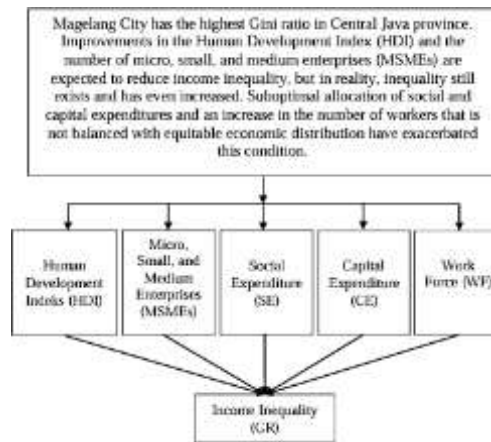


Figure 7. Conceptual Framework

Based on theoretical arguments and empirical findings from previous studies, the hypothesis can be developed:

- H1: Human Development Indeks has a negative effect on Income Inequality.**
- H2: Number of MSMEs has a negative effect on Income Inequality.**
- H3: Social Expenditure has a negative effect on Income Inequality.**
- H4: Capital Expenditure has a negative effect on Income Inequality.**
- H5: Number of Workforce has a negative effect on Income Inequality.**

RESEARCH METHODS

This research employed a quantitative approach aimed at analyzing the effect of several macroeconomic indicators on income inequality in Magelang City from 2010 to 2024. Quantitative methods were selected because they allow social phenomena to be described numerically through the collection and analysis of measurable data using systematic statistical tools (Anshori & Iswati, 2019). The focus of this study is income inequality, which serves as the dependent variable. The independent variables include the Human Development Index (HDI), the number of Micro, Small, and Medium Enterprises (MSMEs), social expenditure, capital expenditure, and the workforce size.

The research was conducted in Magelang City, which consistently recorded the highest income inequality in Central Java Province during the period under review. The study population comprised economic indicators relevant to income inequality in the region, while the research sample was drawn from annual data collected between 2010 and 2024. This research used secondary data, which

were obtained from previously recorded sources, including the Central Bureau of Statistics (BPS), the Directorate General of Fiscal Balance (DJPK), DataGo Magelang, and the Department of Trade, Industry, Cooperatives, and Micro Enterprises (Disperindag) of Magelang City.

Data were collected through documentation techniques, which involve retrieving relevant quantitative data from published reports, statistical bulletins, and other formal records. The use of documented sources ensures the objectivity and accuracy of the data, providing a valid foundation for analysis.

Each variable in the study was clearly defined both conceptually and operationally. Income inequality was measured using the Gini index, ranging from 0 (perfect equality) to 1 (perfect inequality). The Human Development Index was represented as a composite index based on life expectancy, education (measured by average and expected years of schooling), and income, expressed on a scale from 0 to 100. The number of MSMEs was quantified by counting registered business units per year. Social expenditure and capital expenditure were measured in billion Rupiahs, representing annual government allocations for social programs and long-term physical infrastructure, respectively. The workforce was calculated as the number of individuals aged 15 and above who were economically active, expressed in thousands.

To analyze the data, this research applied multiple linear regression using the Ordinary Least Squares (OLS) method. The model assessed the relationship between the dependent variable (income inequality) and the five independent variables over time (time series). The regression model used was:

$$Y_t = \alpha + \beta_1 X_{1t} + \beta_2 X_{2t} + \beta_3 X_{3t} + \beta_4 X_{4t} + \beta_5 X_{5t} + e_t$$

or

$$RG_t = \alpha + \beta_1 HDI_t + \beta_2 MSMEs_t + \beta_3 SE_t + \beta_4 CE_t + \beta_5 WF_t + e_t$$

Where:

RG	= Income Inequality
t	= Time series
α	= Constant
β	= Regression Coefficients
HDI	= Human Development Index
MSMEs	= Micro, Small, and Medium Enterprises
SE	= Social Expenditure
CE	= Capital Expenditure
WF	= Work Force
e	= Error term

Before interpreting the regression results, several classical assumption tests were performed to ensure the validity of the model. These included the normality test using the Jarque- Bera method to confirm whether residuals followed a normal distribution, the multicollinearity test using the Variance Inflation Factor (VIF) to detect correlations among independent variables, the heteroscedasticity test using the Glejser method to ensure homoscedasticity (equal variance of residuals), and the autocorrelation test using the Breusch-Godfrey LM test to verify that residuals were independent over time.

Lastly, model feasibility was evaluated using goodness-of-fit tests, including the coefficient of determination (R^2), the F-test, and the t-test. The coefficient of determination indicated the extent to which the independent variables explained the variation in income inequality. The F-test assessed the joint significance of all independent variables, while the t-test evaluated the individual significance of each variable. A 5% level of significance was used to determine the statistical validity of the results.

RESULTS AND DISCUSSION

This research aimed to examine the influence of the Human Development Index (HDI), the

number of Micro, Small, and Medium Enterprises (MSMEs), social expenditure, capital expenditure, and workforce size on income inequality in Magelang City during the period 2010– 2024. The data were analyzed using multiple linear regression, and the results were interpreted based on classical economic theory and previous research.

A. Classical Assumption Tests

To ensure the validity of the regression model, several classical assumption tests were performed, including normality, multicollinearity, heteroscedasticity, and autocorrelation tests.

1) Normality test

The normality test aims to determine whether the distribution of data in the regression model follows a normal distribution pattern or not. Here is the result:

Table 1. Normality Test	
Jarque-Bera	Probability
0,554877	0,757722

Source: Eviews (2025)

According Table 1, The Jarque-Bera probability was 0.7577, this indicates that the value is greater than the significance level of 0.05. Thus, the residuals are considered to be normally distributed.

2) Multikolinearity test

Multicollinearity testing was conducted to examine the correlation between independent variables in the model. Here is the result:

Table 2. Multikolinearity Test	
Variable	Centered VIF
C	NA
IPM	5,407113
LN_UMKM	2,472600
LN_BS	1,300653
LN_BM	2,232892
LN_TK	4,831561

Source: Eviews (2025)

According Table 2, all the centered VIF values of all independent variables are less than 10. Thus, it can be interpreted that there are no symptoms of multicollinearity.

3) Heteroscedasticity test

The heteroscedasticity test is used to test whether the residual variance of observations is the same (homoscedasticity) or different (heteroscedasticity). Here is the result:

Table 3. Heteroscedasticity Test			
<i>F-statistic</i>	2,274287	<i>Prob.F(5,9)</i>	0,1342
<i>Obs*R-squared</i>	8,373073	<i>Prob.Chi-Square(5)</i>	0,1368

Source: Eviews (2025)

According Table 3, The probability value was 0.1368, is greater than the significance level of 0.05. Therefore, it can be concluded that there are no signs of heteroscedasticity.

4) Autocorrelation test

The autocorrelation test aims to determine whether there is a relationship between the residuals from one period (t) to the previous period (t-1). Here is the result:

Table 4. Autocorrelation Test			
<i>F-statistic</i>	0,124711	<i>Prob.F(2,7)</i>	0,8847
<i>Obs*R-squared</i>	0,516086	<i>Prob.Chi-Square(2)</i>	0,7726

Source: Eviews (2025)

According Table 4, The probability value Obs*R-squared is 0.7726, which is greater than 0.05. Therefore, it can be concluded that there is no evidence of autocorrelation.

B. Regression Analysis Results

The regression results provide estimates for each variable's influence on income inequality. Here is the results:

Table 5. Multiple Linear Regression

<i>Variable</i>	<i>Coefficient</i>	<i>t-Statistic</i>	<i>Prob.</i>
C	0,554339	2,302147	0,0503
IPM	0,031317	2.971940	0,0157
LN_UMKM	0,014624	0,705995	0,4981
LN_BS	-0,022510	-1,859971	0,0270
LN_BM	-0,033194	-2,411908	0,0424
LN_TK	-0,236457	-0,991242	0,0329

Source: Eviews (2025)

The results of the regression analysis are as follows:

$$LnRG, = \alpha + \beta_4 IPM, + \beta_5 LnUMKM, + \beta_6 LnBS, + \beta_7 LnBM, + \beta_8 LnTK, + e,$$

or

$$LnRG, = 0,554339 + 0,031317 IPM, + 0,014624 LnUMKM, - 0,022510 LnBS, - 0,033194 LnBM, - 0,236457 LnTK, + e,$$

According Table 5, The regression results indicate that when all independent variables are zero, the baseline income inequality is 0.554. An increase in the Human Development Index (HDI) by 1% is associated with a 0.031% rise in income inequality, while each additional MSME unit slightly increases inequality by 0.014%. Conversely, social expenditure and capital expenditure reduce inequality by 0.022% and 0.033% for every IDR 1 billion increase, respectively. The workforce variable shows the strongest negative effect, where the addition of one worker reduces inequality by 0.236%.

C. Model Feasibility Test (Goodnes of Fit)

1) Coefficient of Determination

The coefficient of determination is used to measure how much of the variation in the dependent variable can be explained by the independent variables in the model. Here is the results:

Table 6. Coefficient of Determination

<i>R-squared</i>	0,913492
<i>Adjusted R-Squared</i>	0,865432

Source: Eviews (2025)

According Table 6, The adjusted R² value of 0.865, this means that the HDI, number of MSMEs, social expenditure, capital expenditure, and number of workforce contribute 86 percent to income inequality in Magelang City, while 14 percent is explained by other variables not included in the model.

2) F-test

The F-test was conducted to measure the combined effect of the independent variables on the dependent variable. Here is the results:

Table 7. F-test

<i>F-statistic</i>	19,00740
<i>Prob(F-statistic)</i>	0,000153

Source: Eviews (2025)

According Table 7, shows that the calculated F value of 19.00740 is greater than the table F value of 3.4817. Furthermore, the calculated F probability value of 0.000153 is smaller than the

significance level of 0.05, so it can be concluded that the Human Development Index (HDI), the number of SMEs, social expenditure, capital expenditure, and the number of workforce collectively influence income inequality in Magelang City.

3) t-test

The t-test is used to examine the significance of the estimated regression coefficients. Based on Table 5, the calculated t-values and probability values for each variable are compared to the t-table value of 1.833. The influence of each independent variable on the dependent variable is interpreted as follows:

- a. Human Development Index (HDI): The calculated t-value is $2.971 > 1.833$ with a probability value of $0.0157 < 0.05$, indicating that HDI has a positive and significant effect on income inequality in Magelang City. Therefore, H_1 , which states that HDI has a negative effect on income inequality, is rejected.
- b. Number of MSMEs: The calculated t-value is $0.706 < 1.833$ with a probability value of $0.4981 > 0.05$, indicating that the number of MSMEs has a positive but not significant effect on income inequality in Magelang City. Thus, H_2 , which states that the number of MSMEs has a negative effect on income inequality, is rejected.
- c. Social Spending: The calculated t-value is $-1.860 < 1.833$ with a probability value of $0.0270 < 0.05$, showing that social spending has a negative and significant effect on income inequality in Magelang City. Therefore, H_3 , which states that social spending negatively affects income inequality, is accepted.
- d. Capital Expenditure: The calculated t-value is $-2.412 < 1.833$ with a probability value of $0.0424 < 0.05$, suggesting that capital expenditure has a negative and significant effect on income inequality in Magelang City. Thus, H_4 , which states that capital expenditure negatively affects income inequality, is accepted.
- e. Number of Workers: The calculated t-value is $-0.991 < 1.833$ with a probability value of $0.0329 < 0.05$, indicating that the number of workers has a negative and significant effect on income inequality in Magelang City. Hence, H_5 , which states that the number of workers negatively affects income inequality, is accepted.

Discussion

1) The Influence of HDI on Income Inequality

The positive and significant relationship between HDI and income inequality reveals that improvements in human development have not been inclusive. According to the trickle-down theory (Hirschman, 1959), development benefits tend to reach upper-income groups first, and this seems evident in Magelang. This finding supports studies by Deni et al. (2024) and Fergianwan (2018).

2) The Influence of MSMEs on Income Inequality

Although MSMEs are considered engines of local economic growth, their impact in Magelang is limited. Most are micro-scale, low-capital businesses with limited productivity. As a result, the increase in MSMEs does not significantly reduce income inequality. This supports findings from Sari & Nugroho (2020).

3) The Influence of Social expenditure on Income Inequality

Social expenditure has a proven negative effect on income inequality, in line with redistribution theory (Musgrave, 1991). Social assistance such as cash transfers and subsidies can reduce inequality both in the short and long term. This is consistent with Ramdani (2024) and Ikhtiar (2019).

4) The Influence of Capital Expenditure on Income Inequality

Government capital expenditure reduces inequality by improving infrastructure and access to public services. This is particularly effective in a small city like Magelang, where distribution is more targeted. The result supports Keynesian theory and aligns with the findings of Chusamy et al. (2023).

5) The Influence of Workforce on Income Inequality

The increase in the workforce contributes to reducing inequality, as more people are engaged in economic activities. This supports the economic growth model by Todaro & Smith (2006) and is consistent with findings from Santi et al. (2024). Productive employment, especially in labor-intensive sectors like trade and services, is essential for equitable income distribution.

CONCLUSION

A. Conclusion

This study aimed to analyze the influence of the Human Development Index (HDI), the number of Micro, Small, and Medium Enterprises (MSMEs), social expenditure, capital expenditure, and workforce size on income inequality in Magelang City from 2010 to 2024. Based on the multiple regression analysis conducted, the following conclusions can be drawn:

1. HDI has no significant effect on income inequality. The improvement in human development tends to benefit middle-to-upper-income groups more than low-income populations, which limits its role in reducing inequality.
2. MSMEs also show no significant effect on income inequality due to the predominance of micro-scale enterprises with limited capital and productivity.
3. Social expenditure has a significant negative effect on income inequality. It improves the welfare of poor and vulnerable communities, contributing directly to more equitable income distribution.
4. Capital expenditure significantly reduces inequality, as infrastructure development promotes broader economic participation and inclusive growth.
5. Workforce size negatively affects inequality, as increased employment opportunities help distribute income more evenly across the population.

B. Implications

The findings of this research have several practical implications:

1. Although HDI reflects improvements in education, health, and purchasing power, these benefits must be equitably distributed. Policies such as scholarships for low-income students, free public health services, and vocational training for underprivileged communities are essential to ensure inclusive human development.
2. To enhance the impact of MSMEs on reducing inequality, support mechanisms such as business mentoring, digital transformation, access to finance, and supply chain integration should be strengthened, especially for micro-enterprises.
3. Since social expenditure reduces inequality, government aid programs must be well-targeted, impactful, and monitored to ensure they empower recipients rather than fostering dependency. Emphasis should be placed on productive social programs that promote self-sufficiency.
4. Capital expenditure should focus on inclusive infrastructure that directly benefits the poor, such as traditional markets, rural-urban link roads, and facilities supporting informal sectors. Long-term public investment plays a key role in enabling equitable regional development.
5. Increasing the workforce participation rate must be accompanied by job creation and skills enhancement programs. Policies should aim to expand decent work opportunities and improve the competitiveness of the workforce through education, training, and upskilling.

C. Limitations

This study has several limitations. First, the research is limited to Magelang City, which may restrict the generalizability of the findings. Future studies are encouraged to expand the geographical scope to the provincial or national level, which may yield broader and more representative conclusions. Second, the number of variables analyzed was limited. Future research could incorporate additional macroeconomic variables such as inflation, investment, and economic growth for a more comprehensive understanding of the factors influencing income inequality. Lastly, the observation period could be extended beyond 15 years to better capture long-term trends and dynamics.

D. Suggestions for Future Research

Based on these limitations, future research is recommended to:

1. Conduct comparative studies across regions or at the national level to assess regional disparities in income inequality drivers.
2. Explore additional determinants of income inequality, including technological adoption, urbanization, or education inequality.
3. Utilize longer time series datasets or panel data to improve the robustness of analysis and uncover structural patterns in income distribution.
4. Apply qualitative approaches or mixed methods to understand the contextual, institutional, or behavioral dimensions behind economic inequality.

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