## ANALYSIS OF FACTORS AFFECTING UNEMPLOYMENT RATE IN NORTH SUMATRA PROVINCE

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Abstract: This study aims to determine and analyze
factors affecting unemployment rate in North Sumatra
Province. This type of research uses quantitative
research. Secondary data is sourced from the official
publication of the Central Bureau of Statistics for North
Sumatra Province. The observation period of this study
is from 2000 to 2022. Hypothesis testing using partial
test. The results show that investment has a positive
and significant effect on unemployment rate in North
Sumatra Province. Inflation has a positive and
significant effect on unemployment rate in North
Sumatra Province.

### **INTRODUCTION**

One form of the successful development of a region can be seen in the better management of human resources than before. The development followed by structural changes and better social welfare reflects a good economy as well. Economic development is formulated in the form of an effort to reduce or eliminate poverty, inequality in income distribution, and unemployment in an external context of overall economic growth. This causes the need for optimal utilization of human resources to describe balanced labor and employment conditions. If the available workforce cannot be utilized or does not carry out economic activities, it will become a problem for the government that must be solved immediately (Arsyad, 2010). In developing countries with high population growth, such as Indonesia, unemployment is a problem that is always faced by every local government, including North Sumatra Province.

Currently, unemployment is considered an obstacle and a threat to economic development. This is because the result of unemployment indicates the inability of economic growth to provide sufficient employment opportunities, while on the other hand population growth is getting faster and faster. The existence of unemployment in the

economy means someone who has no income will automatically be unable to meet their needs. The economy will be disrupted due to the lack of people's purchasing power for goods and services, resulting in an imbalance in the market which affects the prices of goods and services for daily needs, production, and so on. As a result of unemployment, people will be trapped in poverty and the economic development of a region will be further away from progress.

North Sumatra Province itself has a work force that is absorbed which is dominated by an uneducated workforce or those whose education is below upper secondary. The impact of unemployment causes the government's burden on the poor to be even greater. The government has to spend more to balance prices on the market with subsidies due to the lack of people's purchasing power, while at the same time the government's income will also decrease due to an undeveloped economy. Unbalanced unemployment and employment opportunities cause economic inequality. The increase in population is much faster than the availability of jobs in the economy, while the costs for everyday life are increasing.

Investment has a share in the economy in terms of expanding employment opportunities. In the macroeconomic context, investment is spending or spending on capital goods and production equipment to add to the goods and services available in the economy (Mankiw, 2000). Formation of capital both from the government and the private sector will absorb labor and generate profits. As one of the indicators of economic growth, the government always strives for investment to be realized and provide benefits by creating jobs and better income from the results of these investments. In fact, it is not uncommon for the government to try to attract foreign investors to invest in the country in order to increase investment growth.

Investment realization can produce a multiplier effect for the economy which is urgently needed to solve various socio-economic problems in each region. Even though a policy has now been enacted that makes it easier for investors to invest or open a business, the use of foreign workers for foreign investment entering Indonesia does not help reduce the unemployment rate at all.

The problem of low minimum wage levels in Indonesia, including in North Sumatra Province, has contributed to high unemployment rates. Insufficient wages that workers receive from employers will still not generate demand in the market, as a result, underemployment will increase, even the same thing will happen to open unemployment, considering that people will choose to be unemployed until they get decent jobs with more than sufficient wages.

The amount of wages is appropriate according to the cost of living needs of workers. Any determination of prices for goods and services must be in accordance with the amount of production costs used and the profit that must be obtained. Competition in the market that is often encountered and sometimes causes price wars for goods in order to attract interest from consumers.

The number of workers available in North Sumatra Province is not all followed by expertise. In economic development, people's expertise is needed in their economic activities so that economic development and structural changes occur. The existence of an uneducated and unskilled workforce will only create new problems because even though

labor is available, productivity does not increase, while economic development is marked by changes in the overall economic structure.

This study aims to determine and analyze factors affecting unemployment rate in North Sumatra Province.

### **RESEARCH METHODS**

This type of research uses quantitative research. Quantitative research is systematic scientific research on the parts and phenomena as well as the causality of their relationships. The purpose of quantitative research is to develop and use mathematical models, theories and hypotheses related to a phenomenon (Octiva et al., 2018; Pandiangan, 2018; Pandiangan, 2022; Pandiangan et al., 2023). Quantitative research relies very heavily on data collection. The data in question is in the form of measurement results. Therefore, in this study statistics play a very important role as a tool for analyzing the answers to a problem (Asyraini et al., 2022; Octiva, 2018; Pandiangan, 2015; Sutagana et al., 2022).

This study uses secondary data. Secondary data is data obtained by researchers or data collectors indirectly (Jibril et al., 2022; Pandiangan et al., 2018; Pandiangan, 2022; Kurdhi et al., 2023). It is said to be indirect because the data is obtained through intermediaries, which can be through other people, or through documents. Secondary data is sourced from the official publication of the Central Bureau of Statistics for North Sumatra Province. The observation period of this study is from 2000 to 2022.

Hypothesis testing using partial test. Partial test or better known as individual test is used to determine the effect of each or separately of the independent variables on the dependent variable (Octiva et al., 2021; Pandiangan et al., 2021; Pandia et al., 2018; Ratnawita et al., 2023). This test will show the effect of each independent variable on the dependent variable is positive or negative and also see the magnitude of the influence of each independent variable through the beta value of the standardized coefficient (Pandiangan et al., 2022; Tobing et al., 2018; Sudirman et al., 2023; Pandiangan, 2023).

# RESULT AND DISCUSION General Description

Located in the west side of Indonesia, Sumatera Utara Province is geographicaly positioned between 10 - 40 North and 980 - 1000 East, In terms of geographic position, It is surrounded by water on two sides and two other provinces: Aceh Province to the north, and the Strait of Malacca to the east (Malaysia), Riau Province to the south, and the Indian Ocean to the west.

Based on location and natural condition, Sumatera Utara is divided into 3 (three) regional groups which are Pantai Barat (West Coast), Dataran Tinggi (Plateau), and Pantai Timur (east Coast), West Coast Region consist of Nias Regency, Nias Utara Regency, Nias Barat Regency, Mandailing Natal Regency, Tapanuli Selatan Regency, Padang Lawas Regency, Padang Lawas Utara Regency, Tapanuli tengah Regency, Nias Selatan Regency, Padang Sidempuan City, Sibolga City, and Gunungsitoli City, Plateau region consist of Tapanuli Utara Regency, Toba Samosir Regency, Simalungun Regency, Dairi Regency, Karo Regency, Humbang Hasundutan Regency, Pakpak Bharat Regency, Samosir Regency, and Pematangsiantar City, East Coast Region consist of Labuhanbatu Regency, labuhanbatu

Utara Regency, Labuhanbatu Selatan Regency, Asahan Regency, Batu Bara Regency, Deli Serdang Regency, Langkat Regency, Serdang Bedagai Regency, Tanjungbalai City, Tebing Tinggi City, Medan City, and Binjai City.

The total area of Sumatera Utara Province is 72,460.744 square kilometres, mostly located in Sumatera Island and a small portions are located in Nias Island, Pulau-pulau Batu, as well as several small islands which are situated both in the western and the eastern coast of Sumatera Island, In the terms of total area by regency/ city in Sumatera Utara, the widest area is Mandailing Natal Regency which is about 6,547.257square kilometres or 9.04 percent of the total area Sumatera Utara, followed by Langkat Regency with the area of 6,1140.035 square kilometres or 8.47 percent, then Simalungun Regency with the area of 4,601.477 square kilometres or 6.35 percent, While the smallest area is Sibolga Municipality with the area of 11.471 square kilometres or 0.02 percent of the total area Sumatera Utara.

GRDP of Sumatera Utara at Current Market Prices in 2022 were 955.19 trillion rupiahs. Agriculture, Forestry and Fishing Category was a major contributor with the role of 23.01 percent. It was followed by Manufacturing Category with 19.53 percent and Wholesale and retail trade; Repair of Motor Vehicles and Motorcycles Category which was 18.99 percent. Meanwhile, other categories totally contributed 38.87 percent to Sumatera Utara's economy.

Furthermore, economic productivity which ignoring inflation, can be seen in GRDP at Constant Market Prices. Based on constant prices in 2010, GRDP of Sumatera Utara in 2022 was amounted to 573.53 trillion rupiahs. Agriculture, Forestry and Fishing Category was a major contributor with the role of 25.97 percent, followed by Manufacturing which was 17.41 percent and Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles Category which was 18.31 percent. Overall, the economy of Sumatera Utara in 2022 grew by 4.73 percent, which increased from 2021 which was 2.61 percent.

Per capita GRDP of Sumatera Utara in 2022 was amounted to 63.19 million rupiahs. Meanwhile, based on current market prices in 2010, GRDP per capita increased from it was in 2021. It was 36.67 million rupiahs in 2021 became 37.94 million rupiahs in 2022.

To illustrate the consumption of goods and services by various consumer groups, there is GRDP by Expenditure. From 955.19 trillion rupiahs, value of goods and services in Sumatera Utara, Household Consumption Expenditure largely consumed market share which reached 481.97 trillion rupiahs (50.46 percent). Furthermore, Gross Fixed Capital Formation was amounted to 281.27 trillion rupiahs (29.45 %), Government Consumption Expenditure was amounted to 57.31 trillion rupiahs (6.00 %), Net Exports of Goods and Services was amounted 108.67 trillion rupiahs (11.38%) and for Changes in Inventories was 17.89 trillion rupiahs (1.87%).

## **Hypothesis Test**

Table 1. Hypothesis Test ResultsCoefficients <sup>a</sup>							
				Standardized			
		Unstandardiz	ed Coefficients	Coefficients			
Model		В	Std. Error	Beta	t	Sig.	
1	(Constant)	9.684	2.160		4.484	.000	
	Investment	.475	.102	.392	4.671	.000	
	Inflation	.549	.109	.424	5.051	.000	
a. Dependent Variable: Unemployment Rate							

The results show that investment has a positive and significant effect on unemployment rate in North Sumatra Province. In general, investment is known as an amount of capital that is used to produce goods or services that can generate income, or often also known as investment as an investment in something that has value. Investment can be interpreted as spending or spending by investors or companies to buy capital goods and production equipment to increase the ability to produce goods and services available in the economy. In conclusion, it can be said that the ultimate goal of investing is to get the maximum profit. With investment, economic growth will occur because there will be an increase in production which will absorb labor and eventually generate national income (Arsyad, 2010).

Inflation has a positive and significant effect on unemployment rate in North Sumatra Province. Inflation is generally known as a condition where the price of goods that people need continuously increases. Increases in prices that occur in general which can be referred to as inflation, increases in prices for certain commodities due to seasonal factors, for example before holidays or due to temporary supply disruptions and have no further effect, are not called inflation. Based on the Philips curve, inflation has an impact on economic growth because there will be employment in the short term. Arthur W. Philips explained that an increase in inflation indicates an increase in aggregate demand, which is also called demand full inflation. Aggregate demand that is higher than aggregate supply causes producers to increase their production capacity in order to meet people's needs and earn more profits. In an effort to increase production, companies or industries will absorb a lot of labor so that the number of unemployed will decrease (Mankiw, 2000).

## **CONCLUSION**

The results show that investment has a positive and significant effect on unemployment rate in North Sumatra Province. Inflation has a positive and significant effect on unemployment rate in North Sumatra Province.

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