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Effects of Financial Literacy, Financial Access, and Financial Risk Attitudes on SME's Sustainability in Wajo District, South Sulawesi, Indonesia

¹Abustan, ²Seri Suriani & ³Indrayani Nur

¹Department of Urban and Regional Planning Study, Faculty of Engineering, University of Bosowa, Makassar

²Department of Financial Management, Faculty of Economics and Business, University of Bosowa, Makassar

³Department of Accounting, Faculty of Economics and Business, University of Bosowa, Makassar

Email: abustan@universitasbosowa.ac.id, seri.suriani@universitasbosowa.ac.id,
indrayani.nur@universitasbosowa.ac.id

Abstract

Financial literacy is a vital source of knowledge in making financial decisions in influencing SME sustainability. This study aims to analyze the direct and indirect effects of financial literacy, financial access, and financial risk attitudes on the sustainability of SMEs. This study uses a quantitative survey approach. Data obtained through questionnaires, observations, interviews, and documentation. The results of the study show that good financial literacy skills will facilitate SMEs in accessing finance and predicting business financial risks, being able to determine attitudes so that they have an impact on increasing the sustainability of SMEs. Furthermore, financial access literacy and financial risk attitudes of SMEs owners have a direct effect on increasing SME sustainability directly by 57.3%, and the indirect effect of financial literacy on SMEs sustainability through financial risk attitudes is 20.2%. This study recommends financial literacy based on the effectiveness and efficiency of utilizing access to capital from outside the company coupled with a reduction in the financial risks faced by SMEs. The formulation of economic development policies in order to encourage the sustainability of SMEs businesses in Wajo Regency, South Sulawesi, Indonesia.

Keywords financial literacy, access to finance, financial risk attitude, sustainable SMEs performance.

1. Introduction

The contribution of SMEs to the formation or growth of Gross Domestic Product (GDP) is the largest contribution compared to large businesses. Small and medium enterprises (SMEs) are a key driver of economic development [1], being vital to most economies worldwide [2]. The growth of small and medium enterprises (SMEs) worldwide has increased; it is estimated that there will be around 332.99 million SMEs in 2021, slightly more than in 2019 which amounted to 328.5 million. The number of SMEs in the last year was the highest in the last 10 years. SMEs are the backbone of economies around the world, a major source of job creation globally, accounting for more than 95% of enterprises and 60%-70% of employment. SMEs generate the majority of new jobs in the OECD economy, and even more in the EU, where they represent around 99% of all businesses, create around 85% of new jobs, and provide two-thirds of total private sector employment. Thus, SMEs are an opportunity for job creation in every country in

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the world.

Job Creation Small and medium enterprises (SMEs) make a very large contribution to economic development [3, 4]. A strong SMEs sector is essential for building a solid industrial sector in the economy [5], and therefore, well-functioning SMEs are essential for stable and sustainable economic growth. Rapid economic development with high profitability in developing countries provides opportunities for SMEs to become more competitive in the domestic as well as global markets [6, 7], so a strong SME sector is very important for developing economies, where there is great potential for the development of this sector, although they are yet to realize the full benefits of a strong SME sector. The SMEs sector in developing countries has stagnated, rather than growing and becoming more sophisticated. Some of the characteristics of developing economies are economic turbulence, unstable exchange rates, immature information infrastructure, higher transaction costs, political unrest, high inequality, and worsening unilateralism in trade policies, which are additional threats to the sustainability of SMEs [8, 9]. Therefore, researchers and those who are directly involved in the SME sector need to find ways of how SMEs sustainability.

SMEs sustainability can occur if “think global, act local,” with implications in regional strategies, economic-financial policies, environmental policies, research and innovation policies, social responsibility policies, etc. SMEs need information to understand, maintain, and apply the principles of business sustainability. Furthermore, small and medium enterprises (SMEs) are business enterprises that require financial management support so that businesses that are developed run smoothly and productively. This means that small and medium enterprises (SMEs) are critical to local economic development, playing a critical role in job creation, poverty alleviation, and economic growth, but facing many funding constraints [10]. Indicators for assessing the sustainability of SMEs businesses are measured based on the profitability and productivity of the developed economic business. However, small and medium enterprises face more financial constraints than large enterprises, which prevent them from growing and expanding their activities [11]. This means that high levels of profitability and productivity have a positive effect on business growth and SMEs sustainability.

Profitability and productivity are largely determined by the capital requirements of a business. Availability of working capital has a positive effect on firm profitability [12]. The optimal level of operating capital will drive the rate of company profitability [13]. Working capital management is a major decision in corporate finance. It plays an important role in the financial sustainability of the company because it can have a direct impact on the productivity and profitability of the company [14]. Capital is a factor of production that has a strong influence in creating productivity or output; macro-capital is a big driver for increasing investment both directly in the production process and in production infrastructure so as to encourage increased productivity and output [15]. Sources of capital can be obtained from within and outside the company; from within the company in the form of retained earnings and additional capital from business owners, while outside the company it comes from bank loans, online loans, government business credit loans, investors, and others [16].

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Sources of capital from outside the company can be accessed if a company has a good business plan. The choice of SMEs managers/owners to receive external funds depends on the feasibility of the study, intentions and requirements that must be met [17]. SMEs can prepare their business plans if they have the knowledge, understanding, and skills to manage finances and have good financial literacy [18]. Financial literacy influences the choice of SMEs towards financial products in such a way that managers/business owners who are financially literate are more likely to seek and use relevant information and also make better use of information [19; 20]. Managers/business owners who are financially literate are also more likely to seek advice from financial advisors and are also more likely to receive advantageous advice [21]. They are also more likely to take out financial products such as bank accounts or loans [22], accumulate sufficient wealth reserves to use for retirement [23], participate in financial markets [24; 25], successfully run and sustain their small businesses [26], put aside funds for difficult times, and use several sources of information when choosing financial products such as banking, capital markets, and others [27]. The difficulty of access to capital is due to the low financial literacy of SMEs managers. In general, financial literacy is important for access to finance and how SMEs managers/owners determine attitudes towards the financial risks faced, so knowledge resources are very important to encourage the sustainability of SMEs

Despite the importance of resource knowledge in driving SMEs sustainability, most of the previous studies have focused on other factors, such as competitive advantage, supply chain management, and internationalization [28; 29; 30]. However, Eniola et al. [31] examined the contribution of managers' financial literacy skills to SMEs sustainability and concluded that they play an important role in enabling managers to deal with uncertain market conditions. Menike et al. [32] also found that resource knowledge contributes to SME performance and concluded that resource knowledge, such as financial literacy and business experience, helps SMEs maintain their performance. A large group of researchers has analyzed financial literacy among young SMEs managers/owners [33; 34; 35; 36; 37; 38; 39] and found their low financial literacy. Research conducted around the world, particularly in developing countries, has reached the same conclusion that young people in SMEs have poor financial literacy skills. Poor financial choices can have a number of negative consequences for SMEs, for example, access for SMEs to banking services is still around 20%, while neighboring countries such as Malaysia have reached 50% and South Korea has reached 82%. Failure to access SMEs for banking services is caused by low attention to financial reports, no records of business transactions (both purchases and sales), and inability to provide supporting evidence for SMEs' business transactions, while in the credit process, supporting data in the form of proof of transactions is needed. In addition, the International Monetary Fund [40] states that financially illiterate SMEs managers/owners can face various legal or financial enforcements, including bankruptcy, mortgage crises, or financial fraud; for example, fraudulent investments with losses of 10 billion occurred in Makassar at the end of 2022. There are several in-depth analyses of how knowledge of certain resources, such as financial literacy, affects SMEs sustainability, so we explore the mechanisms of financial literacy in increasing SMEs sustainability and provide an in-depth analysis of financial literacy. So that this study is very urgent to be carried out to provide

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financial education to SMEs, the community, especially in access to finance, predicting the financial risks faced in determining investment for the continuation of their business.

Several previous studies have examined the effect of financial literacy on business continuity, stating inconsistent results: Burchi, A [41] found a positive and statistically significant relationship between financial literacy and sustainable entrepreneurial activity. Kaur, H., & Bansal, P. [42] financial literacy, financial availability, and company growth are positively correlated with corporate sustainability. Hasan, R [43] female entrepreneurs with higher levels of digital financial literacy are more likely to engage in formal banking channels. Sri, Saniarti, et al. [44] found that financing has a positive effect on the sustainability of microbusinesses and financial literacy strengthens the effect of financing on the sustainability of microbusinesses. Unlike the case with Alshebami AS [45], Seraj, A.H.A. [46] found no direct relationship between financial literacy and entrepreneurial intentions and business continuity. However, saving behavior can mediate between financial literacy, entrepreneurial intentions, and business continuity. Due to the inconsistency of these findings, researchers are motivated to examine the effect of financial literacy on the sustainability of SMEs.

In addition, it is important to conduct this study to examine financial literacy in the SMEs sector so that it can overcome the gaps in the existing literature. This study of financial literacy and SMEs sustainability is different from previous studies in five contexts. Namely, first, this study refers to three theoretical perspectives, namely KBV, peaking order theory, and dual-process theory, to illustrate the importance of financial literacy, financial access, and financial risk attitudes in the SMEs sector. Second, expanding knowledge of financial literacy because it investigates the indirect relationship between financial literacy and SMEs sustainability. Third, although it is widely accepted that financial literacy is important in the context of personal financial decisions, the concept of enterprise-level financial literacy is less well understood and researched, especially in developing countries. This research addresses this gap by exploring enterprise-level financial literacy in the SMEs sector of Wajo district. Fourth, the research produces a framework that can be used by SMEs to maintain their performance. As only a minority of SMEs survive their first year [47], such a framework has practical value for new and developing SMEs. Fifth, the findings of this study will help the government to design and initiate programs to improve financial literacy, including programs specifically tailored to the needs of SMEs. If the relevant agency offers a more robust and specific training program, it will increase the financial literacy of stakeholders in the SMEs sector. This research also contributes to research in a specific geographic area, namely Wajo District, and its findings will help improve the sustainability of SMEs in Wajo District.

2. Literature Review

Financial literacy has been defined as the knowledge and cognitive abilities required to manage finances and make effective decisions related to financial matters [48]. Financial literacy is “an individual's ability to make effective judgments and decisions regarding the use and management of money” [49; 50]. Thus, financial literacy is very important for entrepreneurs. Financial literacy is a determining factor in shaping financial well-being. With good financial

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knowledge, effective financial decisions can be taken so that the use of funds and investment choices becomes more appropriate [51; 52]. From time to time financial literacy will become increasingly important due to technological developments that cause changes in people's lifestyles, including in financial management, so that financial literacy will become increasingly complex and require special expertise in its management [53]. SMEs need financial literacy to evaluate their business financial affairs and make financial decisions. Financial literacy must also help businesses to face challenges in meeting capital. Financial literacy enables entrepreneurs to manage risk through strategies, such as maintaining financial reserves, diversifying their investments, and buying insurance. Insufficient financial literacy has been identified as one of the main obstacles to the sustainable development of SMEs. Empirical studies show that the level of financial literacy is low among entrepreneurs. [54] identified lack of financial literacy as a common problem in SMEs; lack of financial literacy has an impact on business organizations in the start-up phase and beyond. Lack of financial literacy is the main reason for the failure of SMEs [55]. However, although the importance of financial literacy has been proven empirically, its impact on SMEs sustainability has not been studied much.

Influenced by cognitive processes and intuition. For example, Widdowson and Hailwood [56] stated that financial literacy helps people to take advantage of increased financial market competition by applying their risk management knowledge and skills. Research has also shown that financial literacy helps entrepreneurs to present their case to bankers during client interviews and enables SMEs to face the challenges of changing business and financial markets so as to promote business sustainability [56; 57]. Therefore, we are of the opinion that financial literacy has a direct and indirect effect on corporate sustainability. So far most empirical studies have used experimental research designs to investigate how individual financial literacy influences predetermined decisions, such as investment decisions and strategies [58;59]. Furthermore, most research on financial literacy has been conducted in developed countries, and several studies have investigated financial literacy in the SMEs sector in developing countries [60]. Therefore, in this study, we investigate the direct and indirect effects of financial literacy on SME sustainability in developing countries and explore new mechanisms by which financial literacy can affect SMEs sustainability.

2.1 Financial Literacy and SMEs Sustainability

In the resource-based view (RBV), competitive advantage and company performance depend on tangible and intangible resources [61]. To preserve their competitive advantage, companies need a variety of resources and a broad knowledge base [30]. Carmeli and Tishler [62] also revealed that intellectual capital has a positive impact on organizational sustainability. According to KBV, financial literacy is a source of knowledge that determines the sustainability of SMEs. Thus, financial literacy plays an important role in the value creation process of SMEs, leading to sustainable performance [63, 64]. Financial literacy contributes to an organization's knowledge base, helping it adapt to changes in the business environment and benefit from the opportunities presented by these changes [53]. Therefore, companies must understand the importance of financial literacy and its strategic role in increasing the company's knowledge capabilities.

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There are many studies showing that financial literacy is positively related to company performance [65]. Companies that are financially literate have better insight into the financial aspects of strategic issues; hence, their performance is better. Wise [66] shows that financial literacy is important for the survival of SMEs in both developed and developing countries. Low financial literacy leads to poor financial management practices and often leads to financial mistakes [67]. Financial literacy is necessary to cope with rapid economic changes [68]. Lusardi A [53] concluded that people with strong financial knowledge are more likely to invest in complex assets and are more likely to do so successfully. Davidson III et al. [69] also found a relationship between financial literacy and firm performance. Furthermore, financial literacy is known to be an important factor in wealth accumulation, as well as company performance [70]. Thus, financial literacy has become one of the most important driving forces in organizational decision-making [71] and long-term strategic financial planning [72, 73]. Companies that are financially literate are more likely to adopt sound financial management practices that will drive their growth and sustainability. Thus, financial literacy is thought to have a positive effect on the sustainability of SMEs. We build the hypothesis that:

Hypothesis 3. Financial literacy has a positive effect on SMEs sustainability.

2.2 Access to finance and SMEs Sustainability

There is a growing body of research on the financial constraints faced by SMEs [74; 75]. Access to finance has been identified as one of the main constraints to SMEs sustainability [76;77]. Gambetta et al. [78] pointed out that underdeveloped financial markets and weak financial instruments in developing countries lead to poor allocation of financial resources among business organizations. Access to finance is defined as the availability of financial services in the form of demand deposits, credit, payment, or insurance [79; 80]. Companies have good financial access if they are able to access financial services that are affordable, usable, and meet their financial needs [81]. Most SMEs started with personal financial resources, and family, relatives, and friends provided financial capital in exchange for a share in the business. When a company is growing, more financial resources are required for expansion, innovation, and ensuring the survival of the company. It is more difficult for SMEs to access financial sources, such as banks, capital markets, or other credit suppliers from larger organizations [82]. Although all organizations need financial resources to start, survive, and grow [83; 84; 85], it is difficult and costly for SMEs to gain access to external financial resources, and in fact the accessibility of these resources has declined sharply. Limited access to finance has therefore been recognized as one of the main barriers for SMEs to realize the full potential of their capital requirements.

The importance of access to finance for SMEs sustainability is well documented in the literature. Loans to small businesses at concessional interest rates improve their access to finance, thereby improving their performance [86, 87, 87]. Furthermore, Ostermann et al. [89] found that increasing the availability and quality of financial resources encourages the adoption of circular economy initiatives in business. Hence our second hypothesis:

Hypothesis 4. Access to finance has a positive effect on SMEs sustainability.

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2.3 Linkages between Financial Literacy, Access to Finance, and SMEs Sustainability

Apart from the direct effect of financial literacy on the sustainable performance of SMEs, the indirect effect of financial literacy on the sustainable performance of SMEs through access to finance is explained by the pecking order theory. Myers [89] expands on the pecking order theory, which states that organizations take a hierarchical approach to investment needs and financing, supporting internal funds, external debt, and external equity in that order. The literature suggests several side reasons for the demand and supply for this preference hierarchy. For example, Stiglitz and Weiss [91] argue that supply-side constraints exist when SMEs are unable to access debt financing due to factors such as higher interest rates and collateral requirements, resulting in a shortage of capital. Demand-side factors, as described by Bolton [92] and Kotey, B. [93], are based on the established fact that SMEs managers are very reluctant to relinquish control of their business and therefore try to first finance business needs from their own money (personal savings and retained earnings) and then switch secondly to term loans. short-term debt and the third being long-term debt [94]. Studies of SMEs finance often show that scarcity of funds is a problem in the sector [95], and poor financial literacy has been identified as the main reason for the high failure rate of SMEs [96]. It has also been noted that SMEs' limited access to financial markets [97] means that they are generally dependent on internally generated funds; however, there are limits to the extent to which internally generated funds can sustain SMEs performance.

Many studies have attempted to determine how important financial literacy is to various aspects of SMEs performance and particularly their sustainability [98, 99]. Beal and Delpachitra [100] identify financial literacy as a key skill that empowers people to navigate financial markets and make sound decisions about finances and reduces the chances of being cheated in financial matters. Financial literacy among the leadership can increase a company's access to finance so that effective decisions can be made to avoid financial losses and difficulties. Poor preparation of financial statements and lack of financial information make loan applications more likely to be rejected and hence have implications for access to finance [101]. Financially literate SMEs increase their access to financial resources through the dissemination of timely and usable financial information to relevant parties, such as bankers and lenders [102]. Financial literacy is key to preparing loan applications and convincing bankers during client interviews; good financial literacy enables SMEs to meet the changing challenges of business and financial markets [103]. Therefore, financial literacy increases the physical access and adequacy of SMEs to financial resources, as well as making finance more affordable and making it easier to create a healthy capital structure, thereby increasing sustainability. Hence our third and fourth hypotheses:

Hypothesis 1. Financial literacy has a positive effect on access to finance.

Hypothesis 6. Access to finance mediates the relationship between financial literacy and SMEs sustainability

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2.4 Financial Risk Attitudes and Sustainability in SMEs

Business and financial risks are assumed to increase rapidly given the instability of the prevailing economic system. SMEs in emerging markets have to face more challenging economic conditions than developed markets, and most of them struggle to survive [104]. This means that financial managers of SMEs in emerging markets must manage risk efficiently to ensure the survival of their organizations [105]. Financial risk attitude is an important factor in the survival and development of SMEs in today's challenging economic environment. In psychology, financial risk attitudes have been widely measured as a personality characteristic of entrepreneurs that can contribute to SMEs success [106]. The importance of financial risk attitudes in SMEs in developing countries is also well documented [107]. Economic theory also explains the relationship between risk and return. Entrepreneurs who are risk averse are willing to accept lower returns in exchange for reduced risk exposure, while entrepreneurs who are willing to take higher risks are compensated with higher expected returns. The financial risk attitude influences the decision about which business sector to invest in. Some sectors generate higher returns, but the variation in returns is higher, which creates more risk for investors. Likewise, business sectors that require large start-up capital have an additional risk of bankruptcy. Entrepreneurs who are risk averse will not invest in the sector.

A financial risk attitude allows companies to identify opportunities and risks associated with business and financial decisions [108]. Marco Caliendo et al. [109] found that financial risk attitudes affect the organization's financial decision-making process. Financial risk attitudes affect the survival and failure rates of firms, as well as their decision-making. Attitudes to financial risk can also vary according to the characteristics of business owners and management. For example, entrepreneurs tend to evaluate business situations more positively than non-entrepreneurs because they focus on business opportunities rather than threats [110; 111]. Thus, differences in financial risk attitudes can have a strong influence on business performance. Therefore, we propose that financial risk attitudes influence SMEs sustainability.

There are many empirical studies on how financial risk attitudes relate to success in the SMEs sector [112; 113; 114; 115]. Grable and Lytton [116] show that total income is positively related to financial risk attitudes, and Díez-Esteban et al. [117] also found a relationship between a firm's performance and its financial risk attitude. Xiao et al. [118] reported that companies that are willing to take big risks generally have a larger share of assets than companies that are not willing to take risks. In general, the probability that a firm will engage in a particular risky activity is based on the trade-off between expected return and risk. Therefore, companies with the right risk approach should perform better [119]. Hence our fifth hypothesis:

Hypothesis 5. Financial risk attitude is positively related to sustainability in SMEs.

2.5 Linkage between Financial Literacy, Financial Risk Attitudes, and Sustainability in SMEs

The indirect effect of financial literacy on SMEs sustainability through financial risk attitudes can be explained by the dual process theory. Dual-process theory argues that the mind is influenced by cognitive processes and intuition. Intuition is a view, judgment, understanding,

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or belief that cannot be verified empirically or justified rationally. Individuals who rely heavily on intuition are willing to use mental shortcuts and thus have their thinking heavily influenced by their emotions [120]. Cognitive processes include the mental processes involved in acquiring, transforming, evaluating, elaborating, storing, and using knowledge (thoughts and experiences) and sensory input. Cognition includes understanding, calculation, reasoning, problem-solving, and decision-making [121]. The relative prevalence of cognitive and intuitive thinking patterns influences financial risk attitudes and thus the decision-making process [122; 123].

The growing literature on financial literacy covering the relationship between financial literacy and financial risk attitudes is lacking [120]. Financial risk attitude can be defined as the extent to which a company is willing to pursue risky financial resource opportunities in ventures with unknown results. In other words, an organization's financial risk attitude reflects its enthusiasm to make large and risky resource commitments [124]. Cacciotti and Hayton [125] note that financial risk attitudes are influenced by cognitive and emotional factors. One would intuitively expect a company's response to a given situation to differ according to the underlying financial risk attitude. Some companies can accept more risk than others, and some can manage risk better than others; attitudes to financial risk and risk management depend in part on attitudes to uncertainty.

The positive attitude of risk-taking that comes with healthy financial literacy can contribute to an understanding of business uncertainty and good financial and strategic performance. For example, Hallahan et al. [126] found a correlation between financial risk attitudes and financial literacy and level of education. Hsiao and Tsai [127] also found a positive relationship between financial literacy and financial risk attitudes. Van Rooi et al. [128] showed that poor financial literacy is associated with bad financial decisions. Increasing a company's financial literacy can improve its attitude towards financial risks and challenges. Increasing the financial literacy of companies will help increase managerial knowledge and skills, leading to better management of resources and financial affairs [128].

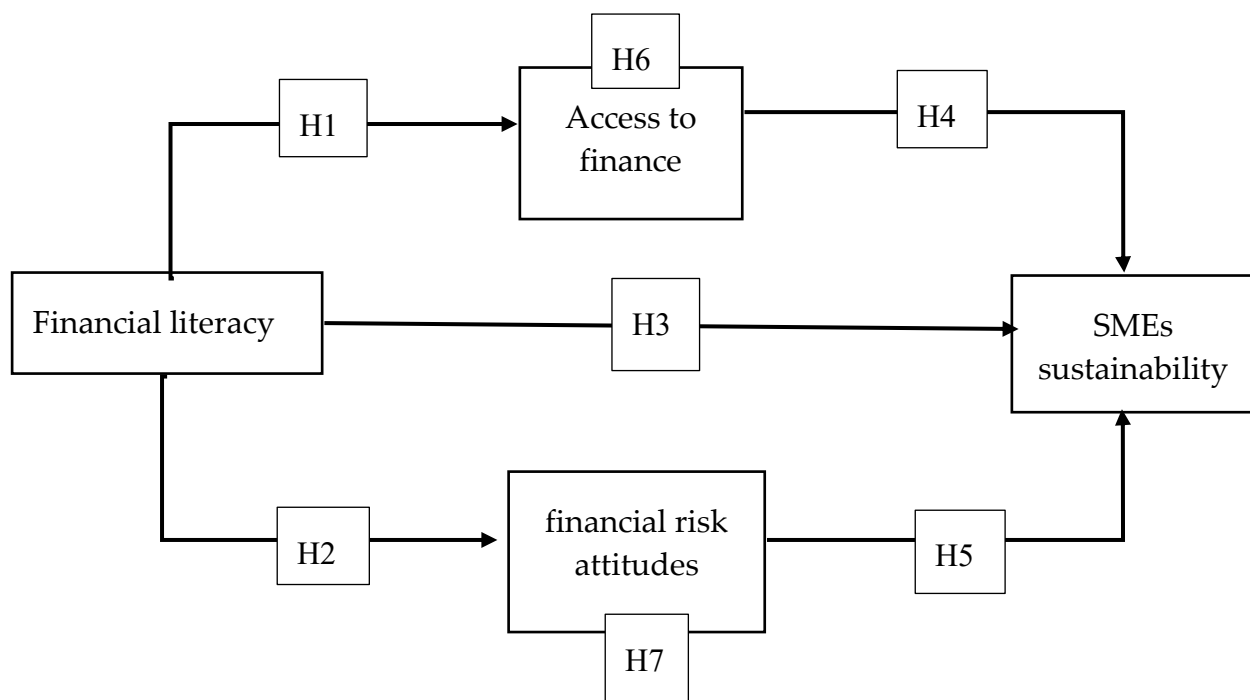
Mursalim et al. [130] state that better financial literacy will make it easier for companies to take advantage of increased financial market competition because financially literate companies have better financial knowledge and risk management skills. Financial literacy can also facilitate the decision-making process. There is a belief that the greater a firm's experience in strategic risk-taking, the more confident it is about the likely outcome of a given risk and hence the better its decisions are [131]. In addition, financial literacy can reduce the level of potential losses associated with taking risks by facilitating companies to more comprehensively assess and rationalize their actions. Financial literacy can influence the extent to which certain strategic responses are considered tolerable risks. Companies that are financially illiterate may lack the necessary knowledge to assess risk, which in practice may limit their access to opportunities to achieve very high returns. SMEs with high levels of financial literacy are more likely to engage in strategic risk-taking, which can increase their sustainability. Hence our sixth and seventh hypotheses:

Hypothesis 2. Financial literacy has a positive effect on financial risk attitudes.

Hypothesis 7. Financial risk attitudes mediate the relationship between financial literacy and SMEs sustainability.

The hypothesized relationships and variables are shown in Figure

Figure 1. Conceptual Framework



3. Research Method

This study is directed toward understanding financial literacy, access to finance, and financial risk attitudes and their impact on the sustainability of SMEs in developing countries. This study uses a quantitative approach. Case studies were selected in this study with the following considerations: First, the complexity of the financial problems of SMEs in Wajo District. Second, the case of financial literacy has an impact on the sustainability of SMEs in Wajo Regency. Third, the context of the case of access to finance and financial risk attitudes in Wajo Regency is quite determined by the financial literacy of the SMEs manager/owner. These three things are very strategic issues in the development and sustainability of SMEs. That is, good financial literacy encourages managers/owners of SMEs to be able to access business capital from outside the company and to be able to determine risk attitudes in determining sources of capital and have an impact on the sustainability of SMEs.

The population for this study consisted of SMEs in Wajo District. After considering the size of the population, this study focuses on SMEs in Wajo District. After considering the number of definitions of SMEs, we select a sample from the population of companies that have 5-99

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employees. It was difficult to identify a sampling frame for this study due to the lack of a comprehensive database of SMEs in Wajo District, so we used the onsite visit technique to identify eligible companies and select an appropriate sample. We start by having a telephone conversation with the owner of the SMEs where we ask for information on the number of employees. If the number is between 5 and 99, then we invite the SMEs to participate in the research and arrange to visit their premises to collect data if they agree.

Structured questionnaires are used to collect data; such a questionnaire is an efficient method of gathering data about the values, opinions, attitudes, or beliefs of a sample [132]. The questionnaire survey allowed data collection from a representative sample distributed over many industries and geographic areas, which is useful because SMEs are spread geographically throughout Wajo District [133; 134]. The questionnaire is based on questions used in different contexts before. Questionnaires were sent to five employees of the Office of Cooperatives and SMEs in Wajo district and five SMEs owners to measure their validity. Based on their feedback, several items were amended or worded to better suit the Wajo District context. The final questionnaire has five main sections. Data is collected from 300 SMEs owners. Owners were selected as respondents because of their involvement in and responsibility for their organization's finances. Nine questionnaires were excluded from the analysis due to missing data, resulting in a final sample consisting of 291 completed questionnaires.

The sectoral distribution of participating SMEs is as follows: 41.2% of enterprises are involved in manufacturing, 30.3% in trading, and 28.5% in services. More than a quarter (27.8%) have 21-40 employees, 27.1% have 41-60 employees, 16.5% have 61-80 employees, 16.2% have 5-20 employees, and 12.4% have 81-99 employees. Almost a third of the sample of SMEs (30.6%) have been operating for 6-15 years, 29.2% of SMEs have been established for 16-25 years, 22% of SMEs have just started, and 18.2% of SMEs have been established for 26 years or more

Financial Literacy: Previous studies have used questions about inflation, exchange rates, interest rates, and future values to measure financial literacy, but effective management of financial issues is critical for SMEs in today's complex business and financial environment, so we use a scale that is more practically relevant for indexing SMEs financial literacy. We used 13 items from a measurement scale developed and validated by Bongomin et al. [135] to measure the financial literacy of owners (leaders) in our sample of SMEs. The sample item is "We have the ability to analyze a company's financial performance on a regular basis." Responses were given using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Access to finance: Access to finance is measured using the approach described by Bongomin et al. [135]. Ten items are used to measure access to finance. Originally this measurement scale was developed by Claessens and Tzioumis [136] and Ardic et al. [137]. We modified the items to make them more suitable for the SMEs context. The sample item is: "The financial services offered by the bank have resulted in an increase in our business." Responses to all items were given using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Financial risk attitude: A psychometric instrument developed by Weber and Blais [138] was

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used to measure financial risk attitude. It recognizes two aspects of financial risk attitudes, namely risk perception and risk-taking propensity, both of which are assessed using six items. This instrument has been extensively tested in Western countries and adapted for use in the context of Wajo District. To measure risk propensity, SMEs Owners were asked to determine their willingness to engage in six different types of risky behavior, one of which was "Betting daily earnings on high-risk games, such as investing in the stock exchange." Responses were given using a five-point Likert scale ranging from very unlikely to very likely. The same six behaviors are used to assess perceived risk. Respondents were asked to rate their respective risk levels using a five-point Likert scale ranging from not at all risky to very risky.

Sustainability: SMEs financial data available to the public is lacking, making it difficult to measure SMEs sustainability [138]. The reluctance of SMEs owners to provide financial information needed to assess performance is often a barrier [139], and it is difficult to verify the accuracy of SME financial reports and data [140]. When objective data is not available, researchers are encouraged to base their research on self-reported data, so we index SMEs performance according to SMEs owner (leader) ratings of business performance using a measurement scale developed by Mikalef and Pateli [141]. Then this scale was adapted by Degong et al. [29] and Ying et al. [142]. SMEs owners (leaders) were asked to compare their company's performance with its competitors in eight domains. All responses were given using a five-point Likert scale ranging from very bad (1) to very good (5).

Control Variables: To achieve better results, we use the age, size, and industry type of the company as control variables. SMEs age and size were directly assessed in the model, while industrial sector was analyzed as a categorical variable (manufacturing, trade, or services).

The quantitative method was chosen to analyze the data in this study. This method is used to get a clearer and sharper picture regarding the assessment of SMEs sustainability. The results of the data obtained were then analyzed using a descriptive quantitative survey. Descriptive statistics are used to describe the data collected without making general conclusions. Furthermore, Partial Least Square Analysis (PLS) is used to obtain latent variables for prediction purposes, Purwanto et al. [143]. In this research three stages were carried out, namely:

1. Designing the Structural Model (Inner Model).

The inner model (inner relation, structural model, and substantive theory) describes the relationship between latent variables based on substantive theory. The structural model was evaluated using the R-square for the dependent construct, the Stone-Geisser Q-square test for predictive relevance, and the t-test and the significance of the structural path parameter coefficients. Changes in the R2 value can be used to assess the effect of certain independent latent variables on the dependent latent variable, whether it has a substantive effect [143]. The R2 results are 0.67, 0.33, and 0.19, indicating that the model is "good," "moderate," and "weak" (Chin, 1998). The inner model equation is:

$$n = \beta n + r\varepsilon + \varsigma \quad (1)$$

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Information:

η = endogenous latent construct matrix

β = coefficient matrix of endogenous variables

ε = exogenous latent construct matrix

γ = exogenous variable matrix coefficient

ζ = inner model residual matrix

$$Q^2 = 1 - (1 - R1^2)(1 - R2^2) \dots (1 - Rp^2) \quad (2)$$

Where, $R1^2$, $R2^2$ Rp^2 , are the R-square of the endogenous variables.

Q^2 has a value with a range of $0 < Q^2 < 1$, where the closer to 1 means the better. This Q^2 quantity is equivalent to the total coefficient of determination in path analysis.

2. Designing the Inner Model.

a. convergent validity test.

$$x = \pi_x \zeta + \varepsilon_x \quad (3)$$

Convergent validity of the measurement model with the indicator reflective model is assessed based on the correlation between the item score/component score and the construct score calculated by PLS. Reflective measure is said to be high if it correlates more than 0.70 with the construct you want to measure. However, for research in the early stages of developing a measurement scale, a loading value of 0.5 to 0.60 is considered sufficient.

b. Discriminant validity test

$$y = \pi_y \zeta + \varepsilon_y \quad (4)$$

Discriminant validity of the measurement model with reflective indicators is assessed based on the cross-loading of measurements with constructs. The latent construct predicts the size of the block better than the size of other blocks if the correlation of the construct with the measurement item is greater than the correlation with the other constructs.

average extracted (AVE)

$$AVE = \frac{\sum \lambda_i^2}{\sum \lambda_i^2 + \sum \text{var}(\varepsilon_i)} \quad (5)$$

Discriminant validity is comparing the square root of the average variance extracted (AVE) value of each construct with the correlation between other constructs in the model. If the AVE root value of each construct is greater than the correlation value between constructs and other constructs in the model, then it is said to have good discriminant validity. This measurement can be used to measure the reliability of the latent variable component score, and the results are more conservative than the composite reliability measure. It is recommended that the AVE value be greater than 0.50.

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Composite reliability

$$pv = \frac{(\sum \lambda_i)^2}{(\sum \lambda_i^2) \sum \text{var}(\epsilon_i)} \quad (6)$$

Composite reliability measures the true value of the reliability of a construct and is better at estimating the internal consistency of a construct. Cronbach's alpha measures the lower limit of the reliability value of a construct. The rule of thumb for alpha or composite reliability must be greater than 0.7, although a value of 0.6 is still acceptable.

3. Hypothesis test. Analysis is used to describe the simultaneous linear relationship between observed variables (indicators) and variables that cannot be measured directly (latent variables). This analysis is also intended to predict the value of the dependent variable when all the dependent variable values are known.

4. Finding and Discussion

We used PLS software to test our model and hypothesis fit. SPSS 23 was used for the initial analysis to ensure the suitability of the data for SEMs. Furthermore, the measurement model is tested to ensure the validity of the construct. Finally, a structural model is used to test the hypothesis. We assessed the potential indirect effects according to the procedure recommended by Preacher et al. [144] and performed a mediation analysis by bootstrapping the PROCESS macro using SPSS.

Outer Model Test. The outer model is a model that specifies the relationship between the latent variables and the indicators, or it can be said that the outer model defines how each indicator relates to its latent variables. The outer model is interpreted by looking at several things, including convergent validity values, discriminant validity values, composite reliability, Average Variance Extracted (AVE), and Cronbach's alpha.

1) Convergent validity. The convergent value is measuring the magnitude of the loading factor for each construct. A loading factor above 0.70 is highly recommended; however, a loading factor between 0.5 and 0.60 can still be tolerated as long as the model is still in the development stage.

2). Discriminant validity. The discriminant value is useful for assessing whether a variable has adequate discriminant validity, namely by comparing the correlation between the indicator and the intended construct; it must be greater than the correlation with other constructs. If the indicator correlation has a higher value than the indicator correlation with other constructs, then the variable is said to have high discriminant validity. Cross-loading illustrates that the value of the loading factor indicator of financial literacy is greater than the cross-loading value, which is aimed at access to finance, attitudes to financial risk, and SMEs sustainability. Based on the results of the discriminant validity test, it shows that all indicators have the highest indicators in their constructs, not in other constructs, so that it can be stated that all indicators have met the requirements of discriminant validity.

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Table 1. Fornell-Larcker Criterion Value

	Access to Finance	SMEs Sustainability	Financial Literacy	Financial Risk Attitude
Access to Finance	0.786			
SMEs Sustainability	0.596	0.800		
Financial Literacy	0.730	0.728	0.781	
Financial Risk Attitude	0.675	0.667	0.721	0.769

Based on the results of the discriminant test validity, the Fornell-Larcker criterion value on financial literacy is greater than the correlation value on other variables. The Fornell-Larcker criterion value on financial access is greater than the correlation value on other variables. The Fornell-Larcker criterion value on financial risk attitude is greater than the correlation value on other variables. The results of the discriminant validity test show that all indicators and constructs in the PLS model have met the required discriminant validity criteria.

3). Composite Reliability. A high composite reliability value indicates good consistency of each indicator in the latent variable to measure that variable. The criterion value of composite reliability > 0.7 indicates that the variable has good internal consistency. The complete composite reliability values are presented in the table below.

Table 2. Composite Reliability Value

	Composite Reliability
Access to Finance	0.890
SMEs Sustainability	0.877
Financial Literacy	0.824
Financial Risk Attitude	0.935

The composite reliability value constructs Financial literacy is 0.824, access to finance is 0.890, financial risk attitude is 0.935, and SMEs Sustainability is 0.877. The four constructs obtained a composite reliability value of > 0.70 , so it is said to be a reliable construct.

4). Cronbach's Alpha. The reliability test is strengthened by Cronbach's alpha value. Cronbach's alpha reliability test limit > 0.7 . Cronbach's alpha value obtained by the financial literacy construct is 0.680, access to finance is 0.845, financial risk attitude is 0.923, and SMEs sustainability is 0.814. Based on the Cronbach's alpha value, the seven latent variables have a reliable construct and are included in the very high category. The complete Cronbach's alpha value results are presented in table 4.

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Table 3. Cronbach's Alpha Value

	Cronbach's Alpha
Access to Finance	0.845
SMEs Sustainability	0.814
Financial Literacy	0.680
Financial Risk Attitude	0.923

5). Average Variance Extracted (AVE). The AVE value indicates the variance value of each indicator in the construct that can be captured by this variable is more than the variance caused by measurement errors. Expected AVE value > 0.5 . The AVE value constructs Financial Literacy 0.609, Access to Finance 0.619, Financial Risk Attitude 0.592, and SMEs Sustainability 0.640. Based on the results of AVE showing that all constructs of each latent variable have an AVE value > 0.5 , it can be concluded that it is valid. Complete results are presented in table 5.

Table 4. Average Variance Extracted (AVE) Value

	Average Variance Extracted (AVE)
Access to Finance	0.618
SMEs Sustainability	0.640
Financial Literacy	0.609
Financial Risk Attitude	0.592

Structural Model Test (Inner Model). To test the structural model, it is done by looking at the value of R^2 which is the goodness of the fit test. The financial access construct obtains an R^2 value of 0.533, which can be interpreted as variations in financial access can be explained by the financial literacy construct of 53.3% (0.533×100), while the remaining 46.7% ($100\% - 46.7\%$) is explained by other variables outside those studied. Meanwhile, the R-square value for financial risk attitudes is 0.520, meaning that variations in financial risk attitudes can be explained by the financial literacy construct of 52.0% (0.520×100). And the SMEs sustainability R-square value of 0.573 means that variations in SMEs sustainability can be explained by the financial literacy and access to finance constructs of 57.3%. The complete R-square value results are presented in table 6.

Table 5. R-Square Value

	R Square	R Square Adjusted
Access to Finance	0.533	0.532
SMEs Sustainability	0.573	0.569
Financial Risk Attitude	0.520	0.519

The next test is to look at the significance of the effect between independent constructs on the dependent and answer what has been hypothesized. Testing with a significance level of 5%, if the t-statistic value is > 1.96 , then the null hypothesis (H_0) is rejected. The t-statistical value of

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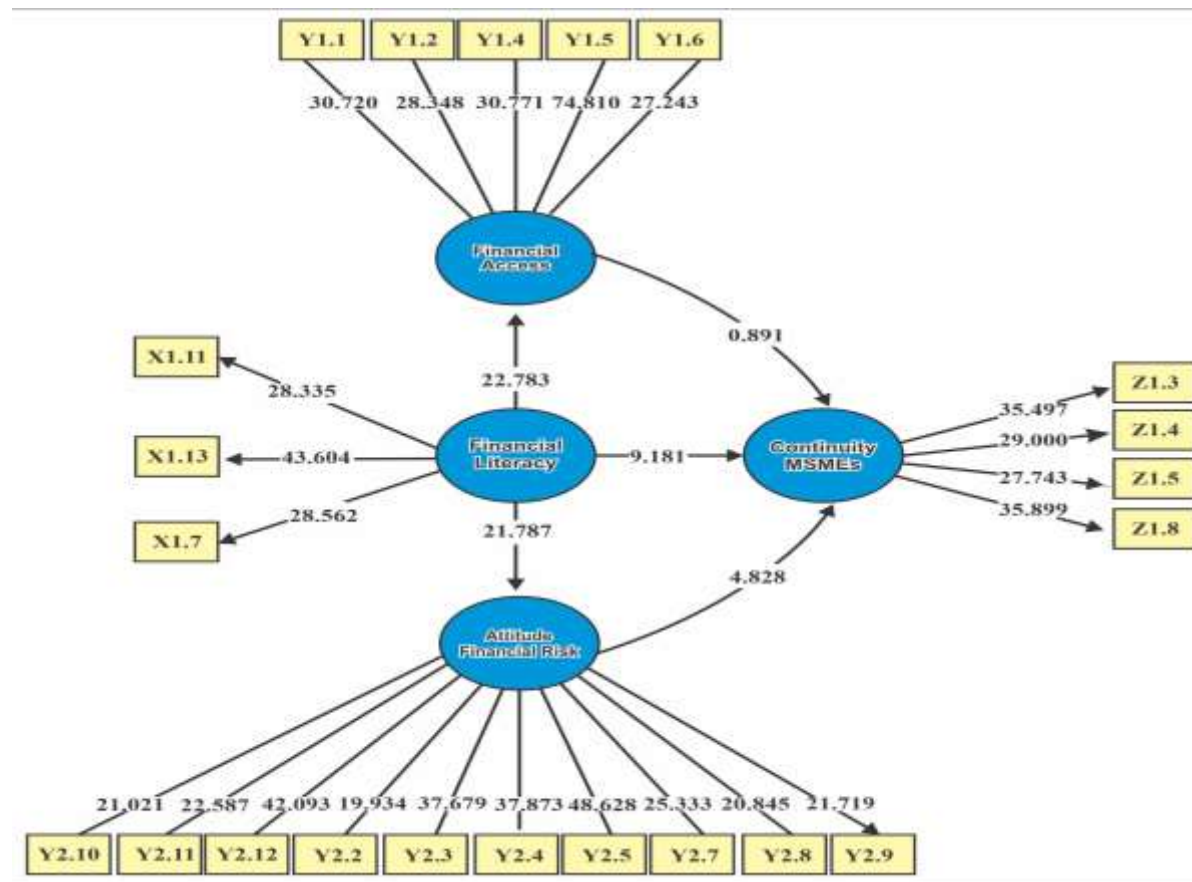
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the effect coefficient of the latent construct was obtained from PLS bootstrapping. The results of the PLS bootstrapping model are presented in the image below.

Test Bootstrapping

Figure 2. The PLS Bootstrapping Model



Parameter coefficient values can be seen in the value (original sample) and standard error (standard deviation), and t-statistical values and p-values can be seen in the table below.

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Table 6. Coefficient Values (Original Sample), Standard Error and T-Statistics

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Access to Finance → SMEs Sustainability	0.048	0.047	0.051	0.945	0.345
Financial Literacy → Access to Finance	0.730	0.729	0.032	23.167	0.000
Financial Literacy → SMEs Sustainability	0.491	0.490	0.054	9.078	0.000
Financial Literacy → Financial Risk Attitude	0.721	0.720	0.032	22.596	0.000
Attitude of Financial Risk → SMEs Sustainability	0.280	0.280	0.055	5.066	0.000

Direct Influence

Hypothesis 1. The test results show that financial literacy affects access to finance. Financial literacy is knowledge and skills in managing finances. The existence of SMEs' awareness of financial literacy has a long-term effect that can maintain financial conditions that remain stable, safe, prosperous, and sustainable. With the ability of SMEs to periodically analyze financial performance, prepare monthly income statements, be able to calculate the cost of capital, be able to prepare basic accounting books, know and be able to prepare the documents needed to get a loan from a bank to meet their financial needs, have the skills needed to assess prospects' company finances, have the ability to predict losses by minimizing bad loans, and have basic accounting knowledge so that SMEs can more easily access the fulfillment of capital needs from outside the company. This advantage is achieved because SMEs are able to convince capital owners to invest or provide credit. This result is in line with Schuhen, M. [145] and Simatele, M. [146], who found that developing countries can use financial literacy to facilitate social, economic, and environmental development, especially financial inclusion in terms of access to finance.

Hypothesis 2. Financial literacy has a positive and significant effect on financial risk attitudes. Financial literacy is one of the intelligences that humans must possess to manage their business finances and personal finances. Financial literacy is a set of skills and knowledge that enables SMEs managers/owners to make efficient, effective, and economical decisions with all the financial resources they have. There are several key factors of financial literacy in influencing the attitude of financial risk in a business, namely: (1) Basic Personal Finance is the basic knowledge possessed by SME managers/owners in terms of financial management, such as calculating profitability, asset liquidity, calculating simple and compound interest rates, the effect of inflation, and others. (2) Money management is a priority for the use of sources of funds owned. This aspect is the ability of the SMEs manager/owner to analyze sources of income, sources, and use of capital. (3) Credit and Debt Management: In this aspect the SME

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manager/owner needs to have knowledge related to credit and debt, because the use of credit or debt is very necessary when a business needs capital. SMEs are able to determine the optimum capital structure so as to avoid financial risks. (4) Risk management is knowledge to be able to manage risks and even avoid risks. Risk management is necessary because there is a possibility of financial loss that will be experienced by SMEs from things that are unsafe or unwanted to occur [147, 148, 149, 150].

Hypothesis 3. Financial literacy has a positive and significant effect on the sustainability of SMEs. Financial literacy plays a role in shaping the behavior of SMEs managers/owners in making financial decisions. The positive effect of financial literacy on sound investment decisions is diminished by the high prevalence of intuition. Therefore, increasing the use of intuition results in optimal investment decisions that can encourage SME sustainability. Cognition is the process by which sensory input is changed, reduced, described, stored, recovered, and used, which is a mental process that includes calculations, understanding, reasoning, problem solving, and decision making, taking into account financial risks and business sustainability. Sustainability of SMEs can be achieved if SMEs are able to reduce operational costs, increase profit growth rates and increase market share, increase customer satisfaction, provide quick responses to market demand, accelerate product or service delivery cycle times, and maximize return on investment and return on equity. This finding is in line with the findings [130; 151; 152].

Hypothesis 4. Access to finance has a direct impact on SMEs sustainability. The source of funds is a potential source for a business to develop. Access to finance for the growth of SMEs requires the ability to manage these resources. Knowledge is indicated to be able to utilize financial resources with the aim of SMEs growth. Financial literacy is an important benchmark for a successful business. In addition, financial literacy has the ability to make financial decisions so that it influences financial access to the sustainability of SMEs properly. The main factor needed by SMEs to develop their business is capital, so access to capital is a major requirement in developing their business. The main indicators in access to finance are the ability to access financial services offered by investors, the ability to access financial service technology offered by investors, financial services offered by investors, the suitability of loan products provided by investors with the needs of SMEs, loan terms and conditions that are impartial and profitable, financial service security, and affordable capital costs. These are things that SMEs need to have to increase their access to finance. This finding is in line with the findings [153, 154, 155].

Hypothesis 5. Financial risk attitude has a positive and significant effect on SMEs' sustainability. The financial risk attitude of the SMEs manager/owner plays an important role in determining business performance, which has an impact on business sustainability. It is the combination of concepts, information, and emotions about learning, which in turn generates a readiness to react well and leads to more effective decisions that result in benefits for SMEs managers/owners. A good financial risk attitude enables SMEs to predict the worst possibility they will face in the future, thus ensuring the sustainability of their business. The results of this study conclude that most SMEs owners are future-oriented, namely by setting good financial

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targets for the future. These findings also show that being oriented towards the future can encourage decision-making and influence business performance and business sustainability. This finding is in line with the findings [156; 157].

Indirect Influence. The results of the direct and indirect effect coefficient values are presented in full in the table below.

Table 7. Coefficient Values (Original Sample), Standard Error and T-Statistics

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Financial Literacy → Access to Finance → SMEs Sustainability	0.035	0.035	0.037	0.936	0.350
Financial Literacy → Financial Risk Attitude → SMEs Sustainability	0.202	0.201	0.042	4.775	0.000

Hypothesis 6. Financial literacy has a positive but not significant effect on the sustainability of SMEs through access to finance. To get access to financial loans at financial institutions, several aspects that must be considered include financial literacy, collateral, SMEs location, type of industry, managerial trust, and network. Financial institutions prioritize SMEs that have guarantees and trust to get access to loans compared to aspects of close location, trade capital, and extensive networks owned by SMEs. Access to finance in mediating the effect of financial literacy on SME sustainability is still small. This is in line with the findings of [156, 157, 158].

Hypothesis 7. Financial literacy has a positive and significant effect on SMEs' sustainability through financial risk attitudes. Business financial risk is related to the company's use of financial leverage and debt financing, rather than operational risk, to increase maximum and profitable business performance. Financial risk relates to the ability of a business to generate sufficient cash flow to be able to make interest payments on financing or meet other debt-related obligations. Businesses with relatively higher levels of debt financing have a higher level of financial risk because it is likely that these businesses will not be able to meet their financial obligations and will experience difficulties and even face bankruptcy. However, good financial literacy will give the manager/owner of SMEs the ability to determine the attitude of the financial risks it faces and determine the financial health of the business in ensuring the sustainability of its business. This finding is in line with Ono, S., et al. [161], Tullio Jappelli, et al. [162], and Glaser, et al. [163].

Access to finance in SMEs sustainability. Understanding and knowledge of financial management has a very important role in determining the level of success of SMEs. The ability of SMEs managers/owners to explore and access financial institutions will affect the growth rate and sustainability of SMEs. The importance of in-depth knowledge of SMEs' financial literacy makes financial literacy indispensable to Menike [164]. Theory of Resource-Based

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View (RBV) Barney, J. [166], considers that the resources and capabilities of SMEs are important for business sustainability because they are the main basis of the ability of competitiveness and company performance. SMEs can compete with other companies by managing the resources owned by the SMEs concerned in accordance with financial literacy skills to achieve a competitive advantage in their business. Financial literacy skills have a positive effect on access to finance. Hasan, M [44], revealed that knowledge of various financial service factors has a significant effect on access to finance. Financial literacy has the goal of increasing the understanding, skills, and beliefs of SMEs that influence attitudes and behavior to improve the quality of decision-making in using financial services. In this study, even though it had a positive effect, it was not significant because the SMEs respondents were still more dominant with a low level of financial literacy. SMEs managers/owners tend to use internal business capital. The Pecking Order Theory by Stewart C. Myers [90] stated that companies prioritize internal equity funding over external equity funding. In the funding hierarchy, capital originating from retained earnings is profitable, followed by debt financing and finally, equity financing [168]. However, SMEs with a good level of financial literacy will have an understanding of the benefits, risks, and costs of their financial products and services as well as their rights and obligations as consumers so that they have higher competitiveness. This makes SMEs have confidence and trust in choosing and accessing financial services according to their needs. Access to finance or capital in the formal financial sector will automatically open business opportunities or increase the business capacity of SMEs. This allows SMEs to access a variety of financial services, such as business loans, take advantage of various savings options, or take advantage of various insurance products. In addition, the ease of accessing business capital in the formal financial sector will reduce credit growth in the informal sector, which generally has high capital costs and is short-term. To reduce SMEs' financial access to the informal sector, financial literacy is needed. The OECD (Atkinson & Messy, [168]) found that financial literacy is a combination of awareness, knowledge, skills, attitude, and behaviors necessary to make sound financial decisions and ultimately achieve individual financial well-being. This shows that SMEs need financial literacy in making financial decisions and achieving prosperity. SMEs are generally characterized by a lack of financial knowledge and managerial skills. This weakness limits their access to external financial resources. We find that financial literacy has a positive impact on access to finance, which is consistent with Wise's [67] finding that financial literacy is an important determinant of access to finance. Moreover, our findings are consistent with those of Carbo-Valverde et al. [169], who revealed that financial literacy is positively related to awareness of various sources of finance and the ability to identify the right sources of finance for a business. This suggests that SMEs need to be financially literate to fill the 'equity gap': that is, compared to larger organizations, they pay higher interest rates and have to provide more collateral when borrowing. Better financial literacy will also enable SMEs to prepare timely, relevant, and accurate financial reports, which are necessary to access finance and thus will help solve the problem of scarcity of capital [170] affecting SMEs in emerging markets. However, financial literacy determines financial access. The dual-process theory put forward by Lusardi and Mitchell [54] argues that financial decisions can be driven by intuitive and cognitive processes, which means that financial literacy does not always

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produce optimal financial decisions. The dual-process theory of financial literacy argues that the behavior of people with high levels of financial literacy depends on the prevalence of two thinking styles, namely intuition and cognition, in determining access to finance and taking financial risk attitudes [171]. The positive relationship between access to finance and SMEs' sustainability is consistent with the results of Bongomin et al. [172], who revealed that access to finance affects the profitability of SMEs. Our results are also consistent with Storey's findings [76] that access to finance has a positive effect on SMEs' performance. According to Ahlstrom et al. [83], it is more difficult for SMEs to access finance than it is for large organizations. Difficulties in accessing finance can cause SMEs to turn to inappropriate sources of finance and thereby reduce their sustainability. In addition, access to finance affects the growth and innovation of SMEs [173]. Overall, the evidence suggests that SMEs with better access to finance are better positioned to maintain their performance and survive in today's competitive business environment. It is difficult for SMEs in emerging markets to access suitable and affordable financial services [174]. Hence, it is evident that poor access to finance for SMEs in emerging markets contributes to poor performance and high failure rates in SMEs.

Attitude of financial risk in SMEs sustainability. A serious challenge that slows down the development of SMEs is limited access to finance or limited access to investment [175]. SMEs sustainability is directly correlated with SMEs financial results and is a major concern of entrepreneurs. According to Martins, A [176], the most important measurement of an SME's performance is its profitability, which shows the SME's ability to generate profits within a certain time, based on available resources. Therefore, the main goal of SMEs is to maximize this indicator. However, SMEs are often young companies that face various obstacles related to financing their activities. Many financial institutions do not want to extend credit to such companies because there are no financial reports (balance sheets, profit and loss statements, capital structure, profit ratios), the trust of banks or investors has not yet been built, there is no guarantee, and there is no visible ability to repay the loan. This form of financing is more frequently available to SMEs aged 2-10 years but will increase corporate debt and reduce Banerjee's profits [177]. Another solution is to look for investors. However, this process turned out to be difficult and complicated, as explained in the research by Gošnik, D. & Stubelj, I. [178]. On the other hand, seeking external sources of financing may be the only way for companies to survive in the market. This is related to the concept of financial leverage, whose job is to use foreign capital to multiply the profits generated. Numerous studies show that it has a positive impact on entity development [179; 180; 181]. However, incurring debt involves increasing the risk of returns, increasing the probability of loss, decreasing the profit rate, and increasing the probability of financial distress and bankruptcy [182]. To reduce this risk, good SME financial literacy is needed. Eniola and Entebang [55] found that good financial literacy has a direct and positive impact on the performance of Nigerian SMEs. Purnomo [183], similarly, found that financial literacy has a direct impact on the performance of SMEs. This study identifies financial literacy as an important component of organizational intellectual capital, and thus the findings of this study are consistent with Carmeli and Tishler [184], who found that intellectual capital has a positive effect on SME sustainability. Furthermore, financial

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literacy helps increase the sustainability of SMEs as it ensures they can cope with sudden economic shocks and rapidly changing financial and credit markets [185; 186]. The findings of this study also support Wella Sandria [178], who found that financial literacy enables SMEs to identify and invest in profitable business opportunities. In addition, financial literacy improves financial management practices and minimizes financial errors, thereby helping to increase SMEs' sustainability [188]. However, the findings of this study contradict the findings of Eresia-Eke and Raath [189], who found no correlation between financial literacy and SMEs performance; this occurs because this study measures the financial literacy of SMEs managers/owners in business financial management. This study also shows that having qualified and highly financially literate managers/owners increases the sustainability of SMEs. The effect of financial literacy on financial risk attitudes has not received sufficient attention [147, 148], so this study seeks to fill the gap by investigating the impact of financial literacy on organizational financial risk attitudes. We find that financial literacy influences organizational financial risk attitudes, consistent with the findings of Xiao, J. J. [118], who found that financial literacy has a positive effect on financial risk attitudes. A higher level of education can reduce the inherent risks associated with entrepreneurial activities. Bae, T. J., et al. [190] argue that financial literacy reduces the level of risk by ensuring that SMEs have the knowledge needed to make good business decisions. SMEs that are more financially literate are more likely to take advantage of highly profitable business opportunities because they are willing to take risks. In today's rapidly changing business environment, the businesses that survive are the ones that can and do adapt to change. This means that the ability to anticipate change and manage the risks it creates is important for SMEs' sustainability. We found that financial risk attitudes have an effect on SMEs' sustainability. Our findings corroborate the results of the Kmmcb study by Kulathunga et al. [191], who found that financial risk attitudes have a positive impact on SMEs' performance. Buchdadi, Agung, et al. [192] also found that financial risk attitude improves performance, as it allows firms to identify opportunities and risks. Moreover, our findings are in agreement with the findings of Kulathunga et al. [191], who suggested that financial risk attitude is an important predictor of SMEs' performance. Moreover, as noted by Palich and Bagby [193], a positive attitude encourages organizations to focus on business opportunities rather than threats.

Mediation Access to finance and financial risk attitudes on SMEs sustainability. This study found that access to finance and financial risk attitudes were able to mediate the relationship between financial literacy and SMEs' sustainability. The fact that we found that financial access mediates the relationship between financial literacy and SMEs' sustainable performance is consistent with peak order theory, which states that financial literacy increases SME sustainability by minimizing information gaps [194], thus providing SMEs with access to appropriate sources of finance. Financial literacy enables SMEs to create a sound and suitable capital structure for the organization, thereby minimizing the cost of capital and increasing their sustainability. Our findings reinforce Wella Sandria's argument [187] that financial literacy influences risk management skills and firm performance. Moreover, our findings are consistent with Hussain et al. [8], who concluded that financial literacy is important for sound investment

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decision-making and risk mitigation, thereby enhancing SMEs' sustainability. The fact that financial risk attitudes mediate the relationship between financial literacy and SMEs' sustainability is also consistent with the dual process theory. Financial literacy influences cognitive processing and improves understanding, calculation, reasoning, problem-solving, and organizational decision-making abilities [195], leading to better decisions and increased sustainability. Therefore, it should be noted that financial literacy is very important for SMEs' sustainability and is directly related to sustainability and also has an indirect influence through associations with access to finance and financial risk attitudes. Thus, our investigation of the relationship between SMEs' sustainability and financial literacy, access to finance, and financial risk attitudes expands knowledge of financial literacy by identifying new pathways that can enhance SMEs' sustainability.

5. Conclusion

SMEs sustainability is closely related to access to finance and financial risk attitudes. Thus, efforts are needed to strengthen financial literacy by increasing access to formal finance and how SMEs managers/owners determine the attitude of the financial risks they face. A higher SMEs Education level orientation, especially in financial management, can reduce the inherent risks associated with entrepreneurial activities. SMEs need to focus on utilizing technology to produce accurate financial reports and appropriate risk management towards creating optimal, efficient, smooth, safe, and reliable financial management performance in conducting economic transactions. Furthermore, increased financial literacy coupled with high access to finance and the ability to determine good financial risk attitudes will improve business performance. The attitude of the leadership/owner is an important factor in SMEs' sustainability because it directly influences organizational decision-making. In addition, the SMEs development literature has shown that access to finance and financial risk attitudes are antecedents of SMEs sustainability and suggest new ways to enhance SMEs sustainability, particularly in developing countries.

This research also has some limitations. First, the current study was conducted only on SMEs in developing countries using survey data, documentation, and interviews, so generalizations of the results must be made with caution. Second, this study does not consider the effects of industrial policies and macroeconomic policies on SMEs' sustainability. Thus, future analysis based on industrial policy and macroeconomic policy will help to clarify this relationship more deeply.

Author Contributions

S.S., conceptualization; S.S., I.N., and M.B., compiling the research; N.N. and I.N., establishing the study; S.S., I.N., N.N. and M.B., processing the data; N.N. and M.B., contributing to the materials/methods/analysis tools; S.S., and I.N., analyzing the data; S.S., I.N. and M.B., contributing to data checking; S.S., I.N., N.N. and M.B., writing and revising the concepts. All authors have read and agreed to the published version of the manuscript.

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Institutional Review Board Statement

The results of this study have received approval from the Institute for Research and Community Service, University of Bosowa Makassar as stated in the Decree of the Head of the Center for Research and Community Service Number: 929/LPPM/IX/202.

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