

# Economic Growth and Financial Management for SMEs: Perspectives on Community Economic Business Sustainability

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## Abstract

Natural resource-based economic growth impacts increasing the productivity of small and medium enterprises (SMEs) in Wajo Regency. This study aims to analyze: (1) Economic growth and financial management performance work as determinants of increasing the productivity of small and medium enterprises (SMEs), (2) The direct and indirect effects of financial management, technology utilization, business diversification, and product innovation, on business productivity economics and business sustainability of SMEs, dan (3) Financial management strategy and productivity of SMEs in supporting economic growth. This study uses a combination of qualitative-quantitative approaches sequentially—data obtained through observation, in-depth interviews, surveys, and documentation. The results of the study indicate that the optimization of financial management performance and the effectiveness and efficiency of the utilization of business capital impact increasing the productivity of SMEs. Furthermore, financial management, technology utilization, business diversification, and product innovation directly affect the productivity of SME economic enterprises with a determination coefficient of 60.58%. The increase in SMEs' business productivity directly and indirectly affects their business sustainability, with a determination coefficient of 67.73%. This study recommends financial management based on the effectiveness and efficiency of the utilization of business capital coupled with the use of technology, business diversification, and product innovation, which are essential parts that need to be considered in the formulation of economic development policies in the framework of encouraging increased productivity and business sustainability of SMEs in Wajo Regency, South Sulawesi, Indonesia.

**Keywords:** Economic Growth; Financial Management; Business Productivity; Business Sustainability of SMEs.

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## Introduction

Economic development is a gradual transformation of a nation's economic conditions and region towards a better condition for a certain period. Identifying the factors that drive economic growth and development is one of the critical challenges faced by both national and regional economies (Stoica, O et al., 2020). Economic growth is a rise in the potential of a region to manufacture goods and provide services valued based on the population's gross domestic product and per capita income output. The increase in output or economic growth commonly arises from the accumulation of factor inputs, such as capital and labor, in the production process. This can be achieved by employing more capital or hiring additional workers (Economic & Social Survey, 2016). The factors that influence business efforts concerning economic growth are as follows: (1) Human resources, about the capacity and quality to manage and harness natural resources' capabilities effectively. (2) Natural resources, concerning the matter of foundational economic sectors. (3) The progress in science and technology concerning the effectiveness and efficiency of production. (4) Inflation rate about cost-push inflation and demand-pull inflation. (5) Interest rate levels concerning the optimal use of borrowed capital will promote improvements in the quality of companies and economic business productivity. Thus, entrepreneurial activities are generally considered to be the critical aspects of industrial organization that are most conducive to innovative activities and uncontrolled competition (Wennekers, Sander, et al., 2005)

Small and medium enterprises (SMEs) are autonomous, non-subsidary establishments that employ a certain number of employees. (Cantele, S, & Cassia, F. et.al 2020). Furthermore, Small and medium enterprises (SMEs) are characterized by their modest size and scale of business endeavors that require financial management support to ensure the smooth and productive operation of the developed business. This indicates that small and medium enterprises (SMEs) hold significant importance in local economic development, as they play vital roles in generating employment opportunities, reducing poverty, and fostering economic growth. However, they encounter numerous financial constraints (Gherghina, S.C, et al., 2020). The indicators for assessing the progress of SMEs are measured based on their operating cash flow and the economic business productivity they have developed. Nonetheless, small- and medium-sized enterprises encounter more significant financial limitations than large enterprises, hindering their potential for growth and expansion (Nguyen, P.A, et al., 2020). Therefore, with smoothly operating cash flow, various obligations that need to be paid will be managed well. Regarding debt and tax management, SMEs still experience difficulties increasing productivity and product marketing (Surya et al., 2021; Badi et al., 2021; Dwikat et al., 2022). This means that smooth operating cash flow and Enhanced productivity favorably affect the growth of SMEs and the macroeconomic conditions of the region. Small and medium enterprises (SMEs) play a vital role in propelling economic progress, and their expansion status significantly influences the functioning of the macroeconomy (Jia et al., 2020). Thus, SME business activities will not encounter obstacles if cash and business capital are managed effectively and efficiently. An effective quality management and financial management system will create net working capital efficiency and business sustainability for SMEs (Zimon, G.; and Zimon, D., 2020; Hernita, H et al., 2021).

Utilizing technology for financial management is critical in advancing and ensuring the steadiness of small and medium enterprises (SMEs). Therefore, business model innovation (BMI) enables companies to respond to market opportunities swiftly, capitalize on innovations through novel business models, redefine existing markets, or establish new ones (Chesbrough & Rosenbloom, 2002; Ibarra et al., 2020; Latifi et al., 2021). Consequently, the potency of BMI as a driver of enhanced market performance has been underscored (Foss & Saebi, 2017). Furthermore, if a company avoids competitors' imitation, BMI substantially boosts its competitive advantage (Schneider and Spieth, 2013). Furthermore, financial management through accounting processes using technology will benefit decision-making and the effective utilization of business capital. New technologies have brought about a profound revolution in the accounting field. In the past, accounting tasks were carried out manually or with limited computer

usage, primarily focused on bookkeeping (Yoon, S, 2020). Financial accounting offers various advantages for SMEs in managing their businesses, such as: (1) Gaining insights into the company's financial performance, (2) differentiating between company assets and owner's assets, (3) comprehending the position of funds, encompassing both sources and uses, (4) creating accurate budgets, (5) calculating tax requirements, and (6) tracking cash flow during specific periods. Therefore, using technology-based accounting will drive increased productivity and stability for SMEs. Industry 4.0 enables the management of both internal and external complexities by shifting conventional production systems from structured centralized control to decentralized control (Prause, M, 2019).

The Asian Development Bank (ADB) states that small and medium enterprises (SMEs) will necessitate assistance or backing to strengthen their businesses through innovation and internationalization, which are crucial to revitalizing the Southeast Asian economy after the devastation caused by COVID-19 (ADB, 2020). This means that SMEs are a significant and essential force in driving the economies of Southeast Asian countries (The Asia Foundation, 2013). Furthermore, SMEs in Southeast Asia currently need help with their business product marketing, which is still focused on the domestic market, low levels of entrepreneurship, and traditional financial management practices (ILO, 2019). To support the development of SMEs, there is a need for the adaptation of the adoption of technology and the involvement of business actors in the global supply chain. Driven by the region's rapid development and increasing incomes, Indonesia, Malaysia, the Philippines, Thailand, and Vietnam will witness an addition of 50 million new consumers to their middle class, projected to grow to 350 million people by 2022. Furthermore, Indonesia and Malaysia are projected to achieve 5–6% economic growth rates, while Vietnam, the Philippines, Myanmar, Laos, and Cambodia are anticipated to experience growth rates of nearly 7% annually until 2035. This is why many consider Southeast Asia one of the most attractive regions for business globally, specifically for marketing SME products (Business Sweden, 2012).

Economic growth in Southeast Asia ranks among the top six in the world, and it is projected to become the fourth-largest economy by 2050. The current trade value generated amounts to USD 2.6 trillion. As a result, Southeast Asian countries rank as the fourth-largest importers globally, following the European Union, the United States, and China (ASEAN Policy Brief, 2020). Furthermore, Indonesia, the largest country in Southeast Asia, has 56.54 million SMEs, followed by Thailand with 3.5 million and Malaysia with 600 thousand SME units. The contribution of SMEs in Indonesia to the national export value is only 15.8%, which is relatively low compared to Thailand's SME contribution of 29.5% and the Philippines and Malaysia, each with a 20% contribution to their countries' export value (ADB, 2019). The main challenges faced by SME operators in Indonesia include (1) suboptimal productivity and product quality, (2) dominant use of traditional financial management among SMEs, (3) limited adoption of technology, and (4) low support for business capital from formal financial institutions. These four factors contribute to the low competitiveness of SMEs in Indonesia. Thus, it takes efforts to optimize the production, application, or exploration of products, services, processes, and organizational management (Czachorowski, 2021).

Are 774,265 SMEs registered in the Wajo Regency (BPS et al., 2020). Furthermore, small and medium enterprises (SMEs) in the Wajo Regency are primarily in Sengkang, the regency's capital. The actively growing potential of SME businesses includes (1) 578 culinary businesses, (2) 5,638 fashion businesses, (3) 28 technology-related businesses, (4) 1,470 cosmetic businesses, (5) 157 automotive businesses, (6) 1,390 souvenir businesses, and (7) 2,767 agribusinesses. These growing SMEs are identified to require support in strengthening financial management, utilizing technology, product innovation, and accessing national and international markets. The involvement of SMEs in international trade highly depends on the competitiveness of the products produced and accepted by the global market (Prasanna, RPIR, et al., 2019). Therefore, the contribution of this study to the theory lies in integrating financial management for SMEs with capacity building for human resources, technological proficiency,

product innovation, and sufficient business capital. This integration will drive improvements in business performance and the competitiveness of SME products, leading to development.

The progress of businesses and improving SMEs' productivity are integral parts of Wajo Regency's development policy to achieve economic growth and enhance the community's welfare. Therefore, SMEs have strategic and vital value in supporting economic growth to increase competitiveness and productivity. Therefore, the primary objective of this research is to tackle the subsequent research inquiries: (1) In what ways do economic growth and financial management serve as factors that influence the enhancement of small and medium enterprises (SMEs) productivity? (2) What is the extent of direct and indirect influence of financial management, technology use, and product innovation regarding the impact on productivity, economic enterprises' viability, and SMEs' sustainability? Moreover, (3) What is the financial management strategy and productivity improvement for SMEs in supporting economic growth?

## Literature Review

### *Economic Growth*

Economic growth is perceived as a dynamic process involving the evolution and transformation of an economy over time (Budiono, 1982). It is quantitatively assessed to gauge the progress of a country or region's economy during a specific one-year duration (Sukirno, 2010). Indicators of economic growth are commonly determined by gross domestic product (GDP) and gross national product (GNP). According to neoclassical theory, capital formation is vital in driving growth. The neoclassical economic theory has advocated that welfare is primarily achieved through the expansion of market activities. Nonetheless, since the 1980s, it has become evident that the prevailing model of global economic growth, while enhancing material prosperity and living conditions for numerous individuals, also comes with significant drawbacks and costs (Membiela-Pollán M et al., 2019; Dolderer J et al., 2021). Furthermore, capital, labor, and technology are essential to increase production and economic business productivity. Therefore, economic development policies' primary focus is to enhance the efficiency and output levels of small and medium enterprises (SMEs) through product innovation and the exploration of new potential markets (Surya B. et al., 2020; Moradi Y.; and Noori, S 2020). Solow, R.M. (2000) asserts that economic growth will occur when supported by capital, population growth, and technology. The connection between human capital, technology, and economic growth constitutes an interconnected and interrelated system (Ali M. et al., 2018).

The overall economic growth of a nation and region is indicated by the level of achievement of Gross Domestic Product (GDP). Furthermore, Equitable income distribution in the economy motivates efficient employment and business activities, significantly influencing economic development (Bilan Y et al., 2020). Thus, GDP is the aggregate value added of all products or services produced by each sector according to economic activities based on constant and current prices (Widodo, 1990; Rustiadi, 2011). Three methods are employed to calculate GDP: the production approach, the income approach, and the expenditure approach (Kuncoro, 2013). Furthermore, the economic growth rate signifies output growth and reflects changes or advancements over a specific time frame. Economic indicators related to employment, especially those that assess the economies' capacity to create adequate employment opportunities for their populations, often offer valuable insights into the overall macroeconomic performance of economies (Kapsos, S, 2005). Therefore, economic growth will positively affect the rise of economic business productivity and the marketing of products from small and medium enterprises (SMEs). Furthermore, Ruthinda (2008) explained that there are several factors involved in the exportability of SMEs, namely the internal state of the company, organization, policies in the foreign market industry, and government support (Maksum, I.R et al., 2020; Surya, B, et al., 2021).

### ***Utilization of Technology and Business Productivity in the Economy***

Small and medium enterprises (SMEs) play a crucial and strategic role in the economic growth of both developing and developed countries. Furthermore, in developing countries, SMEs commonly face challenges such as restricted access to affordable long-term finance, insufficient institutions to foster entrepreneurship and a skilled workforce, low-income levels, and inadequate policies to bolster SMEs' economic and social advancement (Herr & Nettekoven, 2017). Berry et al. (1992) outlined below the three fundamental reasons highlighting the significance of micro and small enterprises in developing countries. Small and medium enterprises (SMEs) tend to perform better in generating productive employment; SMEs can quickly adapt to investment utilization and technological changes, and SMEs have an advantage in flexibility. In developed countries and industries, the presence of SMEs plays a crucial role and contributes to increased exports and serves as subcontractors; micro and small enterprises play a crucial role in supplying diverse inputs to large-scale businesses and serving as innovation sources (Sulistiyastuti, 2004). Therefore, the function and role of SMEs are highly strategic to be developed in promoting economic growth and ensuring sustainable regional development. This means that the business environment for small and medium enterprises (SMEs) can be both a challenge and a source of opportunities (Burlea et al., 2019).

Financial management for SMEs is not just about managing cash flow, but it is aimed at managing assets to generate profits and utilize capital sources to finance business productivity. The primary aim of cash management is to regulate the cash position and uphold the liquidity of SME businesses (AL Smirat, 2016). Additionally, the effectiveness of financial accounting for small and medium enterprises (SMEs) is positively associated with the performance of economic enterprises (Mathew, 2013). Kasmir and Jafkar (2003) stated that the financial management of a business is about how much costs will be incurred to provide economic value and increase business productivity. Furthermore, initiatives aimed at minimizing information asymmetry and fostering active involvement with stakeholders will enhance the credibility and accountability of financial information (Oncioiu et al., 2020). Good financial management will outline the projection of the required funds or initial capital, the capital sources to be utilized, and the expected returns from the investments made (Investopedia, 2017). Furthermore, financial feasibility in business aims to study aspects related to cash flow, funding sources, and financial projections, including potential income and expenses during the production and operational period of the planned project (Rangkuti, 2012). Thus, financial management is closely related to the management behavior of small and medium enterprises (SMEs) predominantly run by local communities. SMEs typically exhibit characteristics of being owner-managed, independent, multi-tasking, financially constrained, reliant on personal connections, often deeply rooted in local communities, commonly family-owned, and informally managed (Spence, 2007; Spence, 2016; Choi et al., 2018).

Financial management is vital in administering small and medium enterprises (SMEs). In this context, the SME management approach plays the key to authority (Ibarra et al., 2020). SMEs often adopt a more streamlined organizational structure, enabling more accessible internal communication, learning, and exchange of mental models among company members (García-Morales et al., 2007). According to Mien and Thao (2015), effective financial management practices aid in identifying, acquiring, allocating, and utilizing financial resources. Furthermore, financial management behavior is aimed at making financial decisions, harmonizing individual motives, and achieving the development objectives of SMEs (Weston & Brigham, 1981). Therefore, effective financial management will create productivity and stability for SMEs' businesses. This means sufficient knowledge or interest in recording transactions and financial reports is essential for increasing SME businesses' sales and productivity (Mazzarol, 2015; Karadag, 2015).

Three indicators are used to measure economic businesses from the financial management perspective. Firstly, Cash flow is a measure of the ability of SME operators to carry out effective financial management concerning budget preparation. On the other hand, small and medium enterprises (SMEs)

that need more capacity to adopt and practice budget formulation will impact the ineffective and inefficient use of business capital (Chowdhury, P and Shumon, R, 2020). Secondly, savings must be well managed as part of income, and investments must not be consumed. This means that the skills and abilities to manage finances and utilize savings contribute positively to decision-making and the effective use of business capital (Ida and Dwinta, 2010). Furthermore, SMEs' ability to prepare budget usage, choose investments, opt for insurance plans, and use credit are all part of efforts to ensure the long-term stability of economic businesses. Thirdly, saving refers to the ability to generate profits and allocate funds related to the management and use of funds towards improving business productivity. Technology integration in financial management is anticipated to offer opportunities for the growth and advancement of small and medium enterprises (Yoon, 2020). Therefore, SMEs' ability to manage business finances effectively and efficiently, coupled with technological proficiency, will aid in developing economic businesses. Technology is opening up fresh prospects and reducing entry barriers for MSMEs. The digital platform economy is facilitating the enhancement of human capital by linking small enterprises to the digital global community (Capri, 2017).

The strategy for developing small and medium enterprises (SMEs) is used to systematically identify various factors in formulating strategic actions towards achieving business stability (Rangkuti, 2014). Furthermore, this strategy is founded on a rationale that aims to capitalize on strengths and opportunities while concurrently mitigating weaknesses and threats. Assauri (2013) states that SWOT is an analytical framework that integrates internal factors and the external environment. Business development strategies serve to anticipate challenges and capitalize on opportunities in response to evolving environmental conditions, ensuring the stability and growth of small and medium enterprises (SMEs). Thus, small and medium enterprises (SMEs) are essential in developing countries like Indonesia. However, simultaneously, they challenge policymakers who want to support their growth (Burger et al., 2015).

Small and medium enterprises (SMEs) fundamentally possess diverse creativity and have the potential to reach a broader market through the support of utilizing technology. SMEs embrace varying levels of digital transformations, which can be categorized into three paths, contingent upon the contextual factors of the firms (Priyono et al., 2020). Furthermore, to support business development and productivity, SME operators are expected to adapt to technological advancements in online product marketing. The benefits of using technology to enhance SME business productivity include (1) obtaining information more quickly, being sensitive to technological developments, and keeping up with trends in product innovation, making it easier for consumers to recognize. Technological advancements, shifts in consumer behavior, intensified competition, resource constraints, short product lifecycles, and evolving business landscapes are among the factors that drive the necessity for innovation within organizations (Kozioł-Nadolna, K, 2020). (2) Cost-saving in marketing; in this case, SME operators will quickly obtain up-to-date information towards long-term business development and competitiveness. Implementing and integrating Internet of Things (IoT) technologies offer solutions to existing challenges in industrial value creation, including shorter technology and innovation cycles, escalating market volatility, and a rapidly changing environment amid mounting competitive pressure (Birkel, H.S. et al., 2019). (3) Simplifying operations, in this case, using technology, will facilitate SMEs' operational activities, such as cutting unnecessary operational expenses, speeding up work processes, and reducing business burdens towards effectiveness and efficiency. There is a positive relationship between innovation culture, technology capabilities, and organizational size with the performance of SMEs (Tang et al., 2020). Therefore, the use of technology combined with effective and efficient financial management will drive an increase in SMEs' business productivity.

The productivity of SMEs is directly Connected to production efforts and their Relationship to the quality of the produced goods. The quality of SME business products offers an excellent opportunity to reach both domestic and global markets (Tambunan, 2019). Furthermore, production is an activity

related to the output expressed by the production volume, whereas productivity is associated with resource utilization efficiency. New product development is a crucial aspect of innovation that must be undertaken to align with consumers' evolving trends and preferences (Prabowo et al., 2020). Thus, the productivity of SMEs is assessed based on the effectiveness and efficiency in utilizing resources. Innovation and technology adoption obtain SME business productivity (Shahadat et al., (2023); Hussain et al., 2020). Three factors impact the productivity of small and medium-sized enterprises (SMEs): First, efficiency is the measure of input utilization based on the desired plan against the actual realization or target achieved. The second is effectiveness, which represents how far the targets can be achieved in quantity, quality, and time. In other words, the higher the percentage of targets achieved, the higher the level of effectiveness. The critical aspect is the sustainable creation of productivity value and reducing negative impacts (Surya et al., 2020; Ordieres-Meré et al., 2020). Third, the quality of the produced goods refers to the extent to which they meet customer requirements, specifications, and expectations. The customer has consistently been and will continue to be, a top priority in developing a new product, necessitating a thorough understanding of their needs and expectations (Leber et al., 2018; Agyei et al., 2020).

### ***Product Innovation and Sustainability of SMEs***

Ensuring the stability and sustainability of economic enterprises relies heavily on the critical aspect of developing business products tailored to SMEs. With the advent of digital technology marking a new era in entrepreneurship, innovative product development becomes essential to secure the longevity of small and medium enterprises (Corrales-Garay et al., 2020; Surya et al., 2020). According to Pujolwanto (2014), the business orientation of SMEs still primarily revolves around survival for the sake of their families' interests. This means that the focus on consumer needs is still relatively untouched as part of efforts to ensure the stability of SMEs (Surya et al., 2020). Winarni and Sugiyarso (2006), along with Sukamulja (2021) mention seven main problems faced by SMEs, namely: (i) lack of capital, (ii) difficulties in marketing, (iii) intense business competition, (iv) raw material shortages, (v) insufficient technical production skills, (vi) inadequate managerial skills, (vii) lack of knowledge in financial management, and (iii) an unsupportive business climate. These seven aspects are closely related to the product innovation developed by SMEs. The low competitiveness of SME products causes the inability to compete in the global market (Hwangbo et al., 2020; Sharfaei et al., 2022). Hawkins and Mothersbaugh (2010) stated that product innovation involves various processes that mutually influence each other. Furthermore, the ability of SMEs to innovate in various fields significantly determines their capability to produce competitive products (Tambunan, 2009). In other words, product innovation is a crucial element for SMEs as it relates to marketing their business products. Open innovation is a crucial topic concerning the innovative advancement of micro, small, and medium enterprises (Stanisławski, 2020). Therefore, the culture of the introduction of new and inventive ideas for small and medium-sized enterprises (SMEs) becomes crucial and strategic in enhancing productivity towards the sustainability of the economic enterprise. Innovation culture, technology capabilities, and organizational size positively correlate with SME performance (Tang et al., 2020).

The sustainability of SMEs is closely related to the business governance conducted by economic actors. SMEs that build collaborative patterns by integrating social and environmental goals in developed business ventures followed by accountability will drive increased economic competitiveness sustainably (Nigri & Baldo, 2018; Surya et al., 2020). Brinkmann (2016) points out that business sustainability is an activity that preserves the environment, economy, and society for future generations. Furthermore, three components influence business sustainability: economic, social, and environmental. First, economic profit refers to the condition where businesses are expected to operate to gain profits. Second, social aspects involve how an economic enterprise promotes equality and ethics concerning the workforce involved. Third, environmental concerns demonstrate the business owners' commitment to minimizing

direct and indirect environmental impacts. These three elements form an interconnected system that plays an essential role in driving the improvement of productivity and stability of SMEs towards economic sustainability. Sustainability is a multifaceted concept extending beyond environmental preservation to economic development and social equity (Surya et al., 2020). This transformation compels entrepreneurs to introduce novel sustainability-focused products and services to support nature and communities (Jayaratne et al., 2019; Surya et al., 2020). Thus, all SME business activities are profit-oriented, socially focused, and responsive to the environment. SME business management and sustainable development are central ideas in developing community business enterprises (Suh & Lee, 2018; López-Pérez et al., 2018; Adelaide et al., 2022). Thus, the community and stakeholders are required to develop productivity towards the sustainability of economic enterprises (Surya et al., 2020). Consequently, this study formulates the following hypotheses: (1) There exists a correlation or impact of economic growth and financial management performance on the enhancement of productivity in small and medium-sized enterprises (SMEs); and (2) There is a connection or influence of financial management performance, the use of technology, and product innovation on the productivity and sustainability of SMEs.

## Research Methods

### *Research Design*

The study uses a sequential mixed-methods approach, combining qualitative and quantitative research to provide a comprehensive overview. Triangulation logic is employed to cross-check the findings of both methods. A case study design is chosen for several reasons: the development potential of SMEs in promoting growth in Wajo Regency, the need for government policy support for SME financial management based on technology utilization, the complexity of improving SME productivity in Wajo Regency, and the aim to foster local economic enterprise growth and SME sustainability. Conducted in six sub-districts in Wajo Regency from July to December 2020, the study covers an area of 2,506.19 km<sup>2</sup> with 14 sub-districts and 176 rural areas. The population increased from 394,495 in 2016 to 379,079 in 2020, with an average growth rate of 0.24%. Economic growth averaged 1.32% over the same period.

### *Data Collection Methods*

The study assesses SME conditions and characteristics through observation, focusing on management, workforce, financial management, production facilities, business premises, marketing, and customer service. In-depth interviews with SME representatives explore administration, economic growth, and financial management performance. A questionnaire measures financial management, technology utilization, product innovation, economic productivity, and sustainability. Additional data comes from documents on economic growth, SME characteristics, and government activities. Qualitative data is gathered using the snowball method, starting with 16 informants, including local officials and SME facilitators, and expanding to additional SME actors. Informants are selected based on economic engagement, connections with other actors, and the ability to provide insights into SME growth and challenges. Using purposive sampling, the study targets local SME actors with at least five years of experience. The research sample was chosen using a purposive sampling method, focusing on respondents who are residents involved in economic ventures and have at least five years of experience running their SMEs. The questionnaire designed for this study gathers information analyzed using statistical methods, percentages, and frequencies. Sampling follows Cochran's (Stephen D, Adruce SAZ., 2018) formula:

$$n = Z^2 \cdot aPQ / d^2$$



The sample size was determined to be 350 based on a confidence level of 95% and a degree of accuracy set at 0.15. Table 4 provides the number of respondents from various districts in Wajo Regency, totaling 350, with detailed distribution across 14 districts, including Sabbangparu, Tempe, Pammana, Bola, Takkalalla, Sajoangin, Penrang, Majauleng, Tanasitolo, Belawa, Maniangpajo, Gilireng, Keera, and Pitumpanua.

**Data analysis method**

The analytical approach employed in this research aligns with the research questions, which center on examining how economic growth and financial management performance impact the productivity of small and medium enterprises (SMEs). To address these research questions, the analysis methods used include (i) shift-share analysis, (ii) location quotient (LQ) analysis, (iii) analysis of per capita income, (iv) economic specialization index, and (v) financial performance of SMEs using financial ratio analysis. The analysis outcomes are then linked to the potential of small and medium enterprises (SMEs) in Wajo Regency. The shift-share analysis involves the following formulas:

$$D_{ij} = N_{ij} + M_{ij} + C_{ij}$$

$$N_{ij} = E_{ij} r_n$$

$$M_{ij} = E_{ij} (r_{in} - r_n)$$

$$C_{ij} = E_{ij} (r_{ij} - r_{in})$$

$$D_{ij} = E_{ij}r_n + E_{ij} (r_{in} - r_n) + E_{ij} (r_{ij} - r_{in})$$

$$SN_{ij} = M_{ij} + C_{ij}$$

Dij represents the change in sectors or subsectors in Wajo Regency caused by economic influences from South Sulawesi and consists of three main components: N, M, and C. N indicates the change in sectors or subsectors in Wajo due to economic growth in South Sulawesi, calculated as E multiplied by rn. M describes the change in GRDP of sectors or subsectors in Wajo due to the growth of the same sectors in South Sulawesi, calculated as E multiplied by the difference between rin and rn. C shows the change in GRDP of sectors or subsectors in Wajo due to the competitive advantage of these sectors in Wajo, calculated as E multiplied by the difference between rij and rin. If M and C are more significant than zero, the sector in Wajo experiences progressive growth; if less than zero, the sector experiences slow growth. Furthermore, if M is more significant than zero, the sector in Wajo proliferates, but if it is less than zero, it grows slowly. A C value greater than zero indicates high competitiveness, while a less than zero indicates low competitiveness. If SN is more significant than zero, the sector under study exhibits progressive growth; if less than zero, the growth is not progressive. Additionally, the location quotient (LQ) analysis is used to gain further insights into the competitiveness of sectors in Wajo Regency.

$$LQ_{ij} = \frac{x_{ij}/RV_{ij}}{x_i/RV} \text{ or } LQ_{ij} = \frac{x_{ij}/x_i}{RV_i/RV}$$

$$DLQ_{ij} = \frac{1 + g_{ij}/1 + g_j}{1 + G_i/1 + G}$$

Where: LQij represents the location quotient coefficient of sector i in Wajo Regency, Xij denotes Eij,t represents the GRDP of sector i in Wajo Regency at time t, Xi signifies the GRDP of sector i in the South Sulawesi Province, RVi indicates the total GRDP of Wajo Regency, RV represents the total GRDP of South Sulawesi Province, DLQ is the dynamic location quotient index, gij represents the average

growth rate of subsector *i* in Wajo Regency, *g<sub>j</sub>* is the growth rate in Wajo Regency, *G<sub>i</sub>* is the average growth rate of the subsector in South Sulawesi Province, and *G* denotes the growth rate at the provincial level in South Sulawesi. Furthermore, the per capita income analysis uses the following formulation:

$$GRDPpk = GRDP / \sum p \times 100\%$$

GRDP represents the final expenditure component for sectors of economic activity, *pk* signifies the income received by each resident, and  $\sum P$  denotes the number of residents in a given location. Furthermore, the regional economic specialization index uses the following formula:

$$Si = \frac{\sum_{i=j} E_i^R E^R - E_i^N E^N}{2}$$

The specialization index (*S<sub>i</sub>*) is calculated using the production values of sector *i* and total sectors in both Wajo Regency and South Sulawesi Province. SME financial performance is assessed using several ratios:

$$\text{Current Ratio} = \frac{\text{Current assets}}{\text{Current Liabilities}}$$

$$\text{Quick Ratio} = \frac{\text{Total Liquid Assets}}{\text{Total Current Liabilities}}$$

$$\text{Cash Ratio} = \frac{\text{Cash} + \text{Cash Equivalents}}{\text{Current liabilities}}$$

$$\text{Debt Ratio} = \frac{\text{Total debt}}{\text{Total Assets}}$$

$$\text{Debt to Equity Ratio (DER)} = \frac{\text{Total debt}}{\text{Equity}}$$

$$\text{Total Asset Turnover} = \frac{\text{Revenue (Sales)}}{\text{Total Assets}} \times 100\%$$

$$\text{Working Capital Turnover} = \frac{\text{Revenue (Sales)}}{\text{Current asset} - \text{Current Debt}}$$

$$\text{Fixed Asset Turnover} = \frac{\text{Revenue (Sales)}}{\text{Fixed Asset}} \times 100\%$$

$$\text{Gross Profit Margin} = \frac{\text{Gross profit}}{\text{Total income}} \times 100\%$$

These ratios measure liquidity, solvency, and operational efficiency. To explore the impact of financial management (*X1*), technology utilization (*X2*), and product innovation (*X3*) on business productivity (*Y*) and SMEs' sustainability (*Z*), a path analysis method is used, showing their relationships and effects.

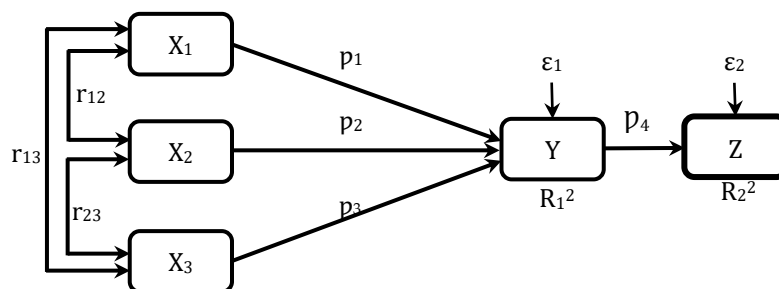


Figure 1 illustrates the interrelationships among the variables *X1*, *X2*, and *X3*. The strength of these relationships is represented by the correlation coefficients (*r12*), (*r13*), and (*r23*). The equation used to calculate these correlation coefficients is as follows:

$$Y = pYX1 + pYX2 + pYX3 + \epsilon1$$

$$X3 = p31X1 + p32X2 + \epsilon1$$

$$Y = pY1X1 + pY2X2 + pY3X3 + \epsilon2$$

$$Z = p21 + Z1 + \epsilon2$$

$$Z3 = p31Z1 + p32Z2 + \epsilon3$$

In path analysis, the relationships between variables are measured by correlation coefficients (r12), (r13), and (r23). Specifically, (r12) represents the correlation between X1 and X2, (r13) denotes the correlation between X1 and X3, and (r23) reflects the correlation between X2 and X3. The variables X1, X2, and X3 serve as independent variables that influence the dependent variable (Z) through the intervening variable (Y). In other words, X1, X2, and X3 do not directly impact Z but instead affect it indirectly through the intermediary variable Y. Thus, X1, X2, and X3 have an influence on Y, Next, Y influences Z. Three significant points can be elucidated in this context: (i) the independent variable X1 and the intervening variable Y are connected by the regression coefficient (p1), (ii) the independent variable X2 and the intervening variable Y are related through the regression coefficient (p2), and (iii) the independent variable X3 and the intervening variable Y are associated through the regression coefficient (p3). The direct effect of X1 on Y is represented by the squared regression coefficient (p1<sup>2</sup>), the direct effect of X2 on Y is indicated by the squared regression coefficient (p2<sup>2</sup>), and the direct effect of X3 on Y is reflected by the squared regression coefficient (p3<sup>2</sup>). Moreover, the coefficient of determination (R2) signifies the total effect of the impact of the independent variables under investigation on the dependent variable, which is reflected in R12. R12 represents the overall effect (including both direct and indirect effects) of X1, X2, and X3 on Y. On the other hand, R22 represents the total effect of Y on Z. The coefficient of determination is calculated using the following formula:

$$R_1^2 = [p_1^2 + p_2^2 + p_3^2] + [(p_{1r_{12}p_2}) + (p_{2r_{12}p_1})] + [(p_{1r_{13}p_3}) + (p_{3r_{13}p_1})] + [(p_{2r_{23}p_3}) + (p_{3r_{23}p_2})]$$

$$R_2^2 = p_3^2$$

The coefficient of determination (R2) represents the total effect (direct effect + indirect effect) of X1, X2, and X3 on Y. "[p12 + p22 + p32]" is the direct effect of X1, X2, and X3 on Y. The term "(p1r12p2)" denotes the indirect effect of variables X1 through X2 on Y. The term "(p2r12p1)" represents the indirect effect of X2 through X1 on Y. "(p2r13p1)" indicates the indirect effect of X1 through X3 on Y. "(p3r13p1)" reflects the indirect effect of the variables X3 through X1 on Y. "(p2r23p3)" represents the indirect effect of the variables X2 through X3 on Y. "(p3r23p2)" denotes the indirect effect of X3 through X2 on Y. "R22 or p32" R22 represents the direct influence of Y on Z. Furthermore, epsilon (ε1 and ε2) represents the residual effect, indicating the magnitude of the influence of other variables that can impact the intervening variable and the dependent variable but have not been studied in this research.

Furthermore, to answer the third research question, namely how the financial management strategy and increase the productivity of SMEs in supporting economic growth, using the SWOT analysis method. The formulation of strategies in relation to financial management and productivity of SMEs in this study is linked to economic growth and development policies in Wajo Regency. Swot analysis is based on parameters: (i) strengths, (ii) weaknesses, (iii) challenges, and (iv) opportunities. SWOT analysis is the systematic identification of various factors that are used to formulate a strategy. This analysis will logically maximize strengths and opportunities, which are simultaneously used to minimize weaknesses and threats towards environmental control and management in the future. The strategic decision-making process is always related to the development of mission, objectives, strategies and policies. SWOT analysis matrix in the following Table 1.

**Table 1. SWOT Analysis Matrix**

		External Factors	
		Opportunity (O)	Threat (T)
Internal Factors	Identification of Factor	Determine the Opportunity factors	Determine the threat factors
	Strenght (S)	S Vs O	S Vs T
	Determine the strength factors	Determine the program that emerges by matching strength (S) with Opportunity (O)	Determine the programs that emerge by matching Strength with threat
	Weakness (W)	W Vs O	W Vs T
Determine the factors of weakness	Determine the emerging program by matching weakness (W) with Opportunity (O)	Determine the emerging program by matching weakness (W) with threats (T)	

Source: Reference Rangkuti (2014).

## Result and Discussion

### Result

Economic growth, which exhibits a rising trend, is strongly interconnected with the exploitation of natural resources and the efficiency of economic enterprises established by private businesses and the residents of the local area. The improvement in productivity of these developing economic businesses contributes positively to regional income, leading to an enhancement in the community's welfare. The economic growth rate of Wajo Regency represents the percentage rise in the region's actual income in a given year compared to the previous year's income in South Sulawesi Province. This signifies that the progress achieved in development requires backing for the formulation of policies that focus on maximizing the utilization of natural resource potentials, boosting the efficiency of economic enterprises, and enhancing the well-being of the local community (Surya, B, 2021). Therefore, the higher economic growth rate means the region's development is improving. Furthermore, in order to support the sustainability of economic enterprises, it is essential to make decisions related to the management of these enterprises with a focus on increasing productivity and adopting technology-based financial reporting (George et al., 2016; Erokhin et al., 2019; Antoaneta et al., 2023). The economic activity sectors and their contributions to the Gross Regional Domestic Product (GRDP) of Wajo Regency are presented in Table 2.

**Table 2. Average Growth Rate and Sector Contribution to GRDP in Wajo Regency and South Sulawesi**

Business field	Growth Rate		Contribution	
	Wajo (%)	Sulawesi Selatan (%)	Wajo (%)	Sulawesi Selatan (%)
Agriculture, Forestry, and Fisheries	8,42	6,40	31,98	21,88
Mining and Excavation	6,13	5,23	22,43	6,26
Processing Industry	6,93	8,51	3,47	14,02
Procurement of Electricity and Gas	8,92	8,41	0,08	0,09
Water Supply, Waste Management, and Waste and Recycling	3,47	4,83	0,03	0,14
Construction	11,59	8,39	8,72	11,78
Wholesale, Retail, and Repair of Cars and Motorcycles	7,90	8,91	14,26	13,82
Transportation and Warehousing	8,83	8,29	2,96	3,79
Provision of Accommodation, Food, and Drink	9,60	8,07	0,31	1,35
Information and Communication	11,03	12,03	1,48	6,04
Financial Services and Insurance	10,64	11,54	2,31	3,42
Real Estate	12,56	9,19	2,89	3,63
Company Services	11,89	7,32	0,10	0,43
Government Administration	5,44	4,44	4,05	4,80
Education Services	8,84	7,51	3,30	5,43
Health Services	10,42	9,50	1,25	1,86

Business field	Growth Rate		Contribution	
	Wajo (%)	Sulawesi Selatan (%)	Wajo (%)	Sulawesi Selatan (%)
Other Services	7,71	7,70	0,38	1,27

Table 2 illustrates the economic growth of Wajo Regency. From the results, several conclusions can be drawn: 1). The Agriculture, Forestry, and Fisheries sector has an average growth rate of 8.42% and contributes 31.98% to the Gross Regional Domestic Product (GRDP) of Wajo Regency. 2). The Mining and Excavation sector experiences an average growth rate of 6.13% and contributes 22.43% to the GRDP. 3). The Wholesale, Retail, and Repair of Cars and Motorcycles sector shows an average growth rate of 7.90% and contributes 14.26% to the GRDP. 4). The Construction sector has an average growth rate of 11.59% and contributes 8.72% to the GRDP. 5). The Processing Industry sector indicates an average growth rate of 6.93% and contributes 3.47% to the GRDP. These findings emphasize the significant impact of the growth in various economic sectors in Wajo Regency on enhancing regional productivity and developing economic enterprises by the community. Table 7 presents the Basic Economic Sector and Dynamic Location Quotient Index, which indicates that the primary economic sector comprises five fields, two of which have very high growth rates. The non-basic sector encompasses eleven fields, four demonstrating potential excellence and high growth rates. These findings confirm that the economic growth of Wajo Regency can stimulate the economy and increase regional income. However, integrating this growth with SME development in the community is essential. Government economic policies focusing on strategic programs that prioritize SMEs are required. Given the globalized economy, national economic growth depends on financial management as a determinant of SME productivity. Strategic efforts to support SME development in Wajo Regency include empowering businesses, providing technological training and mentoring, offering financial management training and support, promoting product innovation to meet customer needs, and strengthening marketing systems. These efforts require collaboration between the government, private sector, and business actors.

**Table 3. Presents the fundamental economic sector and the dynamic location quotient index**

Business Field	Growth (%)	Location Quotient (LQ)	Quotient (DLQ)	Information
Agriculture, Forestry, and Fisheries	6	1.53	1.71	Base
Mining and Excavation	11.44	3.17	1.03	Base, has a very high growth rate
Processing Industry	4.97	0.29	5.06	Non-Basic but potentially superior
Procurement of Electricity and Gas	4.69	1.29	2.08	Base, has a very high growth rate
Water Supply, Waste Management, and Waste and Recycling	9.12	0.35	-0.78	Non-Base, and no potential to excel
Construction	3.06	0.75	3.29	Non-Basic but potentially superior
Wholesale, Retail, and Repair of Cars and Motorcycles	5.74	1.14	4.86	Base
Transportation and Warehousing	7.25	1.21	7.43	Base
Provision of Accommodation, Food, and Drink	12.42	0.29	6.52	Non-Basic but potentially superior and has a very high growth rate
Information and Communication	9.9	0.33	1.53	Non-Basic but potentially superior
Financial Services and Insurance	13.75	0.74	1.30	Non-Basic but potentially superior and has a very high growth rate
Real Estate	9.1	0.97	1.21	Non-Basic but potentially superior and has a very

Business Field	Growth (%)	Location Quotient (LQ)	Quotient (DLQ)	Information
Company Services	10.02	0.31	7.22	high growth rate Non-Basic but potentially superior and has a very high growth rate
Government Administration	1.22	0.97	3.86	Non-Basic but potentially superior
Education Services	4.7	0.67	1.48	Non-Basic but potentially superior
Health Services	7.52	0.69	0.61	Non Base
Other Services	6.85	0.39	7.68	Non-Basic but potentially superior

Source: Analysis results.

**Table 4. Specialization index of the economic activity sector in Wajo Regency**

Business Field	Wajo Regency		South Sulawesi Province		X-Y
	Billion IDR	X (%)	Billion IDR	Y (%)	
Agriculture, Forestry, and Fisheries	7,446.5	33.36	70.37	6.40	26.96
Mining and Excavation	3,411.02	15.28	17.23	-0.59	15.87
Processing Industry	853.81	3.83	44.07	3.02	0.81
Procurement of Electricity and Gas	17.55	0.08	0.35	10.87	-10.79
Water Supply, Waste Management, and Waste and Recycling	7.73	0.03	0.41	4.07	-4.04
Construction	2,170.16	9.72	43.61	4.14	5.58
Wholesale, Retail, and Repair of Cars and Motorcycles	3,511.82	15.73	53.04	6.50	9.23
Transportation and Warehousing	741.76	3.32	9.90	5.17	-1.85
Provision of Accommodation, Food, and Drink	79.85	0.36	4.36	2.96	-2.6
Information and Communication	410.87	1.84	27.52	6.39	-4.55
Financial Services and Insurance	612.12	2.74	11.59	1.14	1.6
Real Estate	770.15	3.45	12.01	2.58	0.87
Company Services	28.08	0.13	1.44	6.23	-6.1
Government Administration	908.07	4.07	14.84	2.92	1.15
Education Services	862.22	3.86	20.18	3.67	0.19
Health Services	382.35	1.71	7.96	7.77	-6.06
Other Services	105.50	0.47	4.34	7.56	-7.09

Source: Analysis results.

The LQ technique is widely used in the economic base model, serving as an initial step in comprehending the sectors that drive growth. LQ assesses economic activity's relative concentration or specialization level through a comparative approach. The LQ technique is used to discuss the economic conditions, leading to the identification of economic activity specialization or the measurement of the relative concentration of economic activities to obtain an overview in determining the leading sectors as the leading sector in a particular economic activity industry in Wajo Regency. Economic growth is an integral and crucial part of achieving economic development. Therefore, analyzing the regions that serve as the backbone of leading sectors is necessary to drive economic growth in Wajo Regency. This will enable structured economic development planning based on its sectoral potential. If we consider the GDP value of each sector in the region, the agricultural sector plays a significant role in increasing the GDP of Wajo Regency. However, it cannot be determined solely based on the regional data whether the agricultural sector serves as the economic base of Wajo Regency; a comparison with a broader area is needed. In this case, South Sulawesi Province is a benchmark for comparing the GDP value of Wajo Regency's sectors. Calculating the Location Quotient (LQ) is necessary to determine the primary and non-basic sectors Wajo Regency possesses.

Table 4 illustrates the following findings: (1) The Agriculture, Forestry, and Fisheries sectors are the primary drivers of economic growth in Wajo Regency. (2) The Wholesale, Retail, and Repair

of Cars and Motorcycles sectors show significant proportional growth. (3) The construction sector is the dominant component of economic competitiveness. (4) The changes in income in Wajo Regency are mainly influenced by the trade, construction, manufacturing industry, information and communication, procurement of electricity and gas, and company services sectors. Furthermore, improving SMEs' economic productivity will require capital provision, especially in terms of marketing power and product innovation. Business strategies and financial performance require dynamic adaptation and flexibility in responding to changes in the business environment (Adam & Alarifi, 2021; Khafri et al., 2023). Field observations indicate significant differences in various types of businesses developed by the community that utilize technological innovations, especially in marketing power. This condition is marked by the shift in normative space and rationalization of actions in developing economic activities. The development of small businesses tends to shift, while medium-sized businesses tend to be balanced. Both types of SMEs are then followed by action rationalization. A comparison is made between the processes of shifting normative space and action rationalization about the adaptation of technology utilization. Furthermore, the income per capita is explained in Table 5 below.

**Table 5. Per capita income of the population in Wajo Regency**

District Area	Total Population (thousand Person)	Income Per Capita (million Rupiah)	Information
Sabbangparu	24.38	556.57	Above average
Tempe	64.41	210.67	Above average
Pammana	30.73	441.56	Above average
Bola	19.45	697.65	Above average
Takkalalla	20.00	3.22	Below average
Sajoangin	17.54	3.67	Below average
Penrang	14.81	4.35	Below average
Majauleng	30.74	2.10	Below average
Tanasitolo	39.35	1.63	Below average
Belawa	30.17	2.13	Below average
Maniangpajo	15.77	4.08	Below average
Gilireng	10.89	5.91	Below average
Keera	20.25	3.18	Below average
Pitumpanua	40.91	1.57	Below average

Source: Analysis results.

Table 5 provides the following overview: (1) Bola district has the highest income per capita, with an average of Rp. 697.65 million per person per year; Sabbamparu district has the second-highest income, with an average of Rp. 556.57 million per person per year; Pammana district and Tempe district have the highest incomes, with an average of Rp. 441.56 million per person per year, and Rp. 210.67 million per person per year, respectively.

Furthermore, economic growth and financial management performance are essential determinants of increasing SMEs' productivity (Hernita Hernita et al., 2021). Strong economic growth creates a conducive environment for SMEs by expanding market opportunities, increasing consumer demand, and encouraging business expansion (Ackah et al.; Sylvester, 2021). When the overall economy grows, SMEs have more significant opportunities to access a larger market share, which can lead to increased sales and productivity. Economic growth also stimulates investment and innovation, providing SMEs with access to resources, technology, and expertise that can enhance their productivity (Surya, Batara et al., 2021). Effective financial management is crucial for SMEs in optimizing resources, managing cash flow, and making appropriate investment decisions (Mang'ana et al., 2023). Well-managed finances enable SMEs to invest in productive assets, acquire necessary technology, recruit skilled employees, and develop operations. This allows them to allocate resources efficiently and minimize wastage, increasing productivity. Good economic growth and effective

financial management performance are crucial factors in enhancing SMEs' productivity.

**Table 6. SMEs liquidity ratio in Wajo District**

Year	Current Ratio (%)		Quick Ratio (%)		Cash Ratio (%)	
	Small	Medium	Small	Medium	Small	Medium
2018	103.0	4213.7	91.0	420.0	2.8	46.33
2019	102.0	5403.3	86.0	540.0	1.27	45.21
2020	95.0	5455.9	79.0	540.0	0.72	48.62
2021	91.0	5049.4	75.0	500.0	0.52	41.68

Source: Analysis results.

The liquidity ratio is used to measure the ability of SMEs to meet their short-term obligations using the most liquid assets. Some common liquidity ratios are the current, quick, and cash ratios. This study compares small businesses and medium businesses, and the results of the current ratio, quick ratio, and cash ratio from 2019 to 2021 show that small businesses experienced a decrease, while medium businesses experienced an increase in the current ratio and quick ratio, but a decrease in the cash ratio. Furthermore, when looking at the efficiency of SMEs in handling their short-term debts, small businesses are more effective than medium businesses. Small businesses have sufficient current assets to pay their short-term obligations and do not have too many unproductive assets. On the other hand, medium businesses have high current assets to pay their short-term obligations but also have too many unproductive assets.

**Table 7. SMEs leverage ratio in Wajo District**

Year	Debt Ratio (%)		Debt to Equity Ratio (%)	
	Small	Medium	Small	Medium
2018	51	5.28	106	5.91
2019	50	4.40	100.3	4.84
2020	52	4.58	109	5.13
2021	53	5.21	116	6.04

Source: Analysis results.

The leverage ratio measures the debt SMEs use to finance their operations and investments. It reflects the proportion of debt in the company's capital structure and provides insight into the financial risk associated with the level of debt for SMEs. The Debt-to-Equity Ratio owned by small businesses is very high, indicating that these small businesses rely on debt to finance their operations. On the other hand, medium businesses have a relatively low ratio, indicating that their operations are more inclined to use their capital.

**Table 8. SMEs activity ratio in Wajo District (Times)**

Year	Inventory Turnover		Fixed Asset Turnover		Total Asset Turnover		Receivable Turnover	
	Small	Medium	Small	Medium	Small	Medium	Small	Medium
2018	7.11	7.11	7.11	2.61	0.013	0.28	1.34	8.66
2019	10.19	10.19	10.19	2.51	0.019	0.23	1.66	11.50
2020	3.65	3.65	3.65	2.59	0.006	2.76	0.97	29.24
2021	6.19	6.19	6.19	2.47	0.011	3.40	0.99	32.25

Source: Analysis results.

The activity ratio indicates the efficiency of a company in managing and utilizing its operational assets. This ratio provides insights into how efficiently SMEs use their assets to generate revenue. For small businesses, the Asset Turnover Ratio shows inefficiency in utilizing their assets to generate revenue, especially in 2019 and 2020. In contrast, medium-sized businesses are relatively



efficient in using their assets to increase revenue. Furthermore, the Accounts Receivable Turnover Ratio for small businesses indicates a very slow turnover in collecting trade receivables, on average, for one year, suggesting inefficiency in credit management and debt collection policies for small businesses. On the other hand, medium-sized businesses have a very high turnover rate, even less than one month. Additionally, both small and medium-sized businesses have a relatively fast Inventory Turnover Ratio, indicating efficient inventory management and turnover of their inventory.

**Table 9. SMEs Profitability Ratio in Wajo District**

Year	Gross Profit Margin (%)		Net Profit Margin (%)		ROA (%)		ROE (%)	
	Small	Medium	Small	Medium	Small	Medium	Small	Medium
2018	77.23	57.11	28.29	46.69	0.361	12.86	0.745	14.37
2019	23.89	42.47	2.26	38.95	0.041	8.83	0.085	9.31
2020	79.36	47.62	4.09	40.16	0.026	11.10	0.055	12.42
2021	66.23	59.37	2.75	43.71	0.031	14.88	0.066	17.25

Source: Analysis results.

Profitability ratios are employed to evaluate the capacity of SMEs to generate profits through their operations, offering valuable insights into the efficiency and profitability performance of their business activities. The gross profit margin for small businesses is higher than that of medium-sized businesses, indicating that the percentage of gross profit from small business revenue after deducting direct production costs or the cost of goods sold is higher than that of medium-sized businesses. Conversely, the Net Profit Margin tends to be lower for small businesses when compared to medium-sized businesses, indicating that the percentage of net profit from small business revenue after deducting all costs, including production costs, operating expenses, interest expenses, and taxes, is lower than that of medium-sized businesses.

The direct and indirect impacts of financial management, technology utilization, business diversification, and product innovation on the productivity and sustainability of SMEs emphasize the importance of adopting efficient, effective, and economical financial practices. SMEs can boost their business productivity by leveraging available technologies, exploring diversified business opportunities, and fostering product innovation. Efficient financial management allocates resources wisely, reduces operational costs, and enhances overall productivity. It helps handle debts prudently, reduces the risk of bankruptcy, and maintains liquidity, which builds a good reputation in the financial market and eases access to growth funds. Proper financial management aids in budget preparation and expenditure control, prioritizing essential projects, and identifying additional resource needs. Economical financial management bases investment decisions on careful risk analysis and return evaluation, resulting in a balanced and profitable investment portfolio that supports long-term business development. It optimizes the use of available funds, maintains good cash management, and ensures optimal liquidity. Good financial management reflects transparency, accountability, and discipline, enhancing stakeholder trust and reinforcing a positive reputation. Efficient and effective financial management helps SMEs maintain long-term operational sustainability, which is crucial for facing economic challenges or uncertainties. Overall, it brings numerous benefits, helping achieve financial goals, reducing risks, and ensuring growth and stability. Furthermore, Figure 5 below illustrates the direct and indirect influences of financial management, technology utilization, business diversification, and product innovation on SMEs' economic productivity and sustainability.

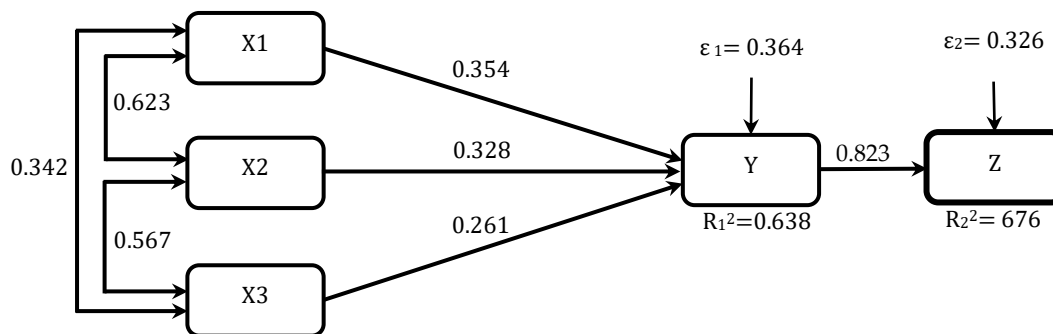


Figure 2. Direct, indirect, and total influence.

Figure 2 outlines several key findings. The correlation between financial management and technology utilization is 0.623, financial management and product innovation is 0.342, and between technology utilization and product innovation allocation is 0.567. The direct effects show that financial management has a direct effect of 12.53% on economic productivity, technology utilization has a 10.76% direct effect, and product innovation has a 6.81% direct effect. The indirect effects include financial management through technology utilization having a 7.23% indirect effect on economic productivity, and technology utilization through financial management having the same 7.23% indirect effect. Financial management through product innovation has a 3.16% indirect effect, and product innovation through financial management also has a 3.16% indirect effect. Furthermore, financial management through economic productivity has a 4.85% indirect effect on SME sustainability, and technology utilization through economic productivity also has a 4.85% indirect effect on SME sustainability.

Overall, the total influence of these factors on economic productivity and SME sustainability is 60.58%, with a remaining residual effect of 39.42%. The direct effect of product innovation on productivity is 67.73%, with a residual effect of 32.27% on SME sustainability. In summary, there is a strengthening effect, where the influence on economic productivity and SME sustainability demonstrates the significant impact of efficient financial management, technology utilization, business diversification, and product innovation. Additionally, a well-executed financial management strategy plays a pivotal role in bolstering the economic growth of SMEs (Small and Medium Enterprises). Several aspects should be considered when assessing these enterprises' opportunities, challenges, strengths, and weaknesses. Opportunities include broad market access, where SMEs can leverage local, regional, and global markets to enhance sales and business expansion, and the advancement of digital technology, which has created new opportunities for SMEs to improve operational efficiency, optimize online marketing, and create innovative business models. However, they also face threats such as access to capital, a significant challenge that can be mitigated by utilizing alternative funding sources like micro-loans, investments from strategic partners, or technology-based financing (e.g., crowdfunding, peer-to-peer lending). SMEs often face intense competition from larger companies with more significant resources, necessitating competitive advantages through innovation, responsiveness, and superior customer service.

SMEs' strengths include flexibility and innovation, allowing them to rapidly adapt to market changes and implement innovations, and product and service diversity, offering unique and distinct products compared to large corporations. However, they also have weaknesses, such as resource constraints, including capital, workforce, and infrastructure limitations, which can restrict their ability to expand operations and achieve economies of scale. Ineffective financial management is another challenge, as many SMEs need more of an understanding of financial planning, cash flow management, and monitoring financial performance, impacting business growth and long-term sustainability. Several strategies can be implemented to enhance productivity and support the

economic growth of SMEs. Improving financial management is crucial, as SMEs need to understand budget planning, cash flow management, cost control, and financial analysis to make better decisions and enhance financial performance. Adopting technology can also enhance operational efficiency, automate business processes, and accelerate growth, such as leveraging accounting software, e-commerce platforms, or digital financial solutions. Enhancing market access and networking through partnerships, participation in trade shows or industry events, and leveraging social media and online platforms can expand market reach. Additionally, skill and knowledge enhancement through training and development initiatives and partnerships with educational institutions or mentoring programs can provide valuable insights and guidance. Implementing sound financial management strategies, capitalizing on existing opportunities, and overcoming challenges can help SMEs enhance their productivity and significantly contribute to economic growth.

## **Conclusion**

The economic progress of SMEs is paramount in realizing sustainable grassroots economic development. These enterprises play a vital role in creating jobs, fostering community economic engagement, and mitigating social and economic disparities. Sustainable growth in the SME sector can amplify their contribution to the national economy and promote widespread prosperity. Effective financial management is crucial for SME sustainability. These enterprises require adequate financial resources to develop their businesses. Moreover, efficient and transparent financial practices can help reduce bankruptcy risk and enable SMEs to adapt to market and business changes.

Several vital considerations emerge in sustainable grassroots economic development: 1) Enhanced Market Access: Improving competitiveness and market access are essential for sustainable SME growth. Government support and private sector partnerships can assist SMEs in expanding their market reach and increasing their market share. 2) Innovation and Technology: SMEs must embrace innovation and technology to enhance efficiency, productivity, and product/service quality, enabling them to compete in the increasingly complex global market. 3) Community-Based Approach: Sustainable grassroots economic development requires a community-centered approach. Strengthening SME networks, providing training, and facilitating knowledge exchange will enhance their capacity. 4) Environmental Sustainability: SMEs should consider their environmental impact and implement environmentally friendly practices to reduce their footprint. 5) Social Sustainability: SMEs should also address the social impact of their operations by contributing to social development and community well-being. By combining sustainable economic growth and sound financial management with a focus on sustainable grassroots economic development, SMEs in Wajo Regency, South Sulawesi Province, can achieve inclusive and sustainable economic progress, contributing to increased welfare and poverty alleviation.

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