International Journal of Research in Business Studies and Management
Volume 7, Issue 4, 2020, PP 14-24
ISSN 2394-5931

Investment Appraisal Techniques of Small and Medium Scale Enterprises in Ethiopia (A Case Study in Selected Wored as of Wolaita Zone)

Tesfaye Jifar

Department of Accounting and Finance, College of Business and Economics, Wolaita Sodo University, Ethiopia

***Corresponding Author:** Tesfaye Jifar, Msc in Accounting and Finance, Lecturer in Wolaita Sodo University*

ABSTRACT

Small and medium scale enterprises (SMEs) are generally regarded as the engine of economic growth and equitable development in developing economies. To facilitate stronger and sustainable business or investment growth, decisions on how to allocate resources are very essential, hence require a systematic, analytical, and thorough approach as well as sound judgment. SMEs play a major role in the socio-economic development of any country; however these enterprises face investment appraisal problem. Poor investment decisions have been blamed for high rate of failure and closure. Thus, the purpose of the study was to determine the investment appraisal techniques of small and medium enterprises in Ethiopia with reference to selected Woredas in Wolaita Zone. The information that provided by this research will benefit policymakers, community members and academicians. The study adopted Theory of Investment Decisions, Agency Theory and Q Theory of Investment. It adopted a descriptive survey research design with a target population of 1,278 licensed SMEs selected Woredas of Wolaita Zone. The sample size was 305 SMEs. The researcher adopted purposive sampling to select sample frame from three Woredas (namely Humbo, Areka and Bodit) and used random sampling technique to select respondents from each Woredas, and collected data using questionnaires. Quantitative data was analyzed using descriptive statistics and presented in tables. The findings of the study suggested that due to the importance of investment to the economy of the country and SMEs themselves; SMEs operators need to continuously analyze the investment decisions that make them improve their financial performance. The study recommends that the government and other service providers to focus more on the issue of investment decisions for small and medium enterprises. In particular, they should train small and medium enterprises on the investment evaluation techniques, their advantages and disadvantages in relation to their financial goals

Keywords: *Investment appraisal techniques, SMEs, IRR, NPV, PBP*

INTRODUCTION

Small and medium scale enterprises (SMEs) are generally regarded as the engine of economic growth and equitable development in developing economies. They are labour intensive, capital saving and capable of helping create most of the one billion new jobs the world will need by the end of the century. They are also perceived as the key to Ethiopia's economic growth, poverty alleviation and employment generation. But their unimpressive performance in employment generation in recent years has generated a lot of research interests on their challenges and prospects (Tariku B., 2017). The goal of every investment in the business environment is to maximize wealth of owners and the firm's value within a specified time period. However, the achievement of this goal is mostly surrendered by a lot of uncertainties which can only be averted through adherences to best practices and theories in the business environment (Agyei-Mensah, 2011). In support of Mamo (2014), Imegi et al et al. (2015) elaborated that the complexity of contemporary business environment has made the application of the traditional investment appraisal techniques ineffective in managing these uncertainties and therefore would need more sophisticated risk management models. Although the mathematical investment appraisal models have received much recognition in theory to be effective for investment risk management, there are other approaches to investment appraisal. That is apart from the statistical approach to investment appraisal as

supported by the statistical or graphical school of thought, investment can also be appraised qualitatively normally referred to as 'intuitive feeling' as supported by the intuitionist school of thought and the integration of both approaches as supported by the integration approach school of thought.

These schools of thought have created unending debate on the best approach to investment appraisal. Nevertheless, this research focused on the statistical approach to investment appraisal. The dynamism characteristics of risk have continued to influence the redevelopment of existing risk management models and design of new ones to match existing investment risks. Therefore, as recommended by Imegi et al et al. (2015), there is the need for authorities to regularly review the existing models to make them relevant to contemporary investment situations. Pandey (2010) and Peterson and Fabozzi, (2002) explained that the common risk management techniques used in the investment environment range from basic statistical models such as the Payback Period (PBP) and Accounting Rate of Returns (ARR) or Return on Capital Employed (ROCE) techniques to the discounted cash flow techniques such as the Net Present Value (NPV), Internal Rate of Return (IRR) and Profitability Index (PI) and among others. According to Guerrero (2007), beyond these traditional investment appraisal techniques are models such as sensitivity analysis, cost-benefit analysis, and stochastic models and among others used to make further analysis of investments in a highly risky or volatile economy. The investment field is gradually moving away from the trading of physical investment assets to electronic and human networking which risks are very difficult to predict hence need more sophisticated risk management models.

Problem Statement

Most SMEs in Ethiopia die within their first five years of existence, a smaller percentage goes into extinction between the sixth and tenth year while only about five to ten percent survive, thrive and grow to maturity. Many factors have been identified contributing to this premature death of SMEs. Key among them includes: insufficient capital, irregular power supply, infrastructural inadequacies (water, roads etc.), lack of focus, inadequate market research, over-concentration on one or two markets for finished products, lack of succession plan, inexperience, lack of proper book keeping, lack of proper records or lack of any records at all, inability to separate business and family or personal finances, lack of business strategy, inability to distinguish between revenue and profit, inability to procure the right plant and machinery, inability to engage or employ the right caliber of staff, cut-throat competition (Tariku B., 2017).

Over all, the above factors of SMEs growth, the failure and dwindling growth of investments in the SME sector has been largely associated to the informality characteristics of the sector in business operations. That is, the SME sector is well known not to be adherent to best business or investment practices. Their operations and financial management are less regulated and operators hardly adhere to best practices. According to Nancy B. et al (2014), majority of SME operators are noted to have no formal basic education and therefore hardly understand or utilize propounded theories in business. Although this assertion continues to be debated among stakeholders, the informal characteristics of the sector is globally accepted (Agyei-Mensah, 2011).

Notwithstanding the sector's informality characteristics, the sector has attracted many research works due to its' potential in contributing to global economic development if the challenges to the sector growth are identified and addressed. One of the long standing mixed research findings in the SME sector is the sector's operator's adherence to the use of the investment appraisal techniques to appraise investment. Some of these research works discovered that SME operators do apply the various investment appraisal techniques in their investment appraisals whereas others research results debunked the assertion. This mixed finding on the application of the investment appraisal techniques by SME operators to assess investment profitability and success had aroused the interest for this research work to assess the application of the investment appraisal techniques among SME operators in selected Woredas of Wolaita Zone to either confirm or contrast the existing research findings on the problem and to also provide reliable information for stakeholders to guide them in decision making and policies formulations.

Although there had been similar research works on the application of investments appraisal techniques by SMEs operators in other countries, there is no previous research in

literature on the application of investment appraisal techniques by SMEs operators in Wolaita Zone. The Woliata Zone in recent time has been discovered to be the fastest growing economy in southern region with the SMEs sector showing a rapid growth in terms of numbers (Tariku B., 2017). It is therefore worth conducting this research problem at the Woredas of Wolaita Zone to help to early address any challenge that may impede investments successes.

Objectives

The general objective of the study is to investigate the investment appraisal techniques of small and medium enterprises in selected Woredas of Wolaita Zone.

The following were the objectives of the study;

- To assess the knowledge level of the SME operators in Wolaita Zone in the various basic investment appraisal techniques.
- To determine whether SME operators in Wolaita Zone apply investment appraisal techniques in their investment decisions.
- To determine the factors that influences the choice of investment appraisal techniques by SME operators in Wolaita Zone.

Literature Review

Theoretical Review

Small and medium-sized enterprises (SMEs; sometimes also small and medium enterprises) or small and medium-sized businesses (SMBs) are businesses whose personnel numbers fall below certain limits. The abbreviation "SME" is used in the European Union and by international organizations such as the World Bank, the United Nations and the World Trade Organization (WTO). Small enterprises outnumber large companies by a wide margin and also employ many more people. SMEs are also said to be responsible for driving innovation and competition in many economic sectors.

According to the National SME development Strategy and the Development Bank of Ethiopia (see table below), SMEs are defined by number of employees and net worth. It is also important to note that SMEs are defined differently depending on whether they operate in the service/trade sector or the industrial/ manufacturing sector.

1	Small	Service	6-30	Birr 50,001 – 500,000
		Industry	6-30	Birr 100,001 – 1,500,000
2	Medium	Service	31-100	Birr 500,001 – 7,500,000
		Industry	31-100	Birr 500,001 – 7,500,000

Unfortunately, there is not yet a clear benchmark for the upper capital limit defining medium enterprises. However, the Development Bank of Ethiopia recently prescribed a definition of medium enterprises (for its lease financing operations) based on number of employees and total capital irrespective of the sector in which the enterprises operate.

Accordingly, medium enterprises in both the industrial and service sectors are enterprises with 31-100 employees and/or with a paid up capital or total assets of ETB 500,001 to ETB 7.5 million. The present study uses both the SMEs Strategy and the development bank of Ethiopia's guidelines to select samples from the 3 participating Woredas in Wolaita Zone and applies the same in its analysis.

The study was anchored on the conventional capital budgeting theory, neo-classical theory and the Tobin's Q theory in order to investigate the investment appraisal techniques of SMEs in woredas of Wolaita Zone.

Conventional Capital Budgeting Theory of Investment

Conventional capital budgeting approaches are biased towards future investment opportunities in the long term in potential opposition to shareholder's interests. Therefore, discounting ought to be done at the required return on equity (Ke) rather than WACC (Ka) to determine shareholders' wealth attributable to future investment opportunities (FIOs). The ability to borrow on FIOs basis would increase shareholders wealth by quantifiable amount, if the management has a clear incentive to increase its credibility in the financial markets. When management is either unwilling to divulge information or unable to convince markets of future cash flows, a divergence will exist between the market value of shares and true shareholder wealth (Woods & Randall, 1989).

The neoclassical theory of investment could be based on the optimal capital accumulation (Jorgenson, 1963). Neoclassical theory of investment is based on the assumption of profit-

maximizing behavior by firms (Samuel, 1996) and the assumption that the management seeks to maximize the present net worth of the firm. Hence, an investment project should be undertaken if and only if it increased the value of the shares. Danielson and Scott (2006) put it clear that, the firms will make set of investments decisions that will maximize shareholders wealth. Hence, the rule is invest in all positive net present value projects and reject those with a negative net present value. The neoclassical model of optimal capital accumulation may be derived by maximizing present value of the firm, by maximizing the integral of discounted profits of the firm, or simply by maximizing profit at each point of time (Eklund, 2013). This theory relates to the rate of investment as a function of Q, where Q is the ratio of the market value of new additional investment goods to their replacement cost (Tobin, 1969). If investors value assets at prices which are greater than replacement costs, then there are strong inducements for investment in reproducible real capital (Ciccolo etal 1979). This theory was in sharp contrast to the output-oriented models like neoclassical model and acceleration model in that it attempted to explain investment on a financial basis in terms of portfolio balance; this translates to the concept based on the Q ratio; that is the ratio of the market value of capital to its replacement cost. Grunfeld (1960) proposed the use of the firm's market value as proxy for potential investment undertakings and further stated that investment depends on the market value of the firm in a direct correlated way, this approach to investment being influenced by the market value of the firm can be seen as a relation to Tobin's Q theory. While the accelerator, neoclassical, modified neoclassical, and the cash flow models do not explicitly consider the optimal adjustment path for the firm's capital stock when it is away from that level, the Q theory characterizes the complete evolution of the capital stock from the underlying optimization problem of investments differ from the preceding investment models such as the accelerator models and Jorgenson's model in that it is not output-based. In contrast, investment is thus not viewed as a function of output as in the previous models, but instead assumed to be determined by the firm's market value (Karin et al. 2008). The contrast is also elaborated by (Clark, 1979) where he states that the Q models should not be viewed as complements but rather substitutes to the standard neoclassical models.

Empirical Review

In the period between 1930s and 1950s non-owner managed firms put in place capital budgeting control systems that identified planned capital investments going forward. The size of non-financial investments and the number of non-owner managed firms increased during the industrial revolution. These simultaneous changes created fertile ground for use of more sophisticated evaluation techniques and for the capital budgeting processes in use today (Chapman & Hopwood, 2007). During the 1950s, practicing financial controllers began to network with each other, with consultants and with academicians to develop models for capital budgeting (Chapman & Hopwood, 2007). Agency theory in the late 1970s and early 1980s gave rise to analytical models of capital investment process. These models suggest that current capital budgeting procedures are a means of reducing agency costs that emanate from the conflict of interest between owners of firms and management. A consistent capital budgeting method must be robust when correctly ranking and selecting superior investments in varying investment environments, remain theoretically sound by maintaining the assumption of wealth maximization, and be expressed as a yield based measure as preferred by corporate management (Chapman & Hopwood, 2007). Grinstein & Tolkowsky (2004) carried out a survey in USA to determine the role of the board of directors in capital budgeting process. They found 17% of the board of directors of the sampled firms disclosed to having established committees with a capital budgeting role. The study revealed that board of directors have four main roles in capital budgeting including review of annual budgets, large capital expenditure requests, merger and acquisition proposals and performance of approved budgets. Some committees have an advisory role in capital budgeting process. The main finding of the study was that boards of directors have a dual role in capital budgeting process, which is the disciplinary and advisory role.

Pradeep & Quesada (2008) in a study on the use of capital budgeting techniques in businesses in the Western Cape Province of South Africa investigated a number of variables and associations relating to capital budgeting practices. The study revealed 64% of the businesses surveyed used only one method of capital budgeting while 32% used between two and three different techniques to evaluate capital

budgeting decisions. The more complicated methods such as NPV and IRR were favored by large businesses compared to small businesses. Brealey & Myers (2010) refer to investment and financing decisions and their interactions as the corporate financial principles addressed by financial managers to help them in providing accurate answers to the two fundamental pre-occupations of the investments the firm should make and how it should pay for the investments. They qualify that this is the secret of success in financial management.

In principle, a firm's decision to invest in a new project should be made according to whether the project increases the wealth of the firm's shareholders. The way capital budgeting is taught and practiced presents a paradox. Typically, students in corporate finance are taught that a project will increase the shareholder value if its NPV is positive. For investors with well diversified portfolios, only the project's systematic risk affects its value: its idiosyncratic risk should not be considered. Capital market imperfections such as costly external financing and bankruptcy costs are mostly ignored in teaching capital budgeting (Graham & Harvey, 2001). Haka et al. (1985) carried out a study aimed to determine the effect on a firm's market performance of switching from naïve to sophisticated capital budgeting selection procedures. They theoretically stated that, a firm should perform better if it employs sophisticated techniques than if it uses naïve techniques. They found out that 48 months before the firms switched to sophisticated capital budgeting techniques, with three different 48-month periods after the switch, indicated no significant improvements in the relative market performance of the firms' adopting sophisticated selection techniques. However, while they found no long-run effects on relative market returns for adopting firms, their results suggested that there was a short-run positive effect when firms adopt sophisticated capital budgeting selection procedures. Mooi and Mustapha (2001) undertook a study to find out whether the degree of sophistication of capital budgeting practice affects the firm performance, in terms of profitability. The capital budgeting techniques which were surveyed were NPV, IRR, ARR and Payback. From the analysis, 19% of the responding firms used superior capital budgeting methods whose score was 0% to 60%, and 42.9% of the firms had a score of 61% to 80% of usage of superior capital budgeting methods, and 38.1% had a score of 81% to 100% of the usage of capital budgeting methods. The t-tests results of the study showed that the degree of capital budgeting sophistication did not significantly affect firm performance, measured by ROA and EPS. Theoretically, the use of superior capital budgeting process should increase the effectiveness of the firms' investments decision making. Thus their study failed to confirm with the theory.

Klammer (2003) sought to investigate the association of capital budgeting techniques and performance in American firms. Attention was directed at the relationship of performance and capital budgeting procedures because the future of the firm is dependent largely on the investment decisions made today. The results of the study indicated that, despite a growing adoption of sophisticated capital budgeting methods, the regression results did not show a consistent significant association between performance and capital budgeting techniques. This indicated that the mere adoption of various analytical tools is not sufficient to bring about superior performance and that other factor such as marketing, product development, executive recruitment and training, labor relations, etc., may have a greater impact on profitability. Consistent with Klammer's (2003) study, other factors were found to vitiate the improvement of firm performance after a switch from naïve to sophisticated capital budgeting selection techniques. These factors were found to be; economic stress (the acute resource scarcity), which they asserted that in times of economic stress, firms do some 'belt tightening' by instituting cost reduction procedures and the adoption of new criteria for capital budgeting could be one of these belt tightening procedure. The company's reward structure was also another factor, where they found out that companies that reward their employees on the basis of long-term incentive plans may experience more benefits from sophisticated selection techniques than companies that reward using a short-term reward plan. Study concluded that the adoption of sophisticated capital budgeting selection techniques, in and of itself, does not result in superior market performance.

A study by Olawale et al, (2010) was conducted to investigate if companies make use of sophisticated investment appraisal techniques when making investment decisions, and the impact of sophisticated appraisal techniques on

the profitability of the manufacturing firms in the Nelson Mandela Bay Metropolitan area, South Africa. The results of the study showed that the pay back method used by the respondents is not significant to profitability and does not have a positive relationship with profitability of the respondent firms. Accounting rate of return was also found insignificant to profitability and negatively related to profitability. However, the results indicated that use sophisticated investment appraisal techniques had a positive impact on profitability thus confirming the second objective of the study.

METHODOLOGY OF THE STUDY

Research Design

This study used a descriptive survey (Describing the characteristics of existing phenomenon) in soliciting information on the investment appraisal techniques of small and medium scale enterprises. Descriptive survey design was used since it provides insights into the research problem by describing the variables of interest. It is used for defining, estimating, predicting and examining associative relationships. This helps in providing useful and accurate information to answer the questions based on who, what, when, and how (Kombo &Tromp, 2006).

Sources of Data and Collection Method

The data used for this study was from both primary and secondary data sources. Secondary data collected through examining the documents and archival records of the selected SMEs in Wored as of Wolaita Zone. A questionnaire was used to gather information from 305 respondents concerning their opinions on investment appraisal techniques of SMES in Ethiopia. This research strategy was considered appropriate because it facilitates a comprehensive and detailed view of the major questions raised in the study.

Population and Sampling Techniques

A simple random sampling (SRS) was employed in the selection of the sample for the study. A sampling frame of each of all the members of the service and manufacturing sectors of the SMSEs purposively selected from three Woredas **(**namely Humbo, Areka and Bodit) was developed by assigning a number to each member of the two groups. The reason for selecting the above stated three Woreds purposively is that these wored as has high number of SMEs active and effective in their performance and they can represent the others as much as the result of the study is unanimously applicable to all SMEs operating in Wolaita Zone.

Table3.1. *SMES in the case study area*

S.N	Selected Woredas in the zone	SMEs Sectors					Total
		Manufacturing	Urban Agriculture	Construction	Services	Trade	
2	Areka	*81*	*68*	*88*	*103*	*183*	523
3	Bodit	*15*	*23*	*62*	*122*	*58*	280
5	Humbo	*46*	*82*	*154*	*114*	*79*	475
Total		**142**	**173**	**304**	**339**	**320**	**1,278**

Source: *Wolaita zone trade and industry bureau*

The study selected 305 respondents/informants only from SMEs from Areka, Bodit and Humbo Wored as of Wolaita Zone. The sample size was determined by using the formula of Yemane (1976). A 95% confidence level and e = 0.05 are assumed.

$$n = \frac{N}{1 + N(e)^2}$$

Where: N = Total Population, n = Sample Size and e = Sample error

Thus, the sample size for the respondents was; $(1{,}278) \div [1+1{,}278(0.05)^2] = 305$ (rounded). Therefore the sample size was **305** SMEs.

Table3.2. *Sample proportion allocation for SMEs sectors*

SMSEs Sectors	Target Population				Sample size			
	Areka	Bodit	Humbo	Total	Areka	Bodit	Humbo	Total
Manufacturing	81	15	46	**142**	19	4	11	**34**
Urban agriculture	68	23	82	**173**	16	5	19	**40**
Construction	88	62	154	**304**	21	15	37	**73**
Service sector	103	122	114	**339**	25	29	27	**81**

Trade	183	58	79	**320**	44	14	19	**77**
Total	**523**	**280**	**475**	**1278**	**125**	**67**	**113**	**305**

DATA PRESENTATION AND ANALYSIS

Descriptive Statistics Analysis For Investment Appraisal Techniques Of SMES

For the analysis of the objective, frequencies and percentages were employed as the preferred descriptive statistical techniques. PBP, NPV, IRR, ROCE and PI are used as measures for investment appraisal techniques. The analysis, therefore, opens with the descriptive statistics (frequency & percentage) for the level of agreement on a 5 point Likert scale; where; 1=Strongly disagree (SD), 2=Disagree (D), 3=Undecided (U), 4= Agree (A) and 5= Strongly Agree (SA).

The Payback Period (PBP) Technique

The Payback period (PBP) method tells the duration it is expected to take to recover the principal investment from the net cash flows of an investment asset or project. Although research has revealed that it is the most popular investment appraisal method used by businesses and individuals especially in the small and medium enterprises (SMEs) due to its simplicity.

Table4.1. *Payback period as method for investment appraisal techniques*

Statement on payback period	Measures	SD	D	U	A	SA	Total
The business consider record on the cash generated from sales	Frequency	58	20	16	102	109	305
	%age	19	7	5	33	36	100
The business consider the total cost spent in establishing the project	Frequency	10	62	20	123	90	305
	%age	3	20	7	40	30	100
The business estimate the time it takes to get back the money invested	Frequency	79	131	77	12	6	305
	%age	26	43	25	4	2	100
The business consider the capital employed	Frequency	3	36	12	129	125	305
	%age	1	12	4	42	41	100
The business considers wear and tear	Frequency	25	36	8	85	151	305
	%age	8	12	3	28	50	100

Source: *Survey (2019)*

Table 4.1 shows that 109(36%) of the respondents strongly agreed with the statement that the business considered record on the cash generated from sales, 102(33%) agreed, 58(19%) strongly disagreed, 20(6.5%) disagreed and 16(5%) of the respondents were undecided on the statement. The study findings suggested that most 221(69%) of the SMEs considered record on the cash generated from sales. This implies that SMEs consider record on the cash generated from sales when making an investment decision.

Similarly, 90(30%) of the respondents strongly agreed with the statement that the business considered the total cost spent in establishing the project/business, 123(40%) agreed, 62(20%) disagreed, 20(7%) of the respondents were undecided and 10(3%) of the respondents strongly disagreed with the statement. It emerged from the study that most 213(70%) of the SMEs considered the total cost spent in establishing the project/business when investing. This implies that SMEs consider the total cost spent in establishing the project/business when making an investment decision.

On the other hand, 131(43%) of the respondents disagreed with the statement that the business estimated the time it took to get back the money invested, 79(26%) strongly disagreed, 77(25%) of the respondents were undecided, 6(2%) strongly agreed and 12(4%) of the respondents were in an agreement with the statement. The study findings suggested that majority 210(69%) of the SMEs never considered estimation of the time it took to get back the money invested when making an investment decision. This implies that SMEs fail to estimate the time it took to get back the money invested.

On whether business considered the capital employed, 129(42%) of the respondents agreed on the statement, 125(41%) strongly agreed, 36(12%) strongly disagreed, 12(4%) of the respondents were undecided and 3(1%) of the respondents had a strong disagreement with the statement. The study findings suggested that most 254(83%) of the SMEs considered capital employed when making an investment decision. This implies that SME always consider the capital employed in the business when making an investment decision. Lastly, 151(50%) of the

respondents strongly agreed with the statement that the business considered the wear and tear, 85(28%) agreed, 25(8%) strongly disagreed, 36(12%) disagreed and 8(3%) of the respondents were undecided on the statement.

It emerged from the study that most 136(78%) of the SMEs considered wear and tear when making an investment decision.

This implies that SME always consider the wear and tear when making an investment appraisal decision.

The Net Present Value (NPV) Technique

In most investment appraisals, the estimated costs and benefits are normally spread over a number of years, and each option is likely to have very different cost or benefit profile. In order to compare the options, it is necessary to convert these profiles to a common measure. This is done by 'discounting' the stream of annual costs and benefits to produce a Discounted Cash Flow (DCF). The total of these discounted cash flows over the appraisal period is what is referred to as the Net Present Value (NPV).

Table4.2. *Net present value as method of investment appraisal technique*

Statement on Net Present Value	Measures	SD	D	U	A	SA	Total
The business estimate the cash inflows and outflows	Frequency	51	20	32	104	98	305
	%age	17	7	10	34	32	100
The business consider the discount rates	Frequency	27	46	6	113	113	305
	%age	9	15	2	37	37	100
The business consider summing up all the present values to get the present value of cash stream	Frequency	148	90	59	6	2	305
	%age	48.3	30	19	2	0.7	100
The business consider the time value for money	Frequency	140	121	6	6	32	305
	%age	46	40	2	2	10	100
The business considers wear and tear	Frequency	33	38	6	82	146	305
	%age	11	12	2	27	48	100

Source: *Survey (2019)*

Table 4.2 shows that 104(34%) of the respondents agreed with the statement that the business estimated the cash inflows and outflows, 98(32%) strongly agreed, 51(17%) strongly disagreed, 32(10%) of the respondents were undecided and 20(7%) of the respondents disagreed with the statement. The study findings suggested that most 202(66%) of the SMEs estimated the cash inflows and outflows. This implies that SMEs estimates the cash inflows and outflows when making an investment decision.

Similarly, 113(37%) of the respondents strongly agreed with the statement that the business considered the discount rates, a similar 113(37%) agreed, 46(15%) disagreed, 27(9%) strongly disagreed and 6(2%) of the respondents were undecided on the statement. It emerged from the study that most 226(74%) of the SMEs considered the discount rates. This implies that SMEs consider the discount rates when making an investment decision. On the other hand, 148(48.3%) of the respondents strongly disagreed with the statement that the business considered summing up all the present values to get the present value of cash stream, 90(30%) disagreed, 59(19%) of the respondents were undecided, 6(2%) agreed and 2(0.7%) of the respondents were in a strong agreement with the statement. The study findings suggested that majority 238(78.3%) of the SMEs never considered summing up all the present values to get the present value of cash stream when making an investment decision. This implies that SMEs fail to sum up all the present values to get the present value of cash stream.

On whether business considered the time value for money, 140(46%) of the respondents strongly disagreed on the statement, 121(40%) disagreed, 32(10%) strongly agreed, 6(2%) of the respondents were undecided and 6(2%) of the respondents had an agreement with the statement. The study findings suggested that most 261(86%) of the SMEs never considered time value for money when making an investment decision. This implies that SME fails to consider the time value for money in the business when making an investment decision.

Lastly, 146(48%) of the respondents strongly agreed with the statement that the business considered the wear and tear, 82(27%) agreed, 38(12%) disagreed, 33(11%) strongly disagreed and 6(2%) of the respondents were undecided

on the statement. It emerged from the study that most 228(75%) of the SMEs considered wear and tear when making an investment decision. This implies that SMEs always consider the wear and tear when making an investment decision.

The Internal Rate of Return (IRR) Technique

The IRR is also a DCF technique which objective is to ascertain a rate of return which when used as a discount factor should produce a zero NPV. In simple terms it tries to ascertain a rate of return on an investment which will be equal to the cost of financing that investment. This method therefore equips the investor to effectively bargain for a favorable cost of capital not exceeding the IRR range. Therefore, the IRR is the rate within which a borrower of funds is prepared to accept as cost of capital and the lender also satisfied to accept as an expected rate of returns on the funds lent. This therefore means that if the project IRR calculated is less than the cost of capital of the investment, the project will not be able to generate enough net cash flow to pay off the debt with its' cost and therefore is not profitable and should be rejected or an alternative financing with lower cost or equal to the IRR should be looked for. On the other hand, if the IRR calculated is greater than the cost of capital, it indicates that the project will generate excess net cash flow to pay off the amount invested with its cost and therefore as a rule, such project should be pursued with that financing source.

Table4.3. *Internal rate of return as method of investment appraisal technique*

Statement on Internal Rate of Return	Measures	SD	D	U	A	SA	Total
The business consider keeping records on yearly projected returns	Frequency	51	20	31	106	97	305
	%age	17	7	10	35	31	100
The business consider the cash flows	Frequency	27	46	15	111	106	305
	%age	9	15	5	36	35	100
The business assume the NPV to be equal to zero	Frequency	128	88	80	6	3	305
	%age	42	29	26	2	1	100
The business consider rate of return from the business	Frequency	136	119	12	5	33	305
	%age	45	39	4	1.7	10.3	100
The business contemplate wear and tear	Frequency	37	36	9	88	135	305
	%age	12.2	11.8	3	29	44	100

Source: *Survey (2019)*

Table 4.3 shows that 106(35%) of the respondents agreed with the statement that the business considered keeping records on yearly projected returns, 97(31%) strongly agreed, 51(17%) strongly disagreed, 31(10%) of the respondents were undecided and 20(7%) of the respondents disagreed with the statement. The study findings suggested that most 203(66%) of the SMEs considered keeping records on yearly projected returns. This implies that SMEs consider keeping records on yearly projected returns when making an investment decision.

Similarly, 111(36%) of the respondents agreed with the statement that the business considered the cash flows, 106(35%) strongly agreed, 46(15%) disagreed, 27(9%) strongly disagreed and 15(5%) of the respondents were undecided on the statement. It emerged from the study that most 217(71%) of the SMEs considered the cash flows. This implies that SMEs consider the cash flows when making an investment decision.

On the other hand, 128(42%) of the respondents strongly disagreed with the statement that the business assumed the NPV to be equal to zero, 88(29%) disagreed, 80(26%) of the respondents were undecided, 6(2%) agreed and 3(1%) of the respondents were in a strong agreement with the statement. The study findings suggested that majority 216(71%) of the SMEs never assumed the NPV to be equal to zero when making an investment decision. This implies that SMEs fail to assume the NPV to be equal to zero when making an investment decision.

On whether business considered the rate of return from the business, 136(45%) of the respondents strongly disagreed on the statement, 119(39%) disagreed, 33(10.3%) strongly agreed, 12(4%) of the respondents were undecided and 5(1.7%) of the respondents had an agreement with the statement. The study findings suggested that most 255(84%) of the SMEs never considered the rate of return from the business when making an investment decision. This implies that SMEs fails to consider the rate of return from the business when making an investment decision.

Lastly, 135(44%) of the respondents strongly agreed with the statement that the business considered the wear and tear, 88(29%) agreed, 37(12.2%) strongly disagreed, 36(11.8%) disagreed and 9(3%) of the respondents were undecided on the statement. It emerged from the study that most 223(73%) of the SMEs considered wear and tear when making an investment decision. This implies that, SME always consider the wear and tear when making an investment decision.

CONCLUSION AND RECOMMENDATION

Conclusion

There is a consensus that if all stakeholders are to show serious commitment to the development of the SMEs sub-sector, it follows that the economy must necessarily witness meaningful transformation and prosperity. A dynamic SME sub-sector is vital and imperative for the overall economic development of the country. Aside from providing opportunities for employment generation, SMEs help to provide effective means of curtailing rural-urban migration and resource utilization. By largely producing intermediate products for use in large–scale companies, SMEs contribute to the strengthening of industrial inter-linkages and integration. A vibrant, efficient and effective SME sub-sector generates many resultant benefits for stakeholders, employees, customers, employers as well as the entire economy's benefits.

The findings of this research work to the research problem were that SMEs operators had significant knowledge in the investment appraisal techniques. The SMEs operators also applied the investment appraisal techniques to appraise their investments. The research findings therefore depicted that the SME sector operators had the necessary basic foundation to be regulated to enable them adheres to best operational practices in investment.

The study concluded that, SMEs do consider cash generated from sales, total cost spent in establishing the project/business, estimation of the time it took to get back the money invested and capital employed when making an investment decisions. Moreover, the study concluded that, SMEs do consider discount rates, wear and tear when investing; however, they fail to consider summing up all the present values to get the present value of cash stream and time value for money when making an investment decision.

Lastly, the study concluded that, SMEs do consider some components of Internal Rate of Return such records on yearly projected returns and wear and tear, however, they fail to consider rate of return from the business and the NPV to be equal to zero when making an investment decision.

Recommendation

The findings of the study suggested that due to the importance of investment to the economy of the country and SMEs themselves; SMEs operators need to continuously analyze the investment decisions that make them improve their financial performance. In view of the research findings, the research recommended the following for policy direction and the academia;

- The government and other stakeholders to focus more on the issue of investment decisions for SMEs. In particular, they should train SMEs on the investment evaluation techniques, their advantages and disadvantages. Knowing these factors of influence will enable SMEs to make better investment decisions by selecting the right investment evaluation technique.
- More efforts are needed from the regulatory agencies and government in general toward helping SMEs grow and make decisions as their growth will be good for the wider economy.
- Financial institutions, such as banks and lending institutions should also require evidence of investment appraisal by SMEs operators before any decision to give credit or financial assistance is taken. This will help whip up the interest of SME operators to appraise their investment with the IATs or to seek for professional services. The enforcement of the application of the IATs by SME operators will minimize the sector's investment failures thereby reducing credit defaults of the SMEs operators to the banks or financial institutions.

REFERENCES

[1] Agyei-Mensah, B. K. (2011), financial management practices of small firms in Ghana: An Empirical Study. African Journal of Business Management, 5(10), 3781-3793.

[2] Brealey, R., & Myers, S. (2010). Principles of Corporate Finance. McGraw Hill. Brigham, F.,

Gapenski, L. & Ehrhardt, M. (1999), Financial Management: Theory and Practice, 9th ed., Harcourt Brace College, San Diego, CA.

[3] Chapman, C., & Hopwood, A. (2007). Handbook of Management Accounting Research. Oxford: Elsevier Ltd.

[4] Ciccolo, J., Fromm, G., & Marshall, A. (1979). "q" and the Theory of Investment. Journal of Finance, 34(2), 35-547.

[5] Clark, J. (1979). Investment in the 1970s: Theory, Performance, and Prediction. Brookings Papers on Economic Activity, 1, 73-113.

[6] Danielson, M., & Scott, j. (2006). The capital budgeting decisions of small business. Journal of Applied Finance, 45-56.

[7] Eklund, J. (2013). Theories of investment: A theoretical review with empirical applications. Working paper. Swedish Entrepreneurship Forum.

[8] Gilbert, E. (2005). Capital Budgeting: A case study analysis of the role of formal evaluation techniques in the decision making process; Graduate School of Business, University of Cape Town, 19, 19-36.

[9] Graham, J. R., & Harvey C. R. (2001). The Theory and Practice of Corporate Finance: Evidence from the Field, Journal of Financial Economics, 60, 187–243.

[10] Grinstein, Y., & Tolkowsky, E. (2004). The Role of the Board of Directors in the Capital Budgeting Process - Evidence from S&P 500 Firms.

[11] Grunfeld, Y. (1960). The determinants of corporate investment. In The Demand for Durable Goods. Chicago: University of Chicago Press.

[12] Guerrero, R. (2007). The case for real options made simple. The Journal of Applied Corporate Finance, Spring 2007.

[13] Haka, G., Gordon, M. & Pinches, D. (1985). The Accounting Review, 60, 651- 669.

[14] Imegi, John, C., Nwokoye, G. A. (2015). The effectiveness of capital budgeting techniques in evaluating projects' profitability. African Research Review. Vol. 9(2), No. 37, 1994-9057.

[15] Jorgenson, D.(1963). Capital Theory and Investment Behavior, American Economic Review, 53.

[16] Klammer, T. (1973). The Association of Capital Budgeting Techniques with firm performance: The Accounting Review, 48, 2, 353-364.

[17] Mamo, A. (2014). The use and usefulness of investment appraisal techniques in non-financial services: Maltese listed companies. University of Malta, Msida MSD 2080, Malta.

[18] Mooi, S. & Mustapha, M. (2001). Firm Performance and Degree of Sophistication of Capital Budgeting Practice: Some Malaysian Evidence; Proceedings of the Asia Pacific Management Conference, pp.279-290

[19] Nancy B. et al (2014). Informal economy and the World Bank. Policy Research Working Paper 6888.

[20] Pandey, I. M. (2010). Financial management. New Delhi: Vikas Publishing House PVT Ltd.

[21] Peterson, P.P. and Fabozzi, F.J. (2002), Capital budgeting: Theory and practice. New York, Wiley & Sons.

[22] Pradeep, B., & Quesada, L. (2008). The Use of Capital Budgeting Techniques in Businesses: A Perspective from the Western Cape. 21st Australasian Finance and Banking Conference.

[23] Samuel, C. (1996). "The Investment Decision: A re-examination of competing theories using panel data". The World Bank Policy Research Working Paper, 1656, Washington DC.

[24] Tariku Kolcha Balango (2017), issues, challenges and prospects of small and medium scale enterprises in Ethiopia: a case study on Humbo Woreda of Wolaita Zone in Southern Ethiopia, Pezzottaite journals, Volume 6, Number 2, April – June p.69.

[25] Titman, S., John W. C., and Xie, F. K. (2010). Access to equity markets, corporate investments and stock returns: international evidence. SSRN Electronic Journal. 10.2139/ssrn.1571648.

[26] Tobin, J. (1969). A General Equilibrium Approach To Monetary Theory. Journal of Money, Credit and Banking, 1(1), 15-29.

Citation: *Tesfaye Jifar "Investment Appraisal Techniques of Small and Medium Scale Enterprises in Ethiopia (A Case Study in Selected Wored as of Wolaita Zone)" International Journal of Research in Business and Management, 7(4), 2020, pp. 14-24.*