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The Effect of Human Development Index, Inflation and Economic Growth on Unemployment in Medan City

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Abstract

The purpose of this study was to determine the effect of the human development index, inflation and economic growth on unemployment in the city of Medan. The approach used in this research is a quantitative approach. The data used in this study are secondary data sourced from the Central Bureau of Statistics for the City of Medan with the data period from 2003 to 2022. The analysis technique used is the classical assumption test (normality test, multicollinearity test, heteroscedasticity test and autocorrelation tests). multiple linear regression, and hypothesis testing (statistical F test, and statistical t test, and test of the coefficient of determination (R2)). The results of this study are based on the results of the simultaneous test (f test) it can be seen that the variables human development index, inflation and economic growth are significant together (simultaneously) on the Unemployment variable. Based on the partial test of the Human Development Index variable, it has a negative and significant effect on Unemployment in Medan City, the Inflation variable has a negative and insignificant effect on Unemployment in Medan City and the Economic Growth variable has no effect on Unemployment in Medan City.

Keywords: Economic growth, Human Development Index, Inflation, Unemployment

INTRODUCTION

A country's economy can be said to be healthy if its economic growth is stable and shows a positive direction. This is reflected in macroeconomic activities. One of them is the unemployment rate (Lamatenggo, Walewangko, and Layuck 2019). Unemployment is someone who belongs to the labor force, who is actively looking for work at a certain wage level, but cannot get the job he wants (Syera 2017). Unemployment is a complex and multidimensional problem. The problem of unemployment is not only an economic problem but also a social problem. The problem of unemployment is faced by almost all countries, even developed countries, especially in developing countries like Indonesia (Baihawafi and Sebayang 2017). Indonesia as a developing country with a high population has a sizeable market potential in terms of labor input. A large population can move the market from a demand point of view through a multiplier effect due to high aggregate demand. As a source of labor, a large population can drive the economy from the supply side. However, if population growth is increasing if it is not matched by increased employment opportunities, it will result in employment problems such as higher unemployment rates which can increase the probability of poverty, crime and socio-economic phenomena in society (Mahroji and Nurkhasanah 2019).

Unemployment in Indonesia occurs in almost every region. Medan is one of the provincial capitals in Indonesia which is still facing unemployment problems which are marked by the unemployment rate which has not shown a consistent decline every year. One indicator that can be used to measure unemployment is the Open Unemployment Rate. The value of the Open Unemployment Rate gives an indication of the size of the working age population who is unemployed. The Open Unemployment Rate

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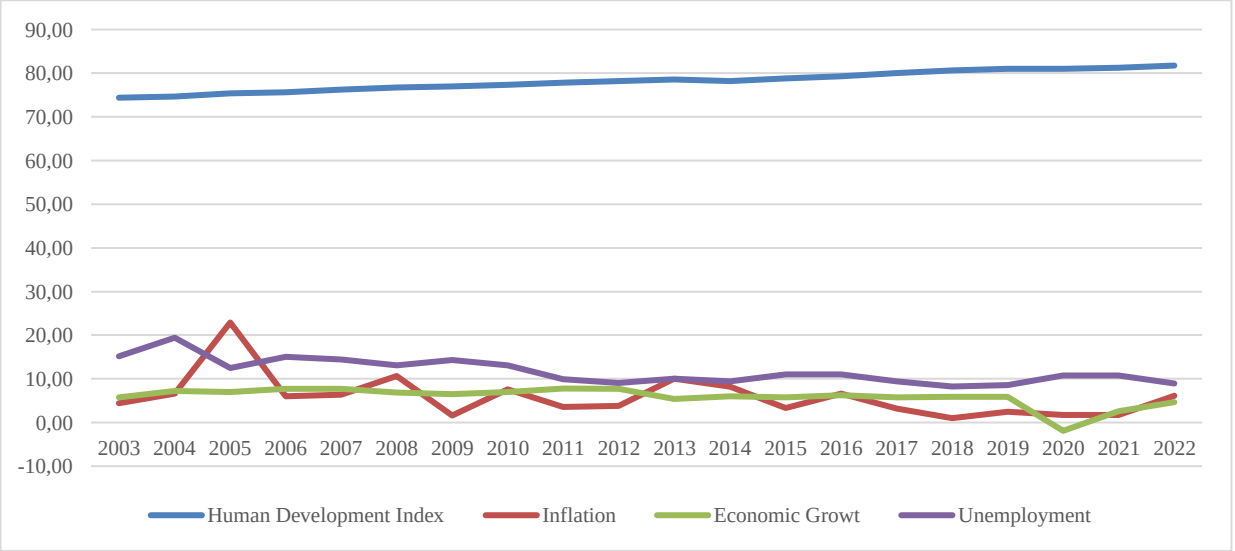
is the percentage of the number of unemployed to the total labor force (Statistik 2023). The current unemployment problem is a very complex problem to study because the unemployment problem is related to several economic indicators, for example the human development index (HDI), economic growth and inflation, the minimum wage for workers and others (Marliana 2022). The following is data on the development of human development (HDI), inflation, economic growth and unemployment in Medan City from 2003 to 2022 obtained from the Central Bureau of Statistics for Medan City:



Picture 1. Development of Human Development Index Data, Inflation, Economic Growth and Unemployment in Medan City for the 2003-2022 Period

Based on the picture 1, it can be seen that the unemployment rate in percentage terms in the city of Medan during the 2003-2022 period has fluctuated. This is due to economic conditions, government policies that are not in favor of the people, development of the non-real economic sector, low education and lack of skills, limited available jobs that are smaller than the number of job seekers, the competence of job seekers is not in line with the market work, have high education but do not have job opportunities because they do not have access so that there is a potential for graduates of educational programs to be unable to accommodate graduates in employment every year, always increasing never decreasing, the culture of an area where only women work, while men do not work, as well as the ineffectiveness of job market information for job seekers. The phenomenon of unemployment is also closely related to the occurrence of termination of employment, which is caused among others; companies that have closed/reduced their business fields due to the economic crisis or unfavorable security; regulations that impede investment, obstacles in the import-export process, and others. In 2004, the unemployment rate was the highest at 19.43%. The unemployment rate is relatively high and this still needs to be a concern both in terms of being directly related to everyone's efforts to meet their basic needs so that they can live decently and not become a social burden and to encourage them to be economically active. Meanwhile, the lowest unemployment occurred in 2018, namely 8.25%. It is known that the low unemployment rate in 2018 was due to well-organized and targeted employment.

Human development is a program that must be focused on because humans are also important assets in a country. Indicators of improving human quality can be used as an assessment of the level of human development, as well as the impact on physical conditions in the form of fitness and prosperity and non-physical ones, namely intellect. This assessment can be reflected through the level of a person's life expectancy and ability in purchasing power, in addition to non-physical measurements it can be reviewed through the level of education available in the community (Yuniarti and Imaningsih 2022). The Human Development Index (HDI) continued to increase during 2003-2022. In 2003, the percentage of the Human

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Development Index (HDI) was 74.40% and in 2022 it was 81.76%. This indicates that there have been various positive improvements in the city of Medan both in terms of healthy living indicators, indicators of school/educational expectations and indicators of decent living/economy. Even though there was the Covid 19 Pandemic in Indonesia in 2020, it did not make the Human Development Index in Medan City experience a drastic decline. However, the problem that arises is that an increase in the Human Development Index (HDI) is not followed by a decrease in the number of unemployed. When the indicators in the Human Development Index (HDI) increase, unemployment will decrease. This is inconsistent with the new growth theory emphasizing the importance of increasing human capital development and development to increase human productivity (Todaro 2000).

The existence of inflation together with unemployment has become a problem in an economy. Inflation is a tendency to increase the price of goods in general, which means a decrease in the value of money. According to the quantity theory, the main and only cause that allows this phenomenon to appear is the occurrence of excess money in circulation as a result of increasing the amount of money in society (Chandra, Yulmardi, and Erfit 2020). Inflation continued to fluctuate during 2003-2022. In 2005 the highest inflation was in Medan City, which was 22.91% and the lowest inflation in 2018 was 1.00%. The link between inflation and unemployment can be explained in the Phillips curve, which states that low unemployment tends to be accompanied by high inflation and when high unemployment tends to be accompanied by low inflation (Samuelson and Nordhaus 2001). The phenomenon that occurred in Medan City in 2018 was low inflation and unemployment also decreased. So it is inversely proportional to the existing Phillips curve theory.

An increase in Gross Regional Domestic Product in an area shows the excitement of a moving and developing economy that will affect the level of economic growth in the region so that later it can show an increase in economic growth in the area (Nurfitriana, Siregar, and Sriyani 2023). The highest economic growth rate in Medan City occurred in 2011 of 7.79% and the lowest in 2020 of -1.90% economic growth from here it can be seen that economic growth in Medan City has decreased significantly. That was due to the Covid 19 pandemic virus which attacked all layers of the world including Indonesia and certainly had an impact on economic growth in the city of Medan. Economic growth plays a very important role in supporting the development of a business. Continued economic growth will be able to encourage wide-open business opportunities, output produced will increase, employment can be optimal. In reality, economic growth in Medan City during 2003-2022 has not been able to absorb the additional workforce that occurs each year plus the number of existing unemployed. This phenomenon is not in accordance with the theoretical basis in this study. Okun's Law that through increased productivity caused by an increase in the human development index will encourage increased economic growth. An increase in economic growth is expected to increase employment opportunities and increase the demand for labor so that many people can be absorbed in the market for job seekers, which in turn can reduce the number of unemployed.

Literature Review

Unemployment

Unemployment is a macroeconomic problem that directly affects human survival, unemployment is a topic that is often discussed in political debates by bureaucrats who often conduct studies that the policies they offer can be a solution to the presence of adequate job opportunities (Mankiw, Quah, and Wilson 2012). Bad effects of unemployment is the reduced level of people's income which in turn reduces the level prosperity/prosperity. Well-being people who are down due to unemployment will increase their chances stuck in poverty for not have income. If unemployment in a country is very bad, then it will political and social chaos ensued have a bad effect on community welfare and prospects long-term economic development long. The number of unemployed will impact on increasing poverty in Indonesia (Sukirno 2004).

There are two ways to classify the types of unemployment viz based on source or cause manifest

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unemployment and traits the unemployment (Sukirno 2004). Based on Causes of unemployment are divided into:

1. Normal or Frictional Unemployment is the type of unemployment caused unemployed want to find a job that better.
2. Cyclical unemployment is a type unemployment caused by the decline economic activity or because of too much small aggregate demand inside economy versus supply the aggregate.
3. Structural Unemployment is a type unemployment caused by it changes in the structure of economic activity.
4. Technological unemployment is unemployment caused by it replacement of human resources with technology/machinery in the production process.

Based on its characteristics, unemployment is divided into:

1. Open unemployment where unemployment is created as a result of the increase in job vacancies which is lower than the increase in the workforce
2. Hidden unemployment is unemployment that is created as a result of the number of workers in an economic activity being more than what is actually needed.
3. Seasonal unemployment is unemployment that is created due to the existing season, this unemployment is usually found in the agricultural and fisheries sectors.
4. Underemployment is unemployment that is created as a result of the workforce not working fully and their working hours are much lower than normal.

Human Development Index

Quoting the contents of the first Human Development Report (HDR) in 1990, human development is a process of increasing the choices that humans have. Among these many choices, the most important choices are to live a long and healthy life, to be educated, and to have access to the resources needed to live a decent life. The Human Development Index (HDI) measures human development achievements based on a number of basic quality of life components. As a measure of quality of life, the Human Development Index (HDI) is constructed through a basic three-dimensional approach. These dimensions include a long and healthy life; knowledge, and a decent life. These three dimensions have a very broad meaning because they are related to many factors. To measure the health dimension, life expectancy at birth is used. Furthermore, to measure the dimensions of knowledge, a combination of literacy rate indicators and the average length of schooling is used. As for measuring the dimensions of decent living, indicators of people's purchasing power are used for a number of basic needs as seen from the average amount of spending per capita as an income approach that represents development achievements for a decent life (Statistik 2023).

The components of the human development index (Statistik 2023):

1. Life expectancy
   Life Expectancy (LE) at birth is the average estimate of the number of years that a person can live in life.
2. Literacy Rate
   Literacy rate is the percentage of the population aged 15 years and over who can read and write Latin letters and/or other letters.
3. Average School Years
   The average length of schooling describes the number of years that are used by residents aged 15 years and over in formal education.
4. Adjusted Real Expenditures per Capita
   UNDP measures a decent standard of living using the adjusted real Gross Domestic Product (GDP), while the BPS in calculating a decent standard of living uses the average real per capita expenditure adjusted for the Atkinson formula.

Inflation

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Inflation is an increase in the prices of goods and services, which occurs because demand increases more than the supply of prices in the market. The stability of the inflation rate is very important to support people's economic activities. If the level or condition of inflation is stable, then it can generate public confidence in carrying out its economic activities, both consumption and investment. Significant inflation fluctuations will disrupt economic stability (Syera 2019). The inflation rate that occurs every year will add to the high unemployment rate, and will affect the level and welfare of people's lives. For regions with a good economy, of course the inflation rate in that area is low, but there are also those that experience very high inflation rates, which is called hyperinflation. If an area experiences hyperinflation, it is certain that the number of unemployed in that area will increase drastically, because with rising prices in all sectors, companies will also adopt policies by reducing the workforce. As a result, high unemployment is unavoidable and the economy suffers a setback (Bintang and Prana 2020).

Types of inflation (Nopirin 2014):

1. Types of Inflation According to Their Nature
   Inflation rates may differ from one country to another or within one country for different times. On the basis of the magnitude of the inflation rate, it is divided into three categories, namely:
   a) Creeping inflation.
      Creeping inflation is characterized by a low inflation rate (less than 10% per year), price increases occur slowly, with small percentages and within a short period of time. relatively long.
   b) Galloping inflation
      Medium inflation is characterized by sizeable price increases (usually double digits or even triple digits) and sometimes runs in a relatively short time and has accelerating properties.
   c) Hyperinflation
      High inflation which is the most severe consequence. Prices rise up to 5 or 6 times. People no longer want to save money because the value of money has fallen sharply so that people prefer to exchange it for goods.
2. Types of Inflation According to the Reasons Before policies are taken to deal with inflation, it is necessary to first know the factors that cause inflation, including:
   a) Demand-Pull Inflation
      Demand-pull inflation originates from an increase in aggregate demand, while production is already at full employment or close to full employment. In an almost full employment situation, an increase in total demand in addition to increasing prices can also increase production output.
   b) Cost Push Inflation
      Cost pressure inflation is usually characterized by price increases and product decline. So this means that inflation is accompanied by a recession. This situation usually begins with a decrease in aggregate supply.

Economic Growth

Economic growth is the slow and steady long-term change that occurs through increases in saving and population (Jhingan 2007). Economic Growth is one of the indicators used to measure a country's economic achievement. In actual economic activity, economic growth means physical economic development. Some of the physical economic developments that occur in a country are the increase in the production of goods and services, and the development of infrastructure. All of these things are usually measured by the development of real national income achieved by a country in a certain period. Per capita economic growth as measured by Gross Regional Domestic Product (GRDP) per capita is simply the accumulation of the productivity of all business sectors in an area (Sukirno 2004).

RESEARCH METHOD

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The approach in this study is a quantitative approach, because in measuring the data using a numerical scale. In this study there are 4 research variables, namely: The dependent variable (Y) is Unemployment; The independent variable X1 is the Human Development Index, the independent variable X2 is inflation and the independent variable X3 is economic growth. The data used in this study are secondary data sourced from the Central Bureau of Statistics for the City of Medan with the data period from 2003 to 2022. The analysis technique used is the classical assumption test (normality test, multicollinearity test, heteroscedasticity test and autocorrelation test). multiple linear regression, and hypothesis testing (statistical F test, and statistical t test, and test of the coefficient of determination (R2)).

RESULTS AND DISCUSSION

The research results obtained using SPSS are:

Classic Assumption Test

The classic assumption test consists of several tests, namely:

Normality Test

The normality test serves to determine whether the research data is normally distributed or not. The method used to test normality is the One-Sample Kolmogorov-Smirnov Test method. The output results are:

Table 1. The Result of Normality Test

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		20
Normal Parameters[a,b]	Mean	0E-7
	Std. Deviation	1.41486721
Most Extreme Differences	Absolute	.097
	Positive	.097
	Negative	-.087
Kolmogorov-Smirnov Z		.435
Asymp. Sig. (2-tailed)		.991

a. Test distribution is Normal.
b. Calculated from data.

Based on the output of table 1, it is known that the value of asymp. sig (2-tailed) is 0.991> 0.05, according to the basis for decision making in the Kolmogorov-Smirnov normality test above, it can be concluded that the data is normally distributed. Thus, the normality assumptions or requirements in the regression model have been met.

Multicollinearity test

The multicollinearity test functions to find out whether multicollinearity symptoms occur in the regression equation, if there is, it means that there is a correlation among the independent variables. The output results are:

Table 2. The Result of Multicollinearity Test

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Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	122.179	16.978		7.196	.000		
	human development index	-1.374	.207	-1.083	-6.652	.000	.569	1.757
	inflation	-.129	.082	-.219	-1.575	.135	.783	1.276
	economic growth	-.377	.197	-.289	-1.916	.073	.661	1.512

a. Dependent Variable: unemployment

The basis for making decisions for the multicollinearity test is a tolerance value of more than 0.1 and a VIF value of less than 10. Based on the output of table 2, it is known that

a. The human development index variable has a tolerance value of 0.569 > 0.1 and VIF of 1.757 <10, so it can be concluded that the data does not show symptoms of multicollinearity.
b. The inflation variable has a tolerance value of 0.783 > 0.1 and VIF of 1.276 <10, so it can be concluded that the data does not show symptoms of multicollinearity.
c. The economic growth variable has a tolerance value of 0.661 > 0.1 and VIF of 1.512 <10, so it can be concluded that the data does not show symptoms of multicollinearity.

Heteroscedasticity Test

The heteroscedasticity test serves to test whether in the regression model there is an inequality of variance from one residual observation to another. Heteroscedasticity test can be done with the Glejser test. The output result are:

Table 3. The Result of Heteroscedasticity Test

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	13.090	9.679		1.352	.195
	human development index	-.150	.118	-.395	-1.273	.221
	inflation	-.041	.047	-.235	-.890	.387
	economic growth	-.004	.112	-.010	-.034	.973

a. Dependent Variable: ABS_RES

Based on the output of table 3, it is known that the significance value of the human development index variable is 0.221 > 0.05, the significance value of the inflation variable is 0.387 > 0.05 and the significance value of the economic growth variable is 0.973 > 0.05. So that it can be seen that the significance value of the independent variable is more than 0.05, it can be concluded that the data does not show symptoms of heteroscedasticity.

Autocorrelation test

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The autocorrelation test is used to determine whether or not there is autocorrelation in the regression model. The autocorrelation test was carried out using the Run Test test. The output result are:

Table 4. The Result of Autocorrelation Test

Runs Test

	Unstandardized Residual
Test Value[a]	-.00444
Cases < Test Value	10
Cases >= Test Value	10
Total Cases	20
Number of Runs	10
Z	-.230
Asymp. Sig. (2-tailed)	.818

a. Median

Based on the output of table 4, it is known that the asymp. sig (2-tailed) 0.818 > 0.05. So that it can be concluded that the data does not show autocorrelation symptoms.

Multiple Linear Regression Test

Multiple linear regression is a regression model that involves more than one independent variable. Multiple linear regression analysis was carried out to determine the direction and how much influence the independent variables have on the dependent variable. The output result are:

Table 5. The Result of Multiple Linear Regression Test

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	122.179	16.978		7.196	.000
	human development index	-1.374	.207	-1.083	-6.652	.000
	inflation	-.129	.082	-.219	-1.575	.135
	economic growth	-.377	.197	-.289	-1.916	.073

a. Dependent Variable: unemployment

The multiple linear regression equations obtained in this study are: $Y=122.179- 1.374X_1 - 0.129 X_2 - 0.377 X_3$. The analysis are:

a. The Human Development Index variable has a negative regression coefficient of 1,374 which means that if the Human Development Index increases by 1 percent, Unemployment will decrease by 1,374 percent, and vice versa.
b. The Inflation variable has a negative regression coefficient of 0.129 which means that if Inflation increases by 1 percent, Unemployment will decrease by 0.129 percent, and vice versa.

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c. The Economic Growth variable has a negative regression coefficient of 0.377 which means that if Economic Growth increases by 1 percent, Unemployment will decrease by 0.377 percent, and vice versa.

Hypothesis Test

The hypothesis test consists of several tests, namely:

Simultaneous Test (F Test)

Simultaneous test (F test) serves to determine whether or not there is influence of the independent variable on the dependent variable simultaneously (together). The output results are:

Table 6. The Result of Simultaneous Test

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	119.456	3	39.819	16.750	.000[b]
	Residual	38.035	16	2.377		
	Total	157.491	19			

a. Dependent Variable: unemployment
b. Predictors: (Constant), economic growth, inflation, human development index

Based on the output of table 6, it is known that the Fcount value is 16.750 and the Ftable value is 3.24, then Fcount > Ftable (16.750 > 3.24). The significant value is 0.000 <0.05, so the human development index, inflation and economic growth variables are significant together (simultaneously) on the Unemployment variable.

Partial test (t test)

Partial test (t test) aims to determine whether or not there is influence of the independent variable on the dependent variable partially. The output results from the partial test (T test) are:

Table 7. The Result of Partial Test

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	122.179	16.978		7.196	.000
	human development index	-1.374	.207	-1.083	-6.652	.000
	inflation	-.129	.082	-.219	-1.575	.135
	economic growth	-.377	.197	-.289	-1.916	.073

a. Dependent Variable: unemployment

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Based on the output of table 7, it is known that:

1. The t value for the Human Development Index variable is -6.652 and t table -1.74588 so that the t count <t table means that H_0 is rejected and H_1 is accepted. If seen from the significance value of the Human Development Index variable of 0.00 so that the significance is < 0.05 percent, then H_0 is rejected and H_1 is accepted. This shows that the Human Development Index variable has a negative and significant influence on Unemployment in Medan City in 2003-2022.
2. The t value of the Inflation variable is -1.575 and the t table is -1.74588 so that the t value < t table means that H_0 is rejected and H_1 is accepted. If seen from the significance of the Inflation variable of 0.135 so that the significance is > 0.05 percent, then H_0 is rejected and H_1 is accepted. This shows that the Inflation variable has a negative and insignificant effect on Unemployment in Medan City in 2003-2022.
3. The t value of the Economic Growth variable is -1.916 and t-table -1.74588 so that the t-count <t-table means that H_0 is accepted and H1 is rejected. If seen from the significance of the Inflation variable of 0.073 so that the significance is > 0.05 percent, then H_0 is accepted and H_1 is rejected. This shows that the Economic Growth variable has no effect on Unemployment in Medan City in 2003-2022.

Coefficient of Determination Test

The coefficient of determination test (R2) aims to determine what percentage of the independent variables simultaneously influence the dependent variable. The output results are:

Table 8. The Result of Coefficient of Determination Test

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.871[a]	.758	.713	1.54182

a. Predictors: (Constant), economic growth, inflation, human development index
b. Dependent Variable: unemployment

Based on the output of table 8, it is known that the R Square (Summery Model) in the regression output results is 0.758 (75.8%). Thus, it can be explained that the Human Development Index, Inflation and Economic Growth variables have a joint effect of 75.8% on the Unemployment variable.

The Effect of the Human Development Index on Unemployment in Medan City for the 2003-2022 Period

Based on the partial test, the results obtained were that the Human Development Index variable had a negative and significant effect on Unemployment in Medan City in 2003-2022. This is in accordance with the theory explained that by increasing the development of human capital and development to increase human productivity. Through investment in education it is hoped that it will be able to improve the quality of Human Resources (HR) as shown by increasing one's knowledge and skills so that it will encourage an increase in work productivity. Increased productivity can affect employment opportunities, namely with an increase in productivity, there is a decrease in production costs per unit of goods. A decrease in production costs per unit of goods will lower the price per unit of goods. If the price of goods falls, the demand for goods will increase which will encourage entrepreneurs to increase the demand for labor, so that by absorbing more and more labor it can reduce the high level of unemployment (Todaro 2000). The results of this study are in line with research conducted by Astrid and Soekapdjo (2020) which states that the Human Development Index has a negative and significant effect on unemployment in Indonesia. An increase in the Human Development Index will have an impact on increasing the quality of Human Resources, so that people can absorb the need for labor according to the wishes of the company, and as a

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result unemployment will decrease (Astrid and Soekapdjo 2020). The results of this study are not in line with research conducted by Anggraini, et al (2023) which states that the Human Development Index has no significant effect on the open unemployment rate in Jambi Province (Anggraini et al. 2023).

The Effect of the Inflation on Unemployment in Medan City for the 2003-2022 Period

Based on the partial test, the results obtained were that the Inflation variable had a negative and insignificant effect on Unemployment in Medan City in 2003-2022. This is in accordance with the theory of the Philps Curve which can be used to explain the relationship between the Inflation rate and the Unemployment Rate in the short term. Philips uses this curve when observing the relationship between unemployment and inflation in England. Philips found that the inflation rate and the unemployment rate have a negative relationship where an increase in inflation can reduce the unemployment rate and efforts to reduce inflation can increase the unemployment rate. The results of this study are in line with research conducted by Yehosua, et al (2019) which states that partially the inflation variable has a negative effect theoretically but is not significant on the unemployment rate in the city of Manado (Yehosua, Rotinsulu, and Niode 2019). The results of this study are not in line with research conducted by Purba, et al (2022) which states that inflation has a positive and significant effect on unemployment in North Sumatra Province (Purba, Nainggolan, and Panjaitan 2022).

The Effect of the Economic Growth on Unemployment in Medan City for the 2003-2022 Period

Based on the partial test, the results obtained are that the Economic Growth variable has no effect on Unemployment in Medan City in 2003-2022. The results of this study are not in line with Okun's Law that through increased productivity caused by increased human development index will encourage economic growth that increase. An increase in economic growth is expected to increase employment opportunities and increase the demand for labor so that many people can be absorbed in the market for job seekers, which in turn can reduce the number of unemployed (Palindangan and Bakar 2021). The results of this study are not in line with research conducted by Fikri and Alianis (2023) which states that based on the results of the analysis, partially there is a negative and insignificant effect of economic growth on unemployment. This means that increased economic growth will reduce the unemployment rate. Conversely, when economic growth decreases, unemployment will increase unemployment. However, the effect is not significant or will not have a large effect on changes in unemployment. This is because economic growth is not accompanied by demand for labor because the production process in Indonesia tends to be capital intensive, namely using capital and using more modern technology compared to using larger human resources (Fikri and Anis 2023).

CONCLUSION

The conclusion of this research is based on the results of the simultaneous test (f test) it can be seen that the variables human development index, inflation and economic growth are significant together (simultaneously) on the Unemployment variable. Based on the partial test (t test) it can be seen that the Human Development Index variable has a negative and significant effect on Unemployment in Medan City in 2003-2022, the Inflation variable has a negative and insignificant effect on Unemployment in Medan City in 2003-2022 and the variable Economic Growth has no effect on Unemployment in Medan City in 2003–2022.

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