CHAPTER II

THEORETICAL FOUNDATION

2.1 Economic Growth

2.1.1 Definition of Economic Growth

Economic growth is the main concept in the study of development economics which is used to describe the ability of an economy to increase the production capacity of goods and services in a sustainable manner in the long term. Economic growth reflects a dynamic process that shows an increase in real output produced by a region, both at the national and regional levels (Gregory Mankiw, 2019). In the context of economic development, economic growth is often used as an indicator of development success because it is directly related to increasing people's income and social welfare (Ahmad Rifa'ini, 2024. The use of constant prices is intended to eliminate the influence of inflation so that measured economic growth truly reflects an increase in production volumes, not just an increase in prices.

Thus, economic growth indicates an increase in the real production capacity of an economy (Tia et al., 2025). Economic growth is the process of increasing per capita output in the long term which occurs due to the increase in the use of production factors and technological advances. These factors include capital, labor, natural resources, technology, and institutions that support economic activities (Natsir et al., 2023). From a regional economic perspective, regional economic growth is greatly influenced by the economic structure of the region concerned.

Economic structure describes the composition of economic sectors that make up regional GDP. Each sector has a different role and contribution to economic

growth. The leading sector is a sector that has relative advantages and is able to become the driving force of the regional economy. These advantages can be seen from the large influence of the sector on economic growth, the ability of the sector to absorb labor, and the attractiveness of the sector in attracting investment. Therefore, regional economic growth analysis is often focused on leading sectors that have a strategic role in encouraging increased regional output and income (Di et al., 2023). In addition, economic growth is also closely related to factors of production, especially capital and labor. Increased investment will enlarge the capital stock used in the production process, so that production capacity can increase. On the other hand, an increase in the number and quality of labor will increase the economy's ability to produce output.

The combination of investment and a productive workforce will drive higher economic growth. Economic growth is also influenced by the level of efficiency and technological advancement. Technological advances allow the production process to be carried out more efficiently, resulting in greater output with the use of relatively equal inputs. Therefore, sustainable economic growth does not only depend on the quantitative addition of production factors, but also on improving the quality of production factors and the technology used (Wijayanti, 2025). In this study, economic growth is positioned as a bound variable (Y) which is influenced by the performance of leading sectors, namely the processing industry sector and the large trade and retail sectors. This sector is considered to remain consistent and stable in realizing economic growth in Sidorjo district even during the transition of economic recovery from COVID-19 which has caused the regional economic system to decline drastically.

2.1.2 Theory Economics Neoclassical Robert Solow

The neoclassical theory of economic growth developed by Robert Solow explains that economic growth is determined by a combination of capital, labor, and technological level. In modern economic literature, Solow's theory is understood as a basic framework for analyzing how the amount and value of production, investment, and labor play a role in driving economic growth in a region.

$$Y = K^{\alpha} L^{(1-\alpha)}$$

Source: Carita et al., (2025)

In the development of modern literature, the production function is often expanded to include the technological factor (A), so that it is formulated as:

$$Y = A K^{\alpha} L^{(1-\alpha)}$$

Source: Carita et al., (2025)

Description:

- Y = Output or production rate
- K = Capital or investment
- L = Labor
- A = Technology level
- α = Elasticity of output to capital

The formula shows that output or the amount and value of production (Y) is directly influenced by the amount of capital or investment (K) and the amount of labor (L). Increased investment will increase capital stock, important in explaining economic growth according to Solow's theory. Solow's theory also emphasizes the law of diminishing returns, which is a condition in which additional capital or labor

will produce a smaller additional output if other factors are considered constant. Therefore, in the long term the economy will achieve a balanced condition called *a* steady state.

2.1.3 Michael Porter's Regional Theory of Competitive Advantage

The theory of competitive advantage put forward by Michael Porter explains that the competitiveness of a region or economic sector is not only determined by the availability of natural resources, but especially by productivity, production efficiency, and the ability to create added value. In the modern regional economic literature, Porter's theory is widely used to explain how superior sectors are able to increase the amount and value of production, attract investment, and absorb labor (Bankova & Tsvetanova, 2024).

According to Porter, the leading sector is one that has a high level of productivity and is able to compete sustainably. This productivity is reflected in the sector's ability to produce large and high-value outputs with efficient use of inputs. Therefore, an increase in the number and value of production is the main indicator in assessing the competitiveness of leading sectors according to Porter's theory (Setiawan et al., 2025). Porter developed an analytical framework known as the Diamond Model, which describes the factors that determine the competitive advantage of a sector or region. This model consists of four main elements, namely the condition of production factors, demand conditions, supporting and related industries, and the Company's strategy and competition (Kaparang, 2025). These four elements together affect the performance of leading sectors and regional economic growth. The interaction of these four elements creates a dynamic system that determines the competitive advantage of the region. In addition to these internal

factors, this model also accommodates the role of the government and the luck factor (chance) as supporting variables Conceptually, the relationship between competitive advantage and sectoral output can be formulated as follows:

$$Daya\ Saing = Produktivitas \times Efisiensi$$

or more operationally:

$$Y = f(P, I, L)$$

Source: Delgado et al. (2023)

Description:

- Y= Quantity and value of production
- P= Sector productivity
- I= Investment
- L= Labor

The formula shows that increasing the productivity of the leading sector will increase the value of investment which along with optimal labor absorption will create greater economies of scale, which ultimately pushes the Y value (Quantity and value of production) to a higher level. In the context of regional development, this relationship indicates that the economic growth of Sidoarjo Regency does not only depend on the increase in the amount of capital and working people, but also on the innovation and sectoral efficiency represented by these productivity variables.

In Porter's theory, investment is seen as an important factor in strengthening competitive advantage. Investment enables companies and sectors to adopt more advanced technologies, increase production scale, and improve product quality.

Modern economic literature shows that regions that are able to attract investment in leading sectors tend to have higher levels of productivity and economic growth (Delgado et al., 2023). In addition to investment, labor is also an important indicator in Porter's theory. A skilled and productive workforce will increase efficiency produksi dan kemampuan inovasi sektor unggulan.

The relevance of Porter's theory with this research lies in its ability to explain the difference in the performance of the processing industry sector and the large and retail trade sector in increasing regional economic growth. Sectors with higher productivity levels, supported by adequate investment and labor, will generate greater production volume and value. The relevance of Porter's theory with this research lies in its ability to explain the differences in the performance of the processing industry sector and the large trade and retail sectors in encouraging regional economic growth. Sectors with higher productivity levels, supported by adequate investment and a competent workforce, will generate a greater amount and value of production, thus making a more significant contribution to regional economic growth (Delgado et al., 2023).

2.2 Relationship Between Research Variables

The relationship between variables in this study is compiled based on the foundation of economic growth theory and superior sector theory that have been described earlier. This study positions economic growth as measured using the Constant Price GDP indicator as a dependent variable (Y), while the processing industry sector (X1) and the large trade and retail sector (X2) are independent variables. The performance of each sector is measured through three main indicators, namely the amount and value of production, investment, and labor,

Labor also has an important role in explaining the relationship between variables in this study. Labor is a factor of production that is directly involved in the process of output creation.

Increase in the number of workers absorbed by the processing industry sector will increase production capacity and encourage the growth of industrial output (Algifari & Masniadi, 2024). On the other hand, the large trade and retail sectors tend to be labor-intensive and have an important role in creating jobs and increasing people's income. Therefore, the difference in labor absorption between sectors will have implications for the difference in the sector's contribution to regional economic growth. Based on Solow and Romer's theory, the relationship between investment, labor, and output is interrelated.

In the context of superior sectors, Hirschman's theory, Porter, asserts that sectors with high production performance, large investments, and significant labor absorption will have a greater multiplier impact on regional economic growth (Y. Sari et al., 2024). So that a qualified workforce is also related to each other so that it becomes the main parameter of economic growth in a region. These three variables are very related to each other because they are complete and accurate indicators to measure economic growth in an area, namely the value of production, investment and labor, so that these indicators produce output for growth.

2.3 Previous Research

Table 2.1 Previous Research

No	Researcher (Year)	Research Title	Variables studied	Analysis Tools	Research Results
1	Sari & Putra (2022)	Analysis of Leading Sectors on Regional Economic Growth	Production, Investment, Labor, Economic Growth	Regresi Panel	Leading sectors have a significant effect on regional economic growth
2	Stuart (2022)	The Role of the Processing Industry in Regional Economic Growth	Production Value, Investment, GDP	Regresi Linear	The processing industry contributes positively to economic growth
3	Lestari & Nugroho (2022)	Trade Sector Analysis on Economic Growth	Production, Labor, GDP	Regresi Berganda	The trade sector has a significant impact on
4	Pratama et al. (2023)	Investment and Regional Economic Growth	Investment, Labor, Economic Growth	Regresi Panel	Investment has a positive effect on economic growth
5	Rahmaw ati (2023)	Analysis of Leading Sectors and Their Impact on GDP	Production, Investment, GDP	LQ and Shift Share	Leading sectors are the engine of regional economic growth

Table 2.1 Previous Research

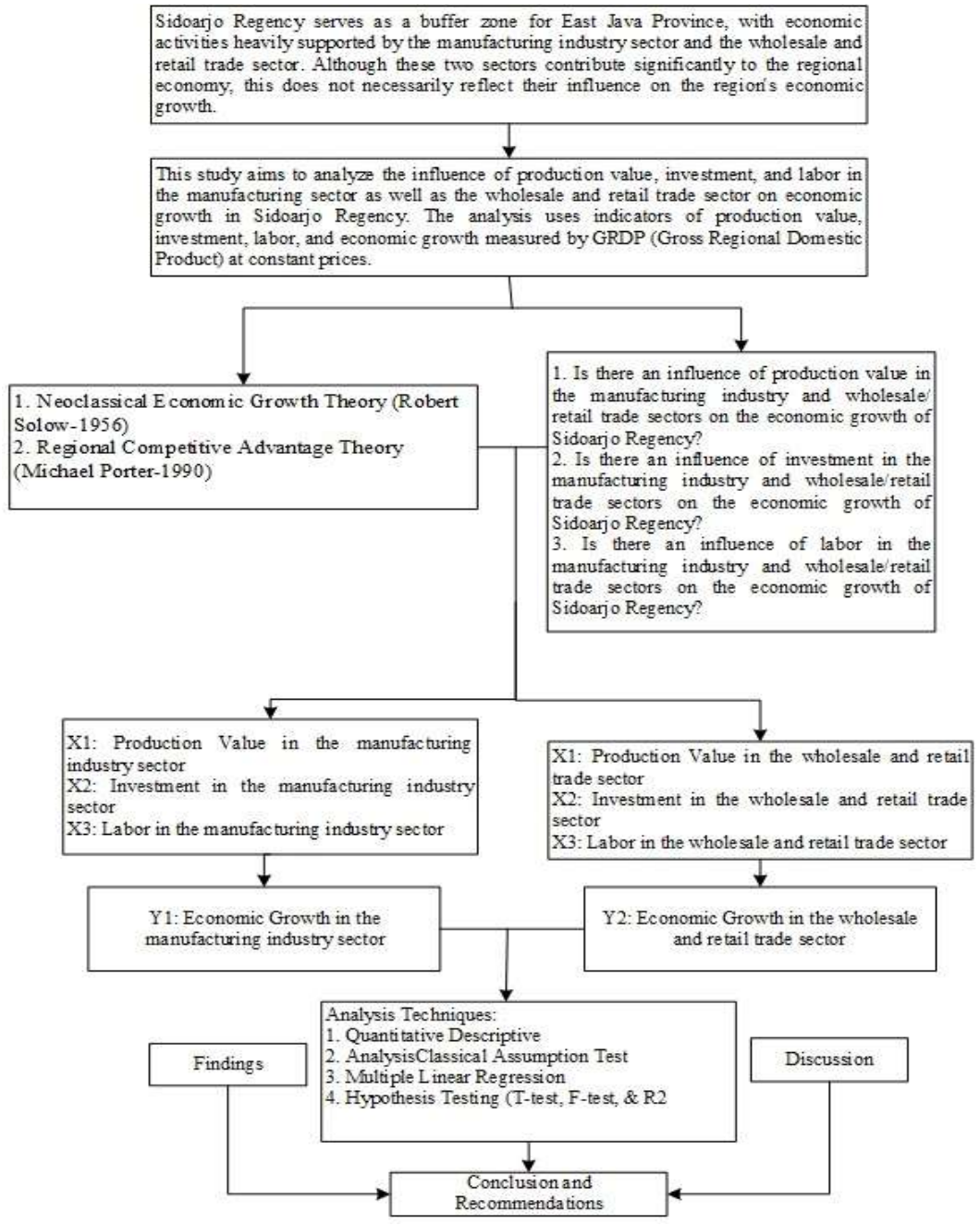
No	Researcher (Year)	Research Title	Variables studied	Analysis Tools	Research Results
6	Gift of Hope (2023)	Processing Industry as a Regional Strategic Sector	Production Value, Investment, GDP	Analis Panel	The processing industry has a large contribution to the GDP
7	Rain & Stuart (2024)	Trade Sector and Regional Economic Growth	Production, Labor, Economic Growth	Bergaa Regression	The trade sector has a positive effect on Economic growth
8	Santoso (2024)	Sectoral Investment Analysis on Economic Growth	Investment, GDP	Regresi Panel	Sectoral investment boosts regional economic growth
9	Dewi & Prakoso (2024)	Leading Sectors and Regional Economic Development	Production, Investment, Labor	LQ and Regression	Leading sectors boost economic growth
10	Ananda et al. (2024)	Comparison of Regional Leading Sector Performance	Production, Labor, GDP	Differential Test	There are differences in performance between leading sectors

Table 2.1 Previous Research

No	Researcher (Year)	Research Title	Variables studied	Analysis Tools	Research Results
11	Ramad han & Utami (2024)	The Influence of Industry and Trade on Economic Growth	Production, Investment, Labor, Economic Growth	Regresi Panel	Industry and trade have a significant impact on economic growth

2.4 Research Mindset

Figure 2.1 Conceptual Framework



Source: researcher

2.5 Hypothesis Concept

Based on the theoretical foundation, the relationship between variables, and the formulation of the problem that has been prepared, the hypothesis in this study is formulated as follows:

1. It is suspected that there is an influence of the production value of the processing industry sector as well as the large and retail trade sector on the Economic Growth of Sidoarjo Regency.
2. It is suspected that there is an influence of investment in the processing industry sector as well as the large trade and retail sectors on the Economic Growth of Sidoarjo Regency
3. It is suspected that there is an influence of the labor of the processing industry sector as well as the large trade and retail sectors on the Economic Growth of Sidoarjo Regency.