COLLEGE OF BUSINESS AND ECONOMICS

DEPARTMNET OF ACCOUNTING AND FINANCE

MASTERS THESIS ON

INVESTMENT APPRAISAL TECHNIQUES OF SMALL AND MEDIUM SIZED ENTERPRISES (SMES) IN ETHIOPIA (IN CASE OF SELECTED SMES OF ADDIS ABABA CITY ADMINISTRATION)

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JUNE, 2021

ADDIS ABABA

COLLEGE OF BUSINESS AND ECONOMICS

DEPARTMNET OF ACCOUNTING AND FINANCE

APPROVAL BY EXAMINERS

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DECLARATION

As thesis advisor, I hereby certify that I have read and evaluated this thesis prepared under my guidance by Tesfaye Guye entitled: INVESTMENT APPRAISAL TECHNIQUES OF SMALL AND MEDIUM SIZED ENTERPRISES (SMEs) IN ETHIOPIA (A CASE STUDY IN SELECTED SUB CITIES OF ADDIS ABABA CITY ADMINISTRATION). I recommend that it can be submitted as fulfilling the thesis requirement.

_____ _____ _____

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ACKNOWLEDGEMENT

First of all, I would like to thank my almighty GOD, without whom nothing is possible. I would like to extend my heartfelt appreciation and deepest gratitude to my advisor, Abebaw Kassie (PhD) for his expert guidance, helpful criticism, valuable suggestions and encouragement at every stage of this work. I am deeply appreciative of the dedication, encouragement and time that he has significantly contributed to the completion of this thesis proposal. My gratitude is also extends to Addis Ababa city administration small and medium size enterprise development offices for cooperation on population and sample accessing. Finally, my heartfelt thanks go to my family, for their unconditional love and support. I am deeply grateful to my parents who have been motivating and praying for my success. Thank you all!

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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. The sector has attracted many researches works due to its' potential in contributing to global economic development if the challenges to the sector growth are identified and addressed. However these enterprises face investment appraisal problem. Poor investment decisions have been blamed for high rate of letdown and closure. Thus, the purpose of the study was to investigate investment appraisal techniques of small and medium scale enterprises in Ethiopia in case of selected SMES in Addis Ababa. 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 435 SMEs selected *in Kirkos and Yeka sub cities of Addis Ababa city administration.* The sample size was 209 SMEs. The researcher adopted purposive sampling to select sample frame from two *sub cities* (namely *Kirkos and Yeka*) and used convenience sampling technique to select respondents from *Kirkos and Yeka sub cities of Addis Ababa city administration* and collected data using questionnaires. Quantitative data was analyzed using descriptive statistics and presented in tables. *The findings of the study show that SMEs in the case area do not consider investment appraisal techniques measure properly because of lack of knowledge.* 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

Key Words: *Investment Appraisal Techniques, Pay Back Period, Net Present Value, Internal Rate of Return, Return on Capital Employed, and Profitability*

CHAPTER ONE
INTRODUCTION

1.1. Background of the study

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). Small and Medium Enterprises (SMEs) have played and continue to play significant roles in the growth, development and industrialization of developing countries. Accordingly, most developing countries have formulated and implemented a wide variety of SME development strategies in order to support the growth of the sector, thereby transforming economies and generating substantial employment opportunities.

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 adherence to best practices and theories in the business environment (Agyei-Mensah, 2011). 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. The possibility of an investment not attaining its objective(s) has therefore facilitated the development of strategies by authorities in the field of finance and economics geared towards eliminating or minimizing the effect of these risks on investments. According to Memo (2014), among these measures to combating/fighting risks on investment is the application of investment appraisal techniques in predicting the survival and profitability of an investment asset before resources are committed. In support of Memo (2014), Imegi 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, these researches 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. (2015), there is the need for authorities to regularly review the existing models to make them relevant to contemporary investment situations. Payday (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.

Despite their importance in the economy of the country, SMEs face problems such as finance and knowledge on the decision to invest which inhibit their growth and success (Katabi and Dimoso, 2016). Also, it might be possible that if owners do not know how to make investment decisions and the link thereof between the financial goals and investment decisions, even if they are given sufficient capital, businesses may continue having problems (Maziku, 2012). Despite the statistics on the importance of SMEs in Ethiopia, inappropriate Investment Appraisal Techniques are related to their financial performance. These initiated the researcher to conduct a study on the investment appraisal techniques of small and medium scale enterprises in Ethiopia in case of selected SMES in Addis Ababa.

1.2. Statement of the Problem

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 researches 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 like Olawale et al, (2010), Yao et al (2006), Gilbert (2005), Mooi and Mustapha (2001), Wambua and Koori (2018), Gokhan Sun– Gun (2015), whereas others research results debunked the assertion, for example a study conducted by Morris G. Daniel son and Jonathan A. Scott (2006) suggests that SMEs operators do not apply investment appraisal techniques in their investment appraisals because of education background of some business owners and small staff, liquidity concerns and cash flow estimation challenges. This mixed finding on the application of the investment appraisal techniques by SME

operators to assess investment profitability and success had provoked the interest for this research work to assess the application of the investment appraisal techniques among SME operators in Addis Ababa to 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.

However, there is no previous research in literature on the application of investment appraisal techniques by SMEs operators in Ethiopia in case of selected SMEs in Addis Ababa. This inspired the need to design the current research to fill in the existing gap by assessing Investment Appraisal Techniques among SMEs operators in Ethiopia in case of selected SMEs in Addis Ababa.

1.3. Objectives of the study

1.3.1. General objective

The general objective of the study was to investigate the investment appraisal techniques of small and medium enterprises in Ethiopia in case of selected SMEs in Addis Ababa.

1.3.2. Specific objectives. The following were the objectives of the study;

i. To assess the knowledge level of the SMEs operators in Addis Ababa in the various basic Investment appraisal techniques.
ii. To determine whether SMEs operators in Addis Ababa apply investment appraisal techniques in their investment decisions.
iii. To determine the factors that influences the choice of investment appraisal techniques by SMEs operators in Addis Ababa.
iv. To investigate the effect of investment appraisal techniques on the profitability of SMEs operating in Addis Ababa.

1.4. Significance of the study

The findings of this research work will provide useful information to stakeholders in the field of finance on the knowledge level and the application of the various investment appraisal techniques in the SME sector. Stakeholders such as the financial institutions, government and nongovernmental organizations will also be guided by the findings to fashion out financial policies to enable SMEs operators to adhere to best operational practices. Financial institutions particularly can leverage on the results to insist on SMEs to use investment appraisal techniques to appraise investments before loans are approved for them. Government can control SMEs operation based on the findings of this study, in order to keep them from early death.

Academicians can also rely on the results from this research to develop investment appraisal models to suit the understanding and needs of the SME operators to improve upon best investment practices in the SME sector. The findings from the study will contribute greatly to filling the research gap in the literature on SME operators' knowledge and application of the investment appraisal techniques and the factors that influence the choice of the investment appraisal techniques by the SME operators in Ethiopia.

1.5. Scope of the Study

The scope of this study was limited to the investigation of the investment appraisal techniques of small and medium scale enterprises in Ethiopia in case of selected SMEs in Addis Ababa. Pay Back Period (PBP), Net Present Value (NPV), Internal Rate of Return (IRR), Profitability Index (PI), and Return on Capital Employed (ROCE) was used as measures for investment appraisal techniques. The study focused on the five SMEs sectors (namely, Manufacturing sector, construction sector, urban agriculture, trade sector and service sector).

1.6. Limitations of the study

Some respondents were hesitant to give information. It took much time to convince such hesitant respondents and to get their consent. Some others didn't fill some of the items in the questionnaire. These were the major limitations encountered during the thesis work. Their potential to affect the research finding was minimized while data cleaning, and statistically recommended adjustments were made before interpretation was carried out.

1.7. Organization of the Study

This research report was organized in to five chapters that are chapter one is made from: the background of the study, problem statement, objectives of the study, a research hypothesis, scope and significance of the study. In chapter two various theories and empirical studies are overviewed and the studies are summarized. Third chapter is the methodology part and includes the research design, nature of data used, and sampling design. Under chapter four the result the study was presented and analyzed. Finally, in chapter five findings were summarized, conclusion made based on the findings and recommendations was given.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2. 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.

2.1. Definition of Small and Medium Enterprise (SMEs)

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.

S.N.	Enterprise level	Sector	Hired labor	Capital
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 two (2) sub cities of Addis Ababa City Administration.

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 two (2) sub cities of Addis Ababa City Administration. 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 tell 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

2.1.1. Investment appraisal techniques

The Pay Back Period 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, it has been tested over the years and found to be suffering from serious shortcomings (Adeniyi et al, 2012). Due to the weaknesses of the PBP method, Watson and Head (2007) stated that it should not be regarded as one of the investment appraisal techniques for decision making but should rather be used to screen and rank investment for further appraisal to be conducted. Thus, the method provides quick insight in how fast an initial investment can be recouped to avert risk. Most managers see risk as time-related and therefore the longer the recoupment period, the greater the chance of failure (risk).

Notwithstanding its wide application, as disclosed by Adeniyi et al. (2012), the method ignores the time value of money and thereby giving equal weight to cash flows irrespective of the time period they occur. It also ignores all cash flows after the payback period, hence cannot be used to evaluate mutually exclusive projects since it does not give comprehensive evaluation of projects. Profitable projects with a long-term cash inflow are mostly sacrificed for projects with immediate cash inflows which may not be as profitable as the long-term project.

Although the discounted payback period method which is an advanced approach to the application of the PBP method factors in time value of money, it does not consider risk factors such as inflation,

Interest rates, exchange rates among others which could influence the future viability and profitability of investments.

The decision rule applied in the PBP technique is to accept investment asset/project if its' payback period is equal to or less than the predetermined investment period. Therefore, even if an investment is profitable but has long term cash inflows after the investment period are normally rejected with the application of this method. The PBP Technique formula depends on the nature of the project cash inflow, (Long more 1989).

The Return on Capital Employed (ROCE) Technique

The ROCE investment appraisal technique is also referred to as Return on Investment (ROI) or Account Rate of Return (ARR). This investment appraisal technique aims at estimating a favorable return on investment that a project should produce. The return of a project is deemed favorable if the computed value of return on the investment (ROI) exceeds the target rate of return of the business. If there are multiple projects appraised, the project with the higher ROCE/ROI/ARR above the targeted rate of return should be considered first and the others then followed in order of acceptance if capital is available. The ROCE is calculated as the estimated annual or the average net profit of the project life span divided by the capital employed or net investment. Apart from the ROCE simplicity in calculation, as a Discounted Cash Flow (DCF) technique, it considers cash flows in the entire life span of a project.

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) as discussed above. The total of these discounted cash flows over the appraisal period is what is referred to as the Net Present Value (NPV).

The net present value (NPV) is a discounted cash flow technique which measures in absolute figures the discounted cash flows of a project life span by taking into consideration the time value of money. Thus, the NPV discounts both cash outflows and inflows of a project using an obtained rate of return or cost of capital to predetermine the viability or profitability of a project. The discounted cash outflows (i.e. present value of cash outflows) are subtracted from the discounted cash inflows (i.e. present value of cash inflows) to obtain the NPV of the project. The NPV figure ascertained

indicates the returns of the investment in absolute figures. The NPV ascertained could be a positive or negative value. As a rule, in the use of the NPV method for investment decision making is a positive NPV indicates that the project is viable and profitable to be undertaken whereas a negative NPV value reveals unprofitability of the project and therefore it should be rejected. If the NPV result is zero, it means that the discounted cash inflow is equal to the discounted cash outflow and therefore the project will yield a return exactly to the cost of capital, hence is worth undertaking since all operational cost can be covered by the cash inflows of the project. Although in such situation it is assumed that the project will not make any profit, it is still a prudent investment decision to undertake such projects if it has the potential of making profit in the subsequent years if management experiences are put into play. Thus, management many be able to turn that project into a profitable one in the subsequent years as a result of the previous work experiences, they might have acquired in the implementation of the project. Unforeseen favorable economic indicators such as drastic reduction in debt financing interest, fall in inflation, favorable investment policies by government and among others can also overturn an investment assessed unprofitable today to be profitable tomorrow.

As revealed by Kadondi (2002), the NPV is one of the advance investment appraisal techniques since it has the objective of wealth maximization, and takes into account time value of money and all cash flows of a project life span. For this reason, Modigliani and Miller (1958) argued that firms should treat financing and dividend decision in investment as irrelevant and rather focus on the result of NPV technique for investment decisions since it has an advance analytical framework which provides a rational basis for collective investment decision making.

Nevertheless, the NPV technique ignores the impact of risk on project evaluation. It also does not give the actual rate of return of a project but gives an absolute value which can mislead decision making.

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.

The Profitability Index (PI) Technique

This investment appraisal method is also a discounted cash flow technique used to ascertain a ratio of the sum of the present values (PVs) of cash inflows of a project to its' initial investment which is then compared with a bench mark ratio of 1to determine the viability or profitability of a project. The investment decision rule in the application of this technique is that, if PI calculated is greater than 1, it means the project is profitable and should be accepted. If the projects are many, capital rationing should be applied to rank them in order with the project with the highest PI prioritized. Where the project(s) PI is or are less than 1, they should be rejected for unprofitability. On the other hand, if PI is or are greater than 1, it means the project will yield higher returns and should be accepted. Project(s) with PI equal to 1 should be accepted since it will yield a return equal to the cedi invested.

The PI technique has a similar calculation of the ROCE and a similar interpretation of the IRR and NPV and therefore in most cases resulting in the same investment decision. As revealed by Lamido (2002), the PI technique does not reveal the profitability of a project in absolute figures as in the case of NPV and therefore could mislead investment decision. The PI technique is also suitable for investment decision making if the project has a cash outflow at time zero and cash inflows in the subsequent periods. This means that projects with higher cash inflows in the long run are likely to be ranked low in investment decision making.

2.2. 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 (2009) 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.

Wambua and Koori (2018) studied the effects of investment appraisal techniques and financial performance among small and medium enterprises in Nairobi County, Kenya using variables Accounting Rate of Return, Payback Period, Net Present Value and Internal Rate of Return on financial performance. The study adopted cash flow theory of investment, Theory of Investment Decisions, Agency Theory and Q Theory of Investment. It adopted a descriptive survey research design with a target population of 71,195 licensed Medium Enterprises with Nairobi County. The sample size was 384 Small and Medium Enterprises. The researcher adopted cluster random sampling technique and collected data using questionnaires. The study revealed that Accounting Rate of Return, Payback Period, Net Present Value, and Internal Rate of Return significantly affect financial performance among SMEs in Nairobi County, Kenya. Besides, these results imply that payback period is most important predictor for financial performance.

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, 2002).

Gokhan Sungun (2015) investigated how investment decisions are being made in SMEs in Turkey and a survey was conducted among 65 SMEs located in Istanbul from production, construction and service industries. The findings show that despite awareness on theoretically superior generally accepted evaluation measures, they are not used by the vast majority of the decision makers in the analysis of capital investments in SMEs in Turkey.

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 this 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.

Gilbert (2005) carried out a study to determine the application of capital budgeting methods and their association with firm performance among South African manufacturing firms. The results of the study indicated that, 15% of the firms employed the payback method, 8% used purely the discounting methods while the rest employed a mixture of both non-discounting and discounting methods. It was also concluded that though many of the managers were aware of the benefits of using the discounting methods, their responses involved the use of shortcuts, and approximations. The study concluded that, while discounted cash flow methods can, and do, play an important role in capital investment decision making, the costs and sometimes impossibility of completing them,

properly means that their use is always going to be limited. Thus, the conclusion of the study was that capital budgeting techniques had no significant impact on the financial performance of the manufacturing firms.

Yao et al, (2006) conducted a study to compare the use of capital budgeting techniques and their impact on performance in Netherlands and China. They compared 250 Dutch and 300 Chinese firms. Out of all the firms, 87 firms responded, 42 from Dutch and 45 from Chinese companies, resulting in a response rate of 17% for the Dutch and 15% for the Chinese sample. The results indicated that 49% chief financial officers (CFOs) in Chinese firms use the NPV method as opposed to 9 % who use the traditional investment decision methods. In Dutch, the study found that 89% of the firms use NPV investment decision method while traditional investment decision methods took the rest of the respondents. Their study used return on assets to measure performance which was used in a regression model as a dependent variable and measured against the various investment decision techniques. The results indicated that in both countries, sophisticated capital budgeting techniques mostly NPV and IRR had a positive relationship with return on assets (ROA) while the traditional methods showed an insignificant relationship.

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.

2.3. Summary of Literature Review

Investment can be described as any business activity or decision which involves the commitment of resources with the goal of maximizing the value of the resources committed within a specified period. Investment activities involve strategic decisions and capital spending plan. Investment appraisal techniques had been found to be one of the most important capital budgeting techniques that were likely to influence financial performance among SMEs (Olawale et al. 2010). Amuzu

(2010) adopted Accounting rate of return, Payback period, internal rate of return and Net present value as the investment appraisal technique that influence financial performance.

Investment appraisal is one of the processes or best practices in investment which has been noted to be very essential in predicting the viability of investment assets. This stage of investment process aims at mitigating any associated risk to an investment asset. According to Pandey (2010), investment appraisal is an important process for investment success since viability and profitability center on the accuracy of predicting the investment future behavior. Therefore, the ability to give accurate prediction of the future behavior of an investment asset is what Investment Appraisal Techniques (IATs) seek to achieve. IATs are statistical investment appraisal models developed to give quantitative assessment of investment assets future viability and profitability. They range from basic to sophisticate depending of the volatility of the investment asset. These IATs range from basic to more sophisticated models and applicable depending on the asset volatility. They are Net Present Value (NPV), Accounting Rate of Return (ARR) or Return on Capital Employed (ROCE), Internal rate of return (IRR), Profitability index (PI), Payback period (PBP), and among others.

However, the establishment of statistical data to feed into the various statistical models to appraise an investment asset is always a challenge in practice since it is very difficult to accurately estimate the cash flows and the risks of an investment asset (Saghi-Zedek, 2016). Nevertheless, with experience and the use of primary or secondary data, one can estimate these elements for the appraisal models. Another way to identify cash flows of an investment to aid the appraisal process is by considering all relevant avoidable or incremental costs and benefits of the project. Avoidable cost and benefits are those which can be influenced by the project.

Studies also exhibit the fact that investment appraisal techniques have been embraced widely by many companies operating in the country. The investment appraisal techniques of small and medium sized enterprises across Ethiopia in general and Addis Ababa city administration in particular have not been explored. This, therefore, the intension of this study is investigating the investment appraisal techniques of small and medium enterprises in Addis Ababa city administration by using Pay Back Period (PBP), Net Present Value (NPV), Internal Rate of Return (IRR), Return on Capital Employed (ROCE) and Profitability Index (PI) as measures for investment appraisal techniques. The research gap in the literature on SME operators' do not have knowledge and application of the investment appraisal techniques and the factors that influence the choice of the investment appraisal techniques by the SME operators in Ethiopia in case of selected SMEs in Addis Ababa

CHAPTER THREE

METHODOLOGY OF THE STUDY

3.1. 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).

3.2. Research Approach

According to Creswell (2009), there are three basic research approaches; these are quantitative, qualitative and mixed research approaches. The quantitative research approach relies on the measurement and analysis of statistical data to produce quantifiable conclusions. Quantitative research is a means for testing objective theories by examining the relationship among variables (Creswell, 2009). Therefore, this study adopted quantitative research approach which is numerical to meet the research objective.

3.3. Sources of data, types and collection method

The data used for this study was both primary and secondary types of data and collected from both primary and secondary data sources. This study used both quantitative and qualitative data. Secondary data was collected through examining the documents and archival records of the selected SMEs in sub cities of Addis Ababa city administration. A questionnaire was used to gather information from respondents concerning their opinions on investment appraisal techniques. This research strategy was considered appropriate because it facilitates a comprehensive and detailed view of the major questions raised in the study.

3.4. Target population

The target population for this study includes small and medium sized enterprises located in Addis Ababa city administration from selected sectors of SMEs. A sampling frame of each of the selected members of the SMEs sectors: manufacturing sector, urban agriculture, construction sector, trade sector, and service sector was used for sample selection. The two sub cities (namely Kirkos and Yeka sub cities) were selected for sample determination. Why I choose only two sub cities because of Availability Data on Time and budget for Ccovering Study's Eexpense.

Table 3.1: SMEs in the case study area

Sub cities in Addis Ababa	SMEs Sectors															Total
	Manufacturing			Urban Agriculture			Construction			Services			Trade			
	S	M	Total	S	M	Total	S	M	Total	S	M	Total	S	M	Total	
Kirkos	60	14	74	6	0	6	72	10	82	5	0	5	7	0	7	174
Yeka	70	34	104	11	3	14	120	12	132	3	0	3	7	1	8	261
Total	130	48	178	17	3	20	192	22	214	8	0	8	14	1	15	435

Source: *Addis Ababa city administration enterprise development bureau, 2020 G.C*

3.5. Sample size and Sampling techniques

A convenience sampling was employed in the selection of the sample from each SME for the study from Kirkos and Yeka sub cities of Addis Ababa city administration. The sample size was determined by using the formula of Yamane (1976). A 95% confidence level and e = 0.05 are assumed.

$$n = \frac{N}{1+N(e)^2} \rightarrow n = \frac{435}{1+435\,(0.05)^2} = 208.38 \approx 209$$

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

And a sample of 209 respondents was selected from Kirkos and Yeka sub cities of Addis Ababa city administration using convenience sampling technique, and its proportionate share from each SMEs sector from each sub city is presented in the table below;

Table 3.2: Sample size of SMEs in the case study area

Sub cities in Addis Ababa	SMEs Sectors															Total
	Manufacturing			Urban Agriculture			Construction			Services			Trade			
	S	M	Total	S	M	Total	S	M	Total	S	M	Total	S	M	Total	
Kirkos	29	7	36	3	0	3	35	5	40	2	0	2	3	0	3	84
Yeka	34	16	50	5	2	7	57	6	63	1	1	2	3	0	3	125
Total	63	23	86	8	2	10	92	11	103	3	1	4	6	0	6	209

3.6. Reliability and Validity and Test

3.6.1. Reliability Test

Reliability test of the questionnaire was measured by using a pilot test carried out by the researcher before actual data analysis. Reliability refers to random error in measurement. To measure the consistency of the questionnaire particularly the essential in reflecting the overall reliability of variables that it is measuring.

3.6.2. Validity Test

The validity of the questionnaire was determined through face and content. First, the questions were framed in such a manner that it was easily understood and exactly conveyed its sense and purpose to the respondents. Moreover, the draft questionnaire was given to colleagues to view it in the light of the research objectives, its relevance, the adequacy of the questionnaire items, and question coverage.

3.7 Ethical Consideration

According to Leedey and Ormond, (2013), in doing any research, there is an ethical responsibility to do the work honestly and with integrity. The basic principle of ethical research is to preserve and protect the human dignity and rights of all subjects involved in a research. The researcher kept privacy, anonymity (protecting the identity of specific individuals from being known) and confidentiality or keeps the information confidential (Saunders et.al, 2007). Before the data is collected, the ethical issues were taken in to consideration. Appropriate communication was made with the SMEs operators of the sub-city administration. During data collection respondents were informed about the objective of the research and the researcher was assured that the respondent's information was confidential. The respondents also informed verbally as well as in writing that any information obtained through questionnaire were purely used for academic purpose and were handled with the highest order of confidentiality. Accordingly, the questionnaire was distributed to voluntary participants. Hence the study was not raising any ethical anxiety.

CHAPTER FOUR
DATA ANALYSIS, RESULTS AND INTERPRETATION

This chapter presents the results of the various factors that determine the investment appraisal techniques of small and medium sized enterprises in case of Kirkos and Yeka sub cities of Addis Ababa city administration.

4.1 Response Rate and Respondents' Profile

On the basis of the arrangement made on the questionnaire, respondents views were organized into one sections, the first section gives brief information on the response rate followed by general respondents' profile. This means the section focuses on the demographic characteristics of respondents.

A. Response Rate of Respondents

According to Lea ray (2004), the response rate is defined as the extent to which the final set of questionnaires collected from respondents is calculated against the number of questionnaires received back from respondents in the study. For the current study, the sample size was 209 respondents, and a total of 148 questionnaires were collected. Therefore, 148 sets of collected questionnaires were used for the data analysis. Thereby, the response rate was 70.81%, which enough to draw conclusions. According to Mugenda and Mugenda (1999) response rate of 70% and above is adequate. Thus a response rate of 70.81% was acceptable for data analysis.

B. Demographic Characteristics of Respondents

In order to understand the profile of study participants, respondents were requested to fill questions related to their characteristics such as years of service, and education level. The result of the study indicated the following picture about the participants of the study.

Work Experience of Respondents: In terms of experience, (68.24%) 1-5 year, (23.65%) 6-10 year & (8.11%) above 10 years. The findings indicated that majority had an experience of about 1-5 years at (68.24%) closely followed by respondents with an experience of 6-10 years in the same organization while the least percentage was (8.11%) above 10 years.

Education Level of Respondents: The level of educational (18.9%) University level, (27.03%) College level, (33.11%) Secondary level, (17.56%) Primary school level and (3.38%) None of the respondents. This implies that majority of the respondents had at least a College level and could give relevant information on the subject matter

4.2 DESCRIPTIVE STATISTICS

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=Neutral (N), 4= Agree (A) and 5= Strongly Agree (SA).

4.2.1. Net Present Value (NPV) as investment appraisal techniques

This is the present value of cash flows discounted at the cost of capital, less the investment outlay. An understanding of various project evaluation techniques provides the investor with valuable tools for determining which projects, if any, should be accepted or rejected. The net present value is a popular technique for investment decision because it is a financial measure that ascertains the time value of money invested in a business (Olawale et al., 2010).

Table 4.1: Net present value as method of investment appraisal technique

Statement on Net Present Value	Measures	Level of Agreement					Total	Mean	STD
		SD	D	N	A	SA			
The SME estimate the cash inflows and outflows	Frequency	27	26	22	58	15	148	3.054	0.11193
	%age	18.24%	17.60%	14.90%	39.20%	10.12%	100%		
The SME considers the discount rates	Frequency	26	24	28	45	25	148	3.128	0.05899
	%age	17.60%	16.20%	18.90%	30.40%	16.90%	100%		
The SME considers summing up all the present values to get the present value of cash stream	Frequency	33	35	30	32	18	148	2.777	0.04521
	%age	22.30%	23.60%	20.30%	21.60%	12.20%	100%		
The SME considers the time value for money	Frequency	29	45	26	31	17	148	2.743	0.0684
	%age	19.60%	30.40%	17.60%	20.90%	11.50%	100%		
The SME considers wear and tear	Frequency	31	57	30	24	6	148	2.439	0.12372
	%age	20.95%	38.51%	20.27%	16.22%	4.05%	100%		

Source: Primary data, 2021

The above table 4.1 shows that 27(18.24%) of the respondents strongly disagreed with the statement that their SMEs estimate the cash inflows and outflows, 26(17.60%) disagreed,

15(10.12%) strongly agreed, 22(14.90%) of the respondents were neutral and 58(39.20%) of the respondents agreed with the statement. The study findings imply that less than half 73(49.32%) of the SMEs estimate the cash inflows and outflows. These are indicated by the mean (≈3.05) and standard deviation (≈0.1). This suggests that major of the SMEs does not consider estimating the cash inflows and outflows when making an investment decision.

On the other hand, 25(16.90%) of the respondents strongly agreed with the statement that their SMEs considers the discount rates when making investment decision, a similar 45(30.40%) agreed, 24(16.20%) disagreed, 26(17.60%) strongly disagreed and 28(18.90%) of the respondents were neutral regarding the statement. It can be seen from the study still less than half 70(47.30%) of the SMEs considered the discount rates. These are indicated by the mean (≈3.13) and standard deviation (≈0.06). This implies that the selected SMEs do not consider the discount rates when making an investment decision. Similarly, 33(22.30%) 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, 35(23.60%) disagreed, 30(20.30%) of the respondents were neutral, 32(21.60%) agreed and 18(12.20%) of the respondents were in a strong agreement with the statement. The study findings suggested that majority 80(54.05%) of the SMEs never considered summing up all the present values to get the present value of cash stream when making an investment decision. These are indicated by the mean (≈2.78) and standard deviation (≈0.05). 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, 29(19.60%) of the respondents strongly disagreed on the statement, 45(30.40%) disagreed, 17(11.50%) strongly agreed, 26(17.60%) of the respondents were neutral and 31(20.90%) of the respondents had an agreement with the statement. This suggests that half 74(50%) of the SMEs never considered time value for money when making an investment decision. These are indicated by the mean (≈2.74) and standard deviation (≈0.07). This implies that SME fails to consider the time value for money in the business when making an investment decision.

Lastly, 6(4.05%) of the respondents strongly agreed with the statement that the business considered the wear and tear, 24(16.22%) agreed, 57(38.51%) disagreed, 31(20.95%) strongly disagreed and 30(20.27%) of the respondents were neutral on the statement. It can be seen from the study that most 88(59.45%) of the SMEs do not consider wear and tear when making an investment decision. These are indicated by the mean (≈2.43) and standard deviation (≈0.12). This indicates that SMEs are not in good trail in considering the wear and tear when making an investment decision.

4.2.2. Internal rate of return (IRR) as investment appraisal techniques

This is a capital budgeting method which uses discounted cash flows in order to decide on the viability of long term investments. If the IRR is greater than the project's cost of capital or hurdle rate, (the required rate of return in a discounted cash flow analysis) the project will add value to the company. The internal rate of return (IRR) technique is that rate of return which equates the present value of the future cash inflows to the present value of the cash outflows (Olawale et al., 2010).

Table 4.2: Internal rate of return as method of investment appraisal techniques

Statement on Internal Rate of Return	Measures	Level of Agreement					Total	Mean	STD
		SD	D	N	A	SA			
The SME considers keeping records on yearly projected returns	Frequency	16	27	50	47	8	148	3.027	0.12556
	%age	10.80%	18.24%	33.80%	31.80%	5.40%	100%		
The SME considers the cash flows	Frequency	20	31	24	62	11	148	3.088	0.13176
	%age	13.50%	20.90%	16.40%	41.90%	7.40%	100%		
The SME assume the NPV to be equal to zero	Frequency	27	28	71	19	3	148	2.615	0.17037
	%age	18.24%	18.92%	47.97%	12.84%	2.03%	100%		
The SME considers rate of return from the business	Frequency	20	33	56	34	5	148	2.804	0.12751
	%age	13.50%	22.30%	37.84%	23%	3.40%	100%		
The SME contemplate wear and tear	Frequency	22	58	37	23	8	148	2.574	0.12774
	%age	14.90%	39.20%	25%	15.54%	5.40%	100%		

Source: Primary data, 2021

As it is indicated in the above table majority (62.84%) of the SMEs do not considered and become neutral regarding keeping records on yearly projected returns. i.e. (16(10.80%) of the respondents strongly disagreed with the statement that the SME considered keeping records on yearly projected returns, 27(18.24%) disagreed, 50(33.80%) are neutral). The other 47(31.80%) and 8(5.40%) were agreed and strongly agreed with the statement. These are indicated by the mean (≈3.03) and standard deviation (≈0.13). This implies that the SMEs do not consider keeping records on yearly projected returns when making an investment decision.

Although, more than half 75(51.16%) of the respondents disagreed and strongly disagreed with the statement that the SMEs considered the cash flows i.e. ((20(13.50%) of respondents strongly disagreed and 31(20.90%) of respondents disagreed with the statement); on the other hand, 62(41.90%) agreed, 11(7.40%) strongly agreed and 24(16.40%) of the respondents were neutral on the statement. These are indicated by the mean (≈3.09) and standard deviation (≈0.13). This indicates that majority of SMEs do not consider the cash flows when making an investment decision.

From the above table we can understand that almost half 71(47.97%) of the respondents were neutral with the statement that their SME assumes the NPV to be equal to zero, 27(18.24%) strongly disagreed, 28(18.92%) disagreed, 19(12.84%) agreed and 3(2.03%) of the respondents were in a strong agreement with the statement. The study findings suggests that majority 126(85.14%) of the SMEs never assumed the NPV to be equal to zero when making an investment decision. These are indicated by the mean (≈2.62) and standard deviation (≈0.17). This implies that SMEs fail to assume the NPV to be equal to zero when making an investment decision.

Regarding whether SMEs considers the rate of return from the SME for investment choice, 20(13.50%) of the respondents strongly disagreed on the statement, 33(23.30%) disagreed, 5(3.40%) strongly agreed, 56(37.84%) of the respondents were neutral and 34(23%) of the respondents had an agreement with the statement. The study findings shows that most 109(73.65%) of the SMEs never considered the rate of return from the SMEs when making an investment decision. These are indicated by the mean (≈2.80) and standard deviation (≈0.13). This implies that SMEs fails to consider the rate of return from the business when making an investment decision.

Lastly, 22(14.90%) of the respondents strongly disagreed with the statement that the SMEs considered the wear and tear, 58(39.20%) disagreed, 8(5.40%) strongly agreed, 23(15.54%) agreed and 37(25%) of the respondents were neutral on the statement. It suggests that more than half 117(79%) of the SMEs do not considered wear and tear when making an investment decision. These are indicated by the mean (≈2.57) and standard deviation (≈0.13). This indicates that, majority of the SMEs do not consider the wear and tear when making an investment decision.

4.2.3. Payback period (PBP) as measure for investment appraisal

CIMA (2002) defines payback as 'the time it takes the cash inflows from a capital investment project to equal the cash outflows, usually expressed in years'. When deciding between two or more competing projects, the usual decision is to accept the one with the shortest payback.

Payback is often used as a “first screening method". This implies that when a capital investment project is being considered, the first question to ask is: 'how long will it take to pay back its cost’? (Olawale et al, 2010).

Table 4.3: Payback period as method of investment appraisal

Statement on payback period	Measures	Level of Agreement					Total	Mean	STD
		SD	D	N	A	SA			
The SME considers record on the cash generated from sales	Frequency	19	36	35	47	11	148	2.966	0.09756
	%age	12.84%	24.30%	23.60%	31.80%	7.40%	100%		
The SME considers the total cost spent in establishing the project	Frequency	41	39	22	37	9	148	2.554	0.09287
	%age	27.70%	26.40%	14.90%	25%	6.08%	100%		
The SME estimate the time it takes to get back the money invested	Frequency	36	34	29	37	12	148	2.696	0.06969
	%age	24.30%	23%	19.60%	25%	8.10%	100%		
The SME considers the capital employed	Frequency	26	30	30	50	12	148	2.946	0.09185
	%age	17.57%	20.27%	20.27%	33.78%	8.11%	100%		
The SME considers wear and tear	Frequency	29	52	31	27	9	148	2.561	0.10318
	%age	19.60%	35.10%	20.90%	18.24%	6.08%	100%		

Source: Primary data, 2021

Table 4.3 shows that 11(7.40%) of the respondents strongly agreed with the statement that the SME considered record on the cash generated from sales, 47(31.80%) agreed, 19(12.84%) strongly disagreed, 36(24.30%) disagreed and 35(23.60%) of the respondents were neutral on the statement. The study findings suggests that most 90(60.81%) of the SMEs does not considered record on the cash generated from sales. These are indicated by the mean (≈2.97) and standard deviation (≈0.1). This implies that SMEs do not consider or have no knowhow to record on the cash generated from sales when making an investment decision.

Similarly, 9(6.08%) of the respondents strongly agreed with the statement that the business considered the total cost spent in establishing the project/business, 37(25%) agreed, 39(26.40%) disagreed, 22(14.90%) of the respondents were neutral and 41(27.70%) of the respondents strongly disagreed with the statement. It is found from the study that most 102(68.92%) of the

SMEs does not considered the total cost spent in establishing the project/business when investing. These are indicated by the mean (≈2.55) and standard deviation (≈0.09). This implies that SMEs do not consider or have no knowhow about the total cost spent in establishing the project/business when making an investment decision.

Similarly, 34(23%) of the respondents disagreed with the statement that the SME estimates the time it took to get back the money invested, 36(24.30%) strongly disagreed, 29(19.60%) of the respondents were neutral, 12(8.10%) strongly agreed and 37(25%) of the respondents were in an agreement with the statement. The study findings suggested that majority 99(66.89%) of the SMEs never considered estimation of the time it took to get back the money invested when making an investment decision. These are indicated by the mean (≈2.7) and standard deviation (≈0.07). This implies that SMEs fail to estimate the time it took to get back the money invested.

On whether SME consider the capital employed, 50(33.78%) of the respondents agreed on the statement, 12(8.11%) strongly agreed, 26(17.57%) strongly disagreed, 30(20.27%) of the respondents were neutral and 26(17.57%) of the respondents had a strong disagreement with the statement. The study findings suggests that most 86(58.11%) of the SMEs never considered or have no knowhow regarding capital employed when making an investment decision. These are indicated by the mean (≈2.95) and standard deviation (≈0.09). This indicates that SMEs do not consider the capital employed in the business when making an investment decision.

Lastly, in can simply be observed from the above table that majority 81(54.73%) of the respondents replied that their SME did not consider wear or tear when making investment decision, i.e. ((29(19.60) strongly disagreed and 52(35.10%) with the statement); 27(18.24%) agreed, 9(6.08%) strongly agreed, and 31(20.90%) of the respondents were neutral on the statement. These are indicated by the mean (≈2.56) and standard deviation (≈0.1). This implies that SME do not consider the wear and tear when making an investment appraisal decision.

4.2.4. Return on Capital Employed as measure for investment appraisal techniques

The return on capital employed or accounting rate of return is the ratio of the project's average after-tax income in relation to its average book value (Copper, 1999). Accounting rate of return (ARR) evaluates the project based on standard historical cost accounting estimates. The accounting rate of return also referred to as the book rate of return, bases project evaluation on average income and on accounting data rather than the projects cash flows. Unlike the payback period, this technique produces a percentage rate of return figure which is then used to rank the alternative investments.

Table 4.4: Return on Capital Employed as method for investment appraisal techniques

Statement on Return on Capital Employed	Measures	Level of Agreement					Total	Mean	STD
		SD	D	N	A	SA			
The SME considers the cash inflows	Frequency	25	36	22	53	12	148	2.939	0.10552
	%age	16.90%	24.30%	14.90%	35.80%	8.10%	100%		
The SME considers the initial cash invested	Frequency	41	45	17	28	17	148	2.561	0.08848
	%age	27.70%	30.40%	11.50%	18.90%	11.50%	100%		
The SME fail to take into account the time value of money	Frequency	27	36	28	41	16	148	2.885	0.06456
	%age	18.24%	24.30%	18.90%	27.70%	10.80%	100%		
The SME considers the residual value	Frequency	24	37	28	41	18	148	2.946	0.06349
	%age	16.22%	25.00%	18.92%	27.70%	12.16%	100%		
The SME considers wear and tear	Frequency	27	51	33	25	12	148	2.622	0.09616
	%age	18.24%	34.50%	22.30%	16.90%	8.10%	100%		

Source: Primary data, 2021

The above table 4.4 shows that 25(16.90%) of the respondents strongly disagreed with the statement that their SME considers the cash inflows, 36(24.30%) disagreed, 12(8.10%) strongly agreed, 22(14.90%) of the respondents were neutral and 53(35.80%) of the respondents agreed with the statement. The study findings imply that less than half 73(49.32%) of the SMEs considers the cash inflows. These are indicated by the mean (≈2.94) and standard deviation (≈0.11). This suggests that majority of the SMEs does not consider the cash inflows when making an investment decision.

On the other hand, 17(11.50%) of the respondents strongly agreed with the statement that their SMEs considers the initial cash invested, 28(18.90%) agreed, 45(30.40%) disagreed, 41(27.70%) strongly disagreed and 17(11.50%) of the respondents were neutral regarding the statement. It can be seen from the study still very small 45(30.40%) of the SMEs considers the initial cash invested. These are indicated by the mean (≈2.56) and standard deviation (≈0.09). This implies that the selected SMEs do not consider the initial cash invested when making an investment decision.

Similarly, 27(18.24%) of the respondents strongly disagreed with the statement that the SME fail to take into account the time value of money, 36(24.30%) disagreed, 28(18.92%) of the respondents were neutral, 41(27.70%) agreed and 16(10.80%) of the respondents were in a strong agreement with the statement. The study findings suggested that majority 91(61.49%) of the SMEs takes into account the time value of money when making an investment decision. These are indicated by the mean (≈2.89) and standard deviation (≈0.06).

On whether the SME considers the residual value, 24(16.22%) of the respondents strongly disagreed on the statement, 37(25%) disagreed, 18(12.16%) strongly agreed, 28(18.92%) of the respondents were neutral and 41(27.70%) of the respondents had an agreement with the statement. This suggests that below half only 59(39.86%) of the SMEs considers the residual value. These are indicated by the mean (≈2.95) and standard deviation (≈0.06). This implies that SME fails to consider the residual value in the business when making an investment decision.

Lastly, 12(8.10%) of the respondents strongly agreed with the statement that the business considered the wear and tear, 25(16.90%) agreed, 51(34.50%) disagreed, 27(18.24%) strongly disagreed and 33(22.30%) of the respondents were neutral on the statement. It can be seen from the study that majority 111(75%) of the SMEs do not consider wear and tear when making an investment decision. These are indicated by the mean (≈2.62) and standard deviation (≈0.09). This indicates that SMEs are not in good trail in considering the wear and tear when making an investment decision.

4.2.5. Profitability index (PI) as measure for investment appraisal techniques

This investment evaluation method is used to evaluate proposals for which net present values have been determined. The profitability index is determined by dividing the present value of each proposal by its initial investment. The Profitability Index is also referred to as the benefit cost ratio. A project is acceptable if its PI is greater than 1.0 and the higher the PI, the higher the project ranking (Rein ford, 2001).

Table 4.5: Profitability Index as method of investment appraisal techniques

Statement on Profitability Index	Measures	Level of Agreement					Total	Mean	STD
		SD	D	N	A	SA			
The SME is able to provide financial reward sufficient to attract and retain financing (profitability) because of the Investment Appraisal Techniques' consideration	Frequency	45	33	17	42	11	148	2.60	0.10
	%age	30.40%	22.30%	11.50%	28.40 %	7.40 %	100 %		
The SME is able to meet short term obligation (liquidity) because of the Investment Appraisal Techniques' consideration	Frequency	42	50	15	29	12	148	2.45	0.11
	%age	28.40%	33.80%	10.12%	19.60 %	8.10 %	100 %		
The SME is able to meet long term obligations and generate future revenues (solvency) because of the Investment Appraisal	Frequency	15	29	28	41	35	148	3.35	0.06
	%age	10.14%	19.59%	18.92%	27.70 %	23.65 %	100 %		
The SME is able to generate positive market expectations (market) because of the Investment Appraisal Techniques' consideration	Frequency	19	21	24	47	37	148	3.41	0.08
	%age	12.80%	14.20%	16.20%	31.80 %	25%	100 %		

Source: Primary Data, 2021

Table 4.4 shows that 11(7.40%) of the respondents strongly agreed with the statement that the SME is able to provide financial reward sufficient to attract and retain financing (profitability) because of the Investment Appraisal Techniques' consideration, 42(28.40%) agreed, 45(30.40%) strongly disagreed, 33(22.30%) disagreed and 17(11.50%) of the respondents were neutral on the statement. The study findings suggests that most 95(64.19%) of the SMEs provide financial reward sufficient to attract and retain financing (profitability) because of the Investment Appraisal Techniques' consideration. These are indicated by the mean (≈2.6) and standard deviation (≈0.1). This implies that SMEs is not able to provide financial reward sufficient to attract and retain financing

(profitability) because of the Investment Appraisal Techniques' consideration when making an investment decision.

Similarly, 12(8.10%) of the respondents strongly agreed with the statement that the SME is able to meet short term obligation (liquidity) because of the Investment Appraisal Techniques' consideration, 29(19.60%) agreed, 50(33.80%) disagreed, 15(10.12%) of the respondents were neutral and 42(28.40%) of the respondents strongly disagreed with the statement. It is found from the study that majority 107(72.30%) of the SMEs is not able to meet short term obligation (liquidity) because of the Investment Appraisal Techniques' consideration. These are indicated by the mean (≈2.45) and standard deviation (≈0.11). This implies that SMEs are not able to meet short term obligation (liquidity) because of the Investment Appraisal Techniques' consideration when making an investment decision.

On whether the SME is able to meet long term obligations and generate future revenues (solvency) because of the Investment Appraisal, 41(27.70%) of the respondents agreed on the statement, 35(23.65%) strongly agreed, 15(10.14%) strongly disagreed, 28(218.92%) of the respondents were neutral and 29(19.59%) of the respondents had disagreement with the statement. The study findings suggests that more half 76(51.35%) of the SMEs is able to meet long term obligations and generate future revenues (solvency) because of the Investment Appraisal. These are indicated by the mean (≈3.35) and standard deviation (≈0.06). This indicates that SMEs are able to meet long term obligations and generate future revenues (solvency) because of the Investment Appraisal.

Finally, 21(14.20%) of the respondents disagreed with the statement that the SME is able to generate positive market expectations (market) because of the Investment Appraisal Techniques' consideration, 19(12.80%) strongly disagreed, 24(16.20%) of the respondents were neutral, 37(25%) strongly agreed and 47(31.80%) of the respondents were in an agreement with the statement. The study findings suggested that majority 84(56.76%) of the SMEs are able to generate positive market expectations (market) because of the Investment Appraisal Techniques' consideration. These are indicated by the mean (≈3.41) and standard deviation (≈0.08). This implies that SMEs are able to generate positive market expectations (market) because of the Investment Appraisal Techniques' consideration.

CHAPTER FIVE

SUMMARY OF THE FINDING, CONCLUSION AND RECOMMENDATIONS

5.1 INTRODUCTION

This chapter presents the summary, conclusion and recommendations. The chapter thus, begins with the summary of the findings.

5.2 SUMMARY OF THE FINDING

5.2.1. Net Present Value (NPV) as investment appraisal techniques

- The study findings imply that less than half 73(49.32%) of the SMEs estimate the cash inflows and outflows. This suggests that major of the SMEs does not consider estimating the cash inflows and outflows when making an investment decision.
- It can be seen from the study still less than half 70(47.30%) of the SMEs considered the discount rates. This implies that the selected SMEs do not consider the discount rates when making an investment decision.
- The study findings suggested that majority 80(54.05%) 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.
- This suggests that half 74(50%) 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.
- It can be seen from the study that most 88(59.45%) of the SMEs do not consider wear and tear when making an investment decision. This indicates that SMEs are not in good trail in considering the wear and tear when making an investment decision.

5.2.2. Internal rate of return (IRR) as investment appraisal techniques

- As it is indicated in the above table majority (62.84%) of the SMEs do not considered and become neutral regarding keeping records on yearly projected returns This implies that the SMEs do not consider keeping records on yearly projected returns when making an investment decision
- This indicates that majority of SMEs do not consider the cash flows when making an investment decision.

- The study findings suggests that majority 126(85.14%) 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
- The study findings shows that most 109(73.65%) of the SMEs never considered the rate of return from the SMEs when making an investment decision. This implies that SMEs fails to consider the rate of return from the business when making an investment decision.
- It suggests that more than half 117(79%) of the SMEs do not considered wear and tear when making an investment decision. This indicates that, majority of the SMEs do not consider the wear and tear when making an investment decision.

5.2.3. Payback period (PBP) as measure for investment appraisal

- The study findings suggests that most 90(60.81%) of the SMEs does not considered record on the cash generated from sales. This implies that SMEs do not consider or have no knowhow to record on the cash generated from sales when making an investment decision.
- It is found from the study that most 102(68.92%) of the SMEs does not considered the total cost spent in establishing the project/business when investing. This implies that SMEs do not consider or have no knowhow about the total cost spent in establishing the project/business when making an investment decision.
- The study findings suggested that majority 99(66.89%) 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.
- The study findings suggests that most 86(58.11%) of the SMEs never considered or have no knowhow regarding capital employed when making an investment decision. This indicates that SMEs do not consider the capital employed in the business when making an investment decision.
- in can simply be observed from the above table that majority 81(54.73%) of the respondents replied that their SME did not consider wear or tear when making investment decision, This implies that SME do not consider the wear and tear when making an investment appraisal decision.

5.2.4. Return on Capital Employed as measure for investment appraisal techniques

- The study findings imply that less than half 73(49.32%) of the SMEs does not considers the cash inflows. This suggests that majority of the SMEs does not consider the cash inflows when making an investment decision

- It can be seen from the study still very small 45(30.40%) of the SMEs considers the initial cash invested. This implies that the selected SMEs do not consider the initial cash invested when making an investment decision.
- The study findings suggested that majority 91(61.49%) of the SMEs takes into account the time value of money when making an investment decision?
- This suggests that below half only 59(39.86%) of the SMEs considers the residual value. This implies that SME fails to consider the residual value in the business when making an investment decision.
- It can be seen from the study that majority 111(75%) of the SMEs do not consider wear and tear when making an investment decision. This indicates that SMEs are not in good trail in considering the wear and tear when making an investment decision.

5.2.5. Profitability index (PI) as measure for investment appraisal techniques

- The study findings suggests that most 95(64.19%) of the SMEs provide financial reward sufficient to attract and retain financing (profitability) because of the Investment Appraisal Techniques' consideration. This implies that SMEs is not able to provide financial reward sufficient to attract and retain financing (profitability) because of the Investment Appraisal Techniques' consideration when making an investment decision.
- It is found from the study that majority 107(72.30%) of the SMEs is not able to meet short term obligation (liquidity) because of the Investment Appraisal Techniques' consideration. This implies that SMEs are not able to meet short term obligation (liquidity) because of the Investment Appraisal Techniques' consideration when making an investment decision.
- The study findings suggests that more half 76(51.35%) of the SMEs is able to meet long term obligations and generate future revenues (solvency) because of the Investment Appraisal. This indicates that SMEs are able to meet long term obligations and generate future revenues (solvency) because of the Investment Appraisal.
- The study findings suggested that majority 84(56.76%) of the SMEs are able to generate positive market expectations (market) because of the Investment Appraisal Techniques' consideration. This implies that SMEs are able to generate positive market expectations (market) because of the Investment Appraisal Techniques' consideration.

5.3. CONCLUSION

To sum up the study the collected data have been analyzed and discussed with the boundary of the objective of the study. So the issue addressed in the study in relation to the investment appraisal techniques of small and medium scale enterprise is briefly concluded in the following paragraphs.

The findings of this research work to the research problem were that SMEs operators had no significant knowledge in the investment appraisal techniques. The SMEs operators also failed to apply the investment appraisal techniques to appraise their investments. The research findings therefore depicted that the SME sector operators need to gain the necessary basic foundation to be regulated to enable them adheres to best operational practices in investment.

The study concluded that, majority of the SMEs does not consider estimating the cash inflows and outflows, the discount rates, the time value for money in the business, keeping records on yearly projected returns, the cash flows, record on the cash generated from sales, do not consider or have no knowhow about the total cost spent in establishing the project/business, do not consider the capital employed in the business, do not consider the initial cash invested, and wear and tear when making an investment decision.

The study also concluded that SMEs fail to sum up all the present values to get the present value of cash stream, fail to assume the NPV to be equal to zero, fails to consider the rate of return from the business, fails to consider the residual value in the business, and fail to estimate the time it took to get back the money invested when making an investment decision.

The study concluded that SMEs is not able to provide financial reward sufficient to attract and retain financing (profitability), not able to meet short term obligation (liquidity) because of the Investment Appraisal Techniques' consideration when making an investment decision.

Lastly, the study concluded that, SMEs are able to generate positive market expectations (market) and able to meet long term obligations and generate future revenues (solvency) because of the Investment Appraisal Techniques' consideration and SMEs takes into account the time value of money when making an investment decision.

5.4. RECOMMENDATIONS

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.

5.5. Limitations and suggestions for future research

Although there are notable contributions regarding the to investigate the investment appraisal techniques of small and medium enterprises in Ethiopia in case of selected SMEs in Addis Ababa as proved from this study, the significance of this study needs to be viewed and acknowledged in lights of its limitation. Thus, there are limitations in this study which are left for future investigation and can be addressed by the future studies. The study only focused on the two sub cities (namely Kirkos and Yeka sub cities) were selected for sample determination. (Focused on two sub-city administration excluding others sub-city Administrations and Addis Ababa city Administration). Therefore, future research should be conducted on a wider scale by considering other sub-city Administration of Addis Ababa and Addis Ababa City Administration as well as all regions and other city administrations all over the country. The sample size can be bigger and broader to increase the representativeness and the results can be more gratifying. Similar studies should be conducted on manufacturing firms, universities and other federal ministry for comparing the public procurement factors or practices between services and manufacturing firms.

REFERENCES

Adeniyi, A. A., Omisakin, O. A., Egwaikhide, F. and Oyinlola, A. (2012). Foreign direct investment: Economic growth and financial sector development in small open developing economies. Economic Analysis & Policy, Vol. 42, No. 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.

Amuzu, M. S (2010) Cashflow Ratio as A measure of performance of listed Companies in emerging economies: The Ghana example. PhD thesis.

Brealey, R., & Myers, S. (2010). Principles of Corporate Finance. McGraw Hill.

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

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

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

Copper WD (1999). Capital Budgeting Models theory Vs Practice. Bus. Forum. 26(2): 15-18.

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

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

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.

Gokhan Sungun (2015). Capital investment decisions in small and medium sized enterprises in turkey. European Journal of Accounting Auditing and Finance Research Vol.3, No.1, pp.46-55, January 2015.Published by European Centre for Research Training and Development UK ISSN 2053-4086(Print), ISSN 2053-4094(Online).

Graham, John, Harvey, & Campbell. (2001). How Do CFOS Make Capital Budgeting and Capital Structure Decisions? Journal of applied corporate finance, 15(1), 8-23.

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

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

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

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.

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

Kadondi, E.A (2002). A survey of capital budgeting techniques used by companies listed at the NSE, Unpublished MBA project, University of Nairobi.

Klammer, T. (2013). The Association of Capital Budgeting Techniques with Firm Performance; the Accounting Review, 48, (2), 353-364.

Kombo, D.K. & Tromp D.L.A. (2006) Proposal and thesis writing an introduction, Makuyu: Pualines Publications Africa.

Lamido, L.M. (2002). Cash flow projections in investment analysis. International Journal of Business Administration; 27(3): 271-183.

Leedey, P.D., & Ormond, J.E. (2013). Practical research: planning and design (10th Ed.). USA: Pearson Education, Inc.

Levy, Haim, Thierry Post (2005). Investments.FT / Prentice Hall.

Long more, D. (1989). The persistence of the payback method: a time-adjusted decision rule perspective. Eng. Economist, 34(3): 1855194

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.

Maziku, M. (2012). Credit Rationing for Small and Medium Scale Enterprises in the Commercial Bank Loan Market.

Modigliani, F. and Miller, M. (1958). The cost of capital, corporation finance and the theory of investment. The American Economic Review, Vol.48, 261–297.

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.

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

Olawale, O., Olumuyiwa, F. & George, H. (2010). An investigation into the Impact of Investment Appraisal techniques on the Profitability of Manufacturing Firms in the Nelson Mandela Bay Metropolitan Area, South Africa, African Journal of Business Management, 4(7), 1274-1280.

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

Patrick.M. Wambua and Jeremiah Koori (2018). Investment Appraisal Techniques and Financial Performance of Small and Medium Enterprises in Nairobi City County, Kenya. International Journal of Current Aspects in Finance (IJCAF), Volume IV, Issue II, May 2018, PP 89-101, ISSN 2616-6976.

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

Pradeep, B., & Quesada, L. (2009). The Use of Capital Budgeting Techniques in Businesses: A Perspective from the Western Cape. Journal of Applied Business Research July/August 2009 Volume 25, Number 8.

Rose J. Katabi and Romanus L. Dimoso (2016). The Effect of Small Business Characteristics on the Choice of Investment Evaluation Techniques for SMEs in Tanzania, Journal of Business and Management (IOSR-JBM) ISSN: 2319-7668. Volume 18, Issue 4 (Apr. 2016), PP 11-18.

Saghi-Zedek, Nadia, 2016. "Product diversification and bank performance: Does ownership structure matter?" Journal of Banking & Finance, Elsevier, vol. 71(C), pages 154-167.

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.

Saunders, M, Lewis, P. and Thorn hill, A. (2007). *Research Methods for Business Students.* (4thed.). England: Pearson Education Limited.

Tariku Kolchak 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.

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

Watson, D. and Head, A. (2007), Corporate Finance– Principles and Practices, 4th ed., FT Prentice Hall, UK.

Yao, L., Smid, P. & Hermes, N. (2006). Capital Budgeting Practices: A Comparative Study of the Netherlands and China, Unpublished Master Business, University of Groningen.

Appendix

Addis Ababa University

College of Business and Economics

MBA in Finance

This questionnaire is prepared by MBA in finance student of Addis Ababa University, college of business and economics. The objective of this questionnaire is to collect information concerning the investment appraisal techniques of small and medium sized enterprises (SMEs) in Ethiopia (a case study in Addis Ababa city administration). You are kindly requested to complete this questionnaire sincerely and honestly. All information you provide will be kept with strict for academic purpose and will not be used for other purpose than the intended purpose.

General direction

- Please take a few minutes to complete this questionnaire
- Please answer the questions correctly and as accurate as possible
- Tick or Circle the correct answer in the boxes provided against the questions where provided.
- Write brief answers where explanation is required.
- You need not write your name on the questionnaire.

Abbreviations

SD	Strongly Disagree	for which response scores 1
D	Disagree	for which response scores 2
N	Neutral	for which response scores 3
A	Agree	for which response scores 4
SA	Strongly Agree	for which response scores 5

SECTION A: Background Information

Part I: The SME specific information

1. Name of the SMEs _____
2. What sector is your business involved in? (Tick where appropriate)

Manufacturing ☐

Urban Agriculture ☐

Construction ☐

Services ☐

☐

Trade

Part II: Respondent information

Experience in the type of business _____

What is the highest level of training that you have undergone?

University level ☐

College level ☐

Secondary level ☐

Primary school level ☐

None ☐

SECTION B: Subject matter questions

1. Return on Capital Employed as method for investment appraisal techniques

Please circle the number that represents your level of agreements with each of the following statements using the scale provided:

Statement on Return on Capital Employed	Level of Agreement				
	SD	D	N	A	SA
The SME considers the cash inflows	1	2	3	4	5
The SME considers the initial cash invested	1	2	3	4	5
The SME fail to take into account the time value of money	1	2	3	4	5
The SME considers the residual value	1	2	3	4	5
The SME considers wear and tear	1	2	3	4	5

Do you always consider the Accounting Rate of Return when making investment decision?

Please Explain_____

_____

2. Payback period as method for investment appraisal techniques

Please circle the number that represents your level of agreements with each of the following statements using the scale provided:

Statement on payback period	Level of Agreement				
	SD	D	N	A	SA
The SME considers record on the cash generated from sales	1	2	3	4	5
The SME considers the total cost spent in establishing the project	1	2	3	4	5
The SME estimate the time it takes to get back the money invested	1	2	3	4	5
The SME considers the capital employed	1	2	3	4	5
The SME considers wear and tear	1	2	3	4	5

Do you always consider the Payback Period when making investment decision?

Please Explain_____

_____

_____

3. Net present value as method of investment appraisal technique

Please circle the number that represents your level of agreements with each of the following statements using the scale provided:

Statement on Net Present Value	Level of Agreement				
	SD	D	N	A	SA
The SME estimate the cash inflows and outflows	1	2	3	4	5
The SME considers the discount rates	1	2	3	4	5
The SME considers summing up all the present values to get the present value of cash stream	1	2	3	4	5
The SME considers the time value for money	1	2	3	4	5
The SME considers wear and tear	1	2	3	4	5

Do you always consider the Net Present when making investment decision?

Please Explain_____

_____

_____

4. Internal rate of return as method of investment appraisal technique

Please circle the number that represents your level of agreements with each of the following statements using the scale provided:

Statement on Internal Rate of Return	Level of Agreement				
	SD	D	N	A	SA
The SME considers keeping records on yearly projected returns	1	2	3	4	5
The SME considers the cash flows	1	2	3	4	5
The SME assume the NPV to be equal to zero	1	2	3	4	5
The SME considers rate of return from the business	1	2	3	4	5
The SME contemplate wear and tear	1	2	3	4	5

Do you always consider the Internal Rate of Return when making investment decision?

Please Explain_____

_____

_____

5. Profitability index as measure of investment appraisal technique

Please circle the number that represents your level of agreements with each of the following statements using the scale provided:

Statement on Internal Rate of Return	Level of Agreement				
	SD	D	N	A	SA
The SME is able to provide financial reward sufficient to attract and retain financing (profitability) because of the Investment Appraisal Techniques' consideration	1	2	3	4	5
The SME is able to meet short term obligation (liquidity) because of the Investment Appraisal Techniques' consideration	1	2	3	4	5
The SME is able to meet long term obligations and generate future revenues (solvency) because of the Investment Appraisal Techniques' consideration	1	2	3	4	5
The SME is able to generate positive market expectations (market) because of the Investment Appraisal Techniques' consideration	1	2	3	4	5