# CHAPTER I INTRODUCTION

#### **1.1 Problem Identification**

One indicator to measure the success of a country's development is economic growth. Economic growth can be interpreted as a process of continuous change in the economic condition of a country towards a better situation over a certain period (Todaro, 2006). Growth can also be interpreted as a description of the impact of government policies implemented in the economic field (Boediono, 1985). Economic growth is the process of increasing output per capita in the long term and is a measure of successful development.

Capital accumulation is one of the main components of economic growth. Direct investments in the physical capital stock, such as the purchase of new factories, machinery, equipment, and raw materials, or investments in supporting infrastructure, such as the construction of highways, the provision of electricity, clean water, and the construction of communication facilities, among other things, can be used to achieve this capital accumulation (Todaro, 2006). Both directly and indirectly, infrastructure development will have an effect on economic expansion. Infrastructure is necessary for the growth of other industries and for establishing connections between them. According to Setiadi (2006), empowering resources to construct infrastructure will set off economic processes and multiply the impacts on the economy and society.

The accumulation of capital is a crucial component of economic expansion. This can be accomplished by investing directly in the physical capital stock, such as purchasing new plant, machinery, equipment, and raw materials, or by investing in supporting facilities, such as roads, electricity, clean water, and communication facilities (Todaro, 2006). Development of infrastructure will have an effect on both direct and indirect economic growth. The infrastructure itself connects people and supports the growth of other industries. According to Setiadi (2006), the commitment of resources to the construction of infrastructure will drive the economic process, resulting in greater economic and social impacts.

From the allocation of public to private financing, infrastructure is regarded as the locomotive of national and regional development. It is the driving force of economic growth. In the context of microeconomics, the availability of infrastructure services influences the reduction of production costs, whereas in macroeconomics, the availability of infrastructure services influences the marginal productivity of private capital (Gie, 2002). In addition, infrastructure plays a crucial role in enhancing human well-being and quality of life by, among other things, increasing the value of consumer goods, boosting labor productivity, expanding employment opportunities, and realizing macroeconomic stability namely fiscal sustainability and the growth of credit markets and their impact on the labor market.

Marzuki (2007) says that infrastructure can also make it easier for people to move around, speed up the speed at which goods are transported, make transportation services better, increase the number and quality of development facilities, and make it easier to use development facilities more effectively.

Transportation is one of the infrastructures that play an important role in facilitating the ability of humans to perform their desired activities. Transportation infrastructure, which is often referred to as the "lifeblood of the economy" and also serves as a unifying tool for the nation, helps economic growth and regional growth, and is often referred to as the "lifeblood of the economy".

There are two terms in transportation, according to Simbolon (2003) trade follows the ship and ship follows the trade. The former indicates that transportation (ships) follows trade activity development, while the latter indicates that transportation (ships) is required for trade activity development. As a result, the growth of transportation infrastructure and facilities has an impact on the development of an area or region. The expansion of a region's trade, other activities, or the people who live there, on the other hand, influence the expansion of a region's transportation infrastructure and facilities. As a result, one has an effect on the other. The fact that transportation provides a significant incentive for a district cannot be denied. It is evident that transportation has strategic value for a region. Due to its strategic value and, more specifically, its economic value in enhancing people's lives and well-being, transportation is becoming increasingly important and requires a lot of research A ANDALAS

Schumer asserts that developed nations have populations that are sufficient and sustainable, abundant natural resources, and smooth transportation because transportation connects consumers to produced goods and commodities. High mobility also slows down the amount of time it takes to process materials and move them from less-than-ideal locations to more-ideal ones. Production is increased by mobility (Nasution, 2006).



Figure 1.1 Development of Motorized Vehicles in Indonesia (Units)

Source: Statistics Indonesia, 2022

Based on Figure 1.1, the development of the number of motorized vehicles in Indonesia has increased from 2018 to 2022. Overall transportation modes experienced an average increase of 3.42%, where the highest increase was motorcycles, which amounted to 4.07%.



Figure 1.2 Road Length by Authority (Km)



Furthermore, Figure 1.2 describes the road network in Indonesia from 2018 to 2022. The data shows that the length of the road has increased by about 0.04% per year. The total length of Indonesian roads in 2018 was 540,252 km then increased in 2019 to 542,160 km, in 2022 it increased again to 546,624 km.

Gie (2002) asserts that infrastructure is the driving force behind economic expansion because it facilitates the global movement of individuals, goods, and services. The transportation sector is given a lot of attention by the government because it plays a crucial role in the production and distribution of economic goods. As a result, its budget is always increased. This is due to the significant role this sector plays in the expansion of the national economy.



Figure 1.3 Ministry of Transportation Budget Allocation (Trillion Rupiah)

Figure 1.3 explains that the budget allocation of the ministry of transportation from 2018 to 2022. In 2018 the budget allocation of the ministry of transportation amounted to Rp. 48.187 trillion, which then decreased in 2019 to 41.55 trillion. In 2020 there was an increase in the budget allocation to 43.11 trillion. In 2021 and 2022 the Ministry of Transportation budget decreased to 34.01 trillion and 33.41 trillion.

Table 1.1 GDP by Business Field at Constant 2010 Prices (Billion Rupiah)

Gross Domestic Product at 2010 Constant Prices by Business Field, 2016-2022 (billion rupiah)							
Business Field	2016	2017	2018	2019	2020	2021	2022
Transportation and Storage	374843.4	406679.4	435336.5	463125.9	393418.9	406169.3	486873.8
Land Transport	206218.1	222587.3	238457.7	262208.1	248208	259493.2	282147.8

Source: Statistics Indonesia, 2022

Source: Ministry of Transportation. 2022

Based on the table, it can be seen that from the GDP data at constant prices in 2018-2022 in Indonesia, the largest contribution is in the maufacturing sector, which is 2,272,276 billion rupiah, followed by the wholesales and retail trade sector, which is 1,436,500 billion rupiah, then followed by the agriculture, forestry and fisheries sector, which is 1,376,019 billion rupiah, while the transportation and storage sector contributed 436,984.9 billion rupiah with the land transportation subsector contributing 258,103 billion rupiah. According to these data, the land transportation subsector contributes a significant amount to Indonesia's GDP; however, the economy will suffer if it is not supported by adequate road facilities and infrastructure.

Empirical results show that infrastructure drives economic growth. For example, research by Radiansyah (2012) found that road length has a positive elasticity of 0.097, which means that assuming ceteris paribus, every 1% increase in road length will increase GRDP per capita by 0.097%. This is consistent with the theory that an increase in output associated with an increase in capital-in the case of road infrastructure-will have an impact on increasing economic growth. Based on a regression result of 7.194, Panggabean (2010) claims that the number of automobiles increases North Sumatra's economic growth. That is, assuming everything is equal, GRDP will rise by 7.914 billion for every 1 billion more motorized vehicles.

Based on this background, this study will analyze the effect of the transportation sector, especially land transportation on economic growth, with the title "Analysis of the Effect of Land Transportation on Economic Growth in Indonesia".

### **1.2 Problem Statement**

The condition of a country's infrastructure can affect the development process, especially road infrastructure. In Indonesia, the number of motorized vehicles amounted to 125,305,332 units in 2022, but the length of the road is only 546,625 km. regional distribution activities can be disrupted by an increase in road length that is not proportional to the increase in the number of vehicles. The following research question can be posed in light of the significance of the transportation industry:

- 1) How does road infrastructure affect economic growth in Indonesia?
- 2) How does the number of motorized vehicles affect economic growth in Indonesia?
- 3) How does government spending on the land transportation sector affect economic growth in Indonesia?
- 4) How does labor force participation rate affect economic growth in Indonesia?

#### **1.3 General Research Objective**

The general and specific objectives of this study are subdivided according to the formulation of the problem. The study's overarching objective is to determine how economic expansion is affected by land transportation. The following are the specific goals of this study:

- 1) Knowing the effect of road length on economic growth in Indonesia
- Knowing the effect of the number of motorized vehicles on economic growth in Indonesia
- 3) Knowing the effect of government spending on the land transportation sector on economic growth in Indonesia
- Knowing the effect of labor force participation rate on economic growth in Indonesia

## **1.4 Research Benefits**

1) Theoretical benefits

It is hoped that this research can provide academic benefits for readers, so that this research can contribute knowledge related to this title. Also, this research can be a reference for subsequent researches who are relevant to this title.

2) Practical benefits VERSITAS ANDALAS

This research should be able to contribute to the determination of policies for parties related to this title or the economic indicators studied.

## 1.5 Systematic Writing

1) Chapter I Introduction

The introduction explains about problem identification, problem statement, general research objectives, research benefits, and systematic writing.

2) Chapter II Theoretical Framework

This chapter explains the theoretical framework used in the research, followed by previous research, research hypotheses, and ideas.

3) Chapter III Research and Methodology

This chapter consists of specific research objectives, time and place of research, research methods, operational defenition of variables, data collection techniques, and data analysis techniques..

4) Chapter IV Research Results

This section explains the results found in the data processing results and the results of the correlation between variables.

# 5) Chapter V Conclusion and Suggestion

The results of this study are presented in Chapter V, as well as researcher recommendations based on the research results.

