Determinants of Project Implementation Delays: The Case of Development Bank of Ethiopia, Adama Branch

In Partial Fulfillment for the Requirement of Master Degree in Project Management

By: Baruda Golo

Advisor: Mulachew Haile (R.S.)

Post Graduate studies

Harambe University

Adama, Ethiopia

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DETERMINANTS OF PROJECT IMPLEMENTATION DELAY: THE CASE OF DEVELOPMENT BANK OF ETHIOPIA ADAMA BRANCH.

A THESIS SUBMITTED TO HARAMBE UNIVERSITY SCHOOL OF GRADUATE
STUDIES IN PARTIAL FULFLIMENT OF THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF PROJECT MANAGEMENT

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I

Statement of Declaration

I hereby declare that the study which is presented in this thesis entitled **"Determinants of Project Implementation Delays: The Case of Development Bank of Ethiopia Adama Branch".** It is conducted by Baruda Golo for the partial fulfillment of the requirements for the award of master degree in Project Management. To the best of my knowledge it is original work carried by me, it had not been presented for a partial fulfillment for any educational qualification at this University or any other and in any projects by any means.

By: Baruda Golo

Signature: ---------------------

Date: ------------------

Statement of Confirmation

I hereby confirm that the thesis work entitled **"Determinants of Project Implementation Delays The Case of Development Bank of Ethiopia Adama Branch"** was conducted by Baruda Golo for the partial fulfillment of the requirements for the award of Master Degree in Project Management under my supervision. I hereby further confirm that the thesis work is fit for the submission of defense as per to the requirement of the University.

Mulachew Haile (R.S)

Signature: ---------------------

Date: ------------------

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Dean, Graduate Studies   **Signature**

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Advisor   **Signature**

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List of abbreviation

UNCTAD………………………United Nations Conference on Trade and Development

ADB……………………………Asian Development Bank

DBE……………………………Development Bank of Ethiopia

DEPSA…………………………Development Project Studies Authority

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Abstract

Project is the building block of economy that nations establish it up on either problem or opportunity. But the delay in projects has negative consequences to the organization as well as to the nation. This study therefore intended to explore the determining factors for implementation delay of the projects in Development bank of Ethiopia at Adama branch. The design used by the study was the mix of descriptive and explanatory. The researcher used samples taken from project financed from year 2015-2020 by Development bank of Ethiopia Adama Branch. The study took the sample frame from years under consideration Creating strata in accordance with the economic sector. The researcher used secondary data of the projects like due diligence of the projects, appraisal work, the educational background of the client and project manager, checking banks and client response rate. In the study hypotheses were analyzed using binary logistic regression analysis model was showed that existence of significant relationship between the delay factors and project implementation delay. The data analysis from the SPSS version 26 showed that the hypothesized predicting variable explain 73% variation in the delay of the projects. The predicting variable found to be educational background of the client, bankability of the client, capital level of the client, quality of document screening, quality of due diligence undertaking and quality of appraisal work are found to be significantly affect the project implementation delay of the project of the branch. The researcher found that six significantly determining factors for the project delay. Educational background of the client, bankability of the client, capital level of the client, quality of document screening, quality of due diligence undertaking and quality of appraisal work are predicting variables found to be significant. Taking the research output the researcher recommends that the next researcher study external factors based to the internal are very broad and very difficult to manage the scope. Therefore the researcher first need to know these two factors the bank side and client side determining factors before he or she go for external one.

Key Words

Project Implementation, Delays, Development Bank of Ethiopia, Adama

CHAPTER ONE

1. INTRODUCTION

1.1. Background of the Study

Every country has its own way of increasing the livelihood of its citizen which can contribute to its national GDP. GDP is by which we can measure the quantity annually produced by nation of the country. Project is center pieces of economic growth and it has a great economic impact internationally and nationally (Abebit, 2013). Economic transformation requires long-term investment to support the expansion of productive capacities, as well as infrastructure development that underpins industrial activities and reduces bottlenecks. Rapid, transformative growth will also require, from the developing world, a more autonomous development strategy, in light of the fragile world economic recovery and the uncertainty about developed country demand and capital as drivers of developing country growth (UNCTAD, 2016).

GDP is the output of every national citizen effort contributes for his/her country. Project is a building block of an economy by which its nation creates employment, contribute for the national income and participate in solving economics problems. Especially, national development agenda of developing country is highly supported by different sectorial projects which were founded up on different needs. A project in its basic definition is a temporary endeavor undertaken by people who work cooperatively together to create a unique product or service (Project Management Institute, 2000) within an established time frame and within established budget to produce identifiable deliverables(Christine K. 2013). Another feature is that projects produce unique results meaning that the product or service at the end of the project should be some way different than the existing. The other characteristic is that projects are characterized by progressive elaboration due to uniqueness and greater uncertainty projects cannot be understood entirely at or before project start, and therefore planning and execution of projects is happening many times in separate steps or phases.

Projects are established up on opportunity or problems seen by any part of the society. This problems needs proper solution through project establishment and any seen opportunities may

necessitate the establishment of projects by which the nation of the country can improve their living standard and satisfy their needs and wants. A projects cannot be designed and implemented in isolation from the rest of the economy(ADB, 2004). Understanding is needed of an economy's overall performance and outlook, and how macroeconomic factors may affect project performance. This includes assessing how the sectors of an economy contribute to the growth and development process, and influence macroeconomic performance. Key macroeconomic factors include, for example, exchange rate changes that affect the price and competitiveness of traded goods, and economy wide structural policies that influence prices and affect consumer and producer incentives and behavior. The fiscal management situation needs to be understood for assessing and ensuring financial sustainability of projects that draw on public resources.

Usually the successfulness of a project can be determined by three dimensions which are quality, time and budget. These can be explained in the form of triangle diagram which shows equal importance of them. Quality is an abstract of dimension by which project successfulness can be determined by and time is the schedule planned prior to the project implementation period. And the last one is the budget or cost required for the project to undertake the activities required for the project objective. These three dimensions are crucial and interlinked to each other. Thus project monitoring is very essential by which we proceed the project as per plan (Abebit, 2013).

So many research result show In development bank of Ethiopia project Implementation delay is the result of both side contribution which are from the team who are engaged in loan processing and undertaking follow up share the delay contribution and the bank long standing organizational culture which hinders the progressive development of agricultural projects, time management, consulting on breaking down of the operational activities in to phases, yearly bases, bi annual, quarterly, monthly, weekly, days and even hours has to be the tradition and the ti me management limitation which is universal in our nation is so also the major problem in the project implementation, lack of proper utilization of disbursed fund was also one of the causal factors that attributed to the delay of agricultural projects implementation(Adane, 2018).

This thesis intends to explore the determinant of DBE Adama branch project implementation delay. From different research conducted by different peoples their result shows that the implementation delay projects are almost the result of improper planning and poor implementation of prior planned work. Specific to the bank the implementation delay of project financed by DBE

are highly affected external factors and internal factors to the projects. Generally these factors are improper project closure, poor project initiation, poor controlling, poor communication, poor evaluation, poor project planning and poor monitoring are the key factors that affect project delay. Considering the above different literature review and analysis of bank operational trend, this thesis intends to analyze the determinant of project implementation delay which were not analyzed on other research paper or put on recommendation to be undertaken by successive researcher.

The impact of any business initiator should select projects that are more familiar and interesting for them and scope of project should be established, controlled and must be clearly defined and be limited. This includes the amount of the systems implemented and amount of project process reengineering needed since poor project initiation is the most determinant of project delay.

1.2. Statement of Problem

The national economy of any country depends on the properly use of skills, knowledge for better use of national resources for achievement of the strategic economic objective. Trend analysis shows that these resources are in a very competition paradigm in today world. Those nations who use their skills and knowledge properly not only use theirs but also they widely extract the untouched resources of currently raising their hand to practice development. This is especially the action and competition of USA and Far East country China for African unexploited resources.

Developing project is by which these nations can increase the level of their relationship with Africa. Project is an economic means by which nations can create employment opportunities and income for government. Project passed through cycles by which it can attain its prior objective. From these cycles, implementation of a project which is the part of execution phase is a crucial phase where the project manager should monitor its proper implementation on periodic base.

Development bank of Ethiopia is a specialized financial institution engaged in the financing government priority area projects specifically to fill the national demand. Many of its financed projects delayed behind the schedule due to so many factors. The inability to complete projects on time and within budget continues to be a chronic problem worldwide and is worsening (Ahmed et al., 2002). Azhar and Farouqui (2008) observe that the trend of cost overrun is common worldwide and that it is more severe in developing countries .Projects are centerpieces of development plans (Ababet, 2013).

DBE is a specialized financial institution established to promote the national development agenda through development finance and close technical support to viable projects for the priority area sectors given by the government by mobilizing fund from domestic and foreign sources. DBE¶s main area of focus is provision of working capital, medium and long-term loans for priority areas investment projects and currently machinery lease (Lease Financing) for small and medium enterprises.

Project success has been defined by the criteria of time, budget and deliverables (Flaman and Gallagher, 2001). A project is only successful if it comes on schedule, on budget, it achieves the deliverables originally set for it and it is accepted and used by the clients for whom the project was intended(Christine K. 2013).

The central point for the researcher to undertake as review of many thesis undertaken were explored the determinant of project implementation delay internationally and in the African continent specifically Ethiopia. DBE financed projects were not successfully closed due to improper implementation of preplanned activities. This is due to many determining factors those hinders the proper implementation of preplanned work the expected quality, time and cost (Assafa et al (2006)).

1. Due to the dynamics in business environment on the current even the business system are varying or problem dynamism, increase the number of factors affecting the business objective
2. Increasing the level of technology which has both negative and positive effect on business
3. Advance in Communication means and increase the business process if used appropriately and vice versa

4. Advance in technology bring another new era of thinking and using things lead to quality matters.

Development bank of Ethiopia as one of the government owned and policy bank its major role is trying to fill the economic gap (financial provision for investment demand for priority area projects) required by the government. These includes providing financial loan for government priority area projects in the form of working capital, lease financing in the form of machinery and long term project loan. The bank permanently undertaking its quarter follow up of its projects for the purpose of activity evaluation and take correction action if the project is not as per the plan. So many reports of branch projects follow up reports shows project could not go as per the planned due so many reasons. The researcher is from the organization where the project implementation delays exist or the project could not undergo its progress as per it plan.

As any kind of financial institution especially as Development project financing institution Development bank of Ethiopian took high risk in financing these government priority area projects. Development bank of Ethiopia of Adama Branch as being the respective branch it was taking risks, facing counting non-performing loan almost resulted by implementation delay (DBE Adama branch 2022) report. Thus the thesis is intended to dig out those factors individually or collectively contribute for the implementation delay and their extent and to put researcher recommendation for concerned organ. Factors affect the project implementation delay are put in the order of the factor from client is put first followed by that of banks and the external is concluded to be the third one(Belay T. 2017). Thus, this research thesis intended to examine the factors affecting or factors contributing for implementation delay of the investment project from the client side and bank side. Those independent factors determine the project implementation delay from client side are educational background of the client, age, bankability of the client, capital of the client, speed of the response for the required information and from bank side quality of document screening, quality of due diligence undertaking, quality of appraisal work, experience of loan staff assigned as contact officer, quality of customer request handling, rework rate and quality of follow up.

1 .3.Research questions

In the light of the above discussion this research tried to address the following research questions:

a. What is the level of delay in projects financed by DBE, Adama branch?
b. What are client personality related factors for the project implementation delay in projects financed by DBE Adama Branch?
c. What are bank related factors determine the project implementation delay in projects financed by DBE Adama Branch?

1 .4.Objective of the Study

1.4.1. General Objective

The general objective of the thesis isto examine the factors contribute for the implementation delay of investment projects at Development Bank of Ethiopia Adama branch.

1.4.2. Specific Objective

The specific objectives which supplement the general objective of this thesis are;

1. To explore the level of delay in Projects financed by DBE Adama Branch from fiscal year 2015-2020
2. To explore the effect of personality related factors of investors for the delay of projects in DBE, Adama Branch?
3. To explore bank related factors that determine project implementation delay of projects financed by DBE Adama Branch?

1.5. Significance of the Study

As Development bank of Ethiopia is the only government owned development project financing institutions, the researcher identified the existence of implementation delay at the branch level and confirmed that its existence on the branch and concluded that many projects with some kinds of internal or external factors lasted on implementation for long time and lead to Non-performing loan. Thus, the researcher believes that findings of this thesis will add some conceptualization for the staff of the bank especially to the management to undergo with a careful loan processing and loan

granting. It is expected to suggest important recommendation s which would be of great importance both to policy makers and financial institutions providing financial and technical assistance for project s ranging from simple and small to complex an d big once. Moreover, the study will be used as an input for individuals who are interested in the subject mat ter to undertake similar studies.

1.6. Scope of the Study

The thesis intended to explore the determinant of projects implementation delay at the development bank of Ethiopia Adama Branch for project financed in the fiscal year 2015 -2020. The researcher intended to examine the determinant of project implementation delay hypothetically assigned to participate on retarding the healthy implementation delay of the Branch financed projects from bank side and customer side. The reason for this is due to the branch is considered as the major outline branches of the bank which is facing different kinds of obstacles and taking risk of financing of development projects. It is very difficult to explore all kinds of independent variable affect the project implementation delay of the branch that why the study is limited to client related factors like educational background of the client, age, bankability of the client, capital of the client, speed of the response for the required information and from bank related are quality of document screening, quality of due diligence undertaking, quality of appraisal work, experience of loan staff assigned as contact officer, quality of customer request handling, rework rate and quality of follow up.

The researcher specifically covered the projects financed from the fiscal year 2015 to 2020. The reason behind of specifically selecting these operational years is in the last two fiscal year mean that from 2021 to 2022 the bank was not in financing new projects due different internal and external reasons. The study only assesses the projects which their implementations are within the last six years (2015-2020) and their determining factors of the ir implementation delay. These period interval is selected due to its behaviour. In history of the bank this period is the period when the bank politically exposed or considered to be misused and concluded to be extravagantly used by somebody public.

The scope of the study extends from identifying the determinant of project implementation delay to their effect on pre-planned objective, limited to the branch project financed in the last fiscal year

2015 to 2020 and surrounds about factors contribute individually or collectively for the project implementation delay. The dependent variable to be analyzed is implementation delay of Adama branch financed projects and independent variable are considered to hypothetically put here in under. Factor determining project implementation delay related to client are educational background of the client, age, bankability of the client, capital of the client, speed of the response for the required information and from bank related are quality of document screening, quality of due diligence undertaking, quality of appraisal work, experience of loan staff assigned as contact officer, quality of customer request handling, rework rate and quality of follow up.

1.7. Limitation of the study

To undertake the thesis on the title determinant of project implementation delay in development bank of Ethiopia the case of Adama Branch the researcher found the following limitation. From the scope of the research, the study was limited to project implementation delay, the delay factors were only from two dimensions which are determining factors from bank side and client side. The researcher used only some descriptive analysis and some regression analysis to get the required result. He could not use all appropriate analyzing methods to come up with required output. These are due to scope limitation, time limitation and budget limitation required to undertake the study.

1.8. Operational Definitions

➤ **Implementation** is the proper application of the preplanned actions, activities and tasks with prior put budget for the achievement of project objective. Each project implementing entity has its own internal project cycle with different definitions for various milestones, including project start dates. Some may consider project start to be the date an implementing entity's board approves a project, others the date of first disbursement still others the date of the signed agreement between the entity and government (Belay Tefera, 2017).

➤ In case of the Development Bank of Ethiopia, however, projects are assumed to start implementation immediately after the signing of the loan contract. The Bank, in its project feasibility appraisal format sets out project implementation schedule from loan approval up to commencement of operation.

➤ Hence, **the definition used for 'projects implementation'** in this study focuses on the

period from loan contract signing up to the project commences operation and/or production of the specified products. As per the researcher literature review and conceptualization he concluded that the definition used is the

- **Delay**: the definition used by the researcher used taking into the project life cycle the project implementation period, it is called the project is delayed whenever it pass over preplanned schedule with a minimum of more than 6 months due to customer side and bank side determinants.

- **implementation delay** is defined as the project implementation period delay occurred from customer side and from bank side from the date of approved budget and given the implementation period, stay of more than 6 months after the planned implementation period is finished is called the project implementation is delayed and succeeded if the implementation period fathomed below 6 months after the given implementation period is finished.

- **Bankability of the client:** is the previous relationship of the client with financial institution like banks through credit relationship or other and enable the client to have some concept about the bank, their service, their intentions for their duty and customers and etc.

- **Capital of the client:** is the level owner's equity of the client that enables the client to apply for the loan and use it some kinds of gap filling. In other word the capital level of the client shows the capacity of the client to cover a certain kind of budget shortfall whenever need arises.

- **Speed of response of the client to the required information:** The speed of the response the client the researcher used is the speed or the time taken by the client to provide the information requested by the bank to process the request. Most of the time this is taken place when the project was approved and keeping for the condition to be fulfilled by the client. As the implementation period of the project start from the date project approved the bank have a hope on the project and expected to proceed the implementation process while keeping for unfulfilled conditions

- **Age of the client:** is the period that shows from the date of birth to date may show the level of maturity of an individual, experience and business exposure of an individual.

- **Due diligence:-** is the assessment undertaken by bank for the purpose checking background of the customer and enables the bank to have better ground to undertake proper

decision

- ➢ **Appraisal work:-** it is assessment of proposed project in terms of financial capability, economic viability, environmental friendly and put future projection of proposed project.
- ➢ **Experience of loan staff:-** It is about the stay of individual employed by the organization and exposed to credit process for the customer and expected to have knowhow about loan.
- ➢ **Document screening:-** It is about selecting the proper document eligible for the loan processing or rejecting or turning back to customer for correction toward the customer.
- ➢ **Loan Follow up:-** This is project monitoring within the required time interval for the purpose of checking proper resource utilization of the project.
- ➢ **Reluctant:** this is a problem when the clients are very difficult for the project life. Sometimes DBE finance project founded by such type client by considering the benefit of the project for the society. Such clients need regular follow up of any activity by the banks to minimize the failures of the project due to their reluctance.

1.9. Organization of the Thesis

This proposal is organized on five chapters with each chapter containing subcategories that which details of the proposal introduction about the project. The first chapter introduces about the project background, statement of the problem objectives of the study, significance of the study, scope of the study. The next chapter is literature review containing theoretical, Empirical and trend analysis which finally came up with the hypothesized factors affecting the project implementation delay of the project at the branch. The third chapter is about the research methodology, the fourth chapter covers about the data analysis and discussion and the chapter is about the summery of thesis.

CHAPTER TWO
2. REVIEW RELATED LITERATURE

2.1. Introduction

A project cannot be designed and implemented in isolation from the rest of the economy. Understanding is needed of an economy's overall performance and outlook, and how macroeconomic factors may affect project performance. This includes assessing how the sectors of an economy contribute to the growth and development process, and influence macroeconomic performance. Key macroeconomic factors include, for example, exchange rate changes that affect the price and competitiveness of traded goods, and economy wide structural policies that influence prices and affect consumer and producer incentives and behavior. The fiscal management situation needs to be understood for assessing and ensuring financial sustainability of projects that draw on public resources (ADB. 2014).

Most of the time project execution is based on detailed plan, which considers also external factors and constraints. Planning, execution and controlling of project is the primary fieldof project management. For major projects it is necessary sometimes to set up a special temporary organization, consisting of a project team and one or more work teams (Flaman and Gallagher, 2001). Major projects can be divided into sub-projects, and program denotes collection of related projects. Implementation is the stage where all the planned activities are put into action. Before the implementation of a project, the implementers which are spearheaded by the project committee or executive should identify their strength and weaknesses including internal forces, opportunities and threats which include external forces (Christine Kagendo, 2009).

2.2. Theoretical Review

Theory of project is provided by the transformation view on operations. In the transformation view, a project is conceptualized as a transformation of inputs to outputs. There are a number of principles, by means of which a project is managed (PMI 2002). These principles suggest, for example, decomposing the total transformation hierarchically into smaller transformations, tasks, and minimizing the cost of each task independently. We contend that understanding of management is based on three theories: management-as-planning, the dispatching model and the

thermostat model. In management-as-planning, management at the operations level is seen to consist of the creation, revision and implementation of plans. A project is a complex, no routine, one-time effort limited by time, budget, resources, and performance specifications design to meet customer needs (Gray, C.F. and Larson, E. W., 2008.) Project management is a set of tools, techniques, and knowledge that, when applied, helps to achieve the three main constraints of scope, cost and time, (Charvat, J, 2003.) However, based on different literatures, 52.7% of projects were not able to complete on time and over cost, and 31.1% not fulfilled the scope [Charvat, J., 2003 and Clancy, T., 2008]. The growth in new knowledge has increased the complexity of projects because projects encompass the latest advances. Today, many companies focus on project management, as it focuses on achieving project objectives. It is important as it applies managerial process and has its tools that give managers a good opportunity to succeed in achieving objectives.

Project success can be defined as meeting goals and objectives as prescribed i n the project plan. A successful project means that the project has accomplished its technical performance and maintained (Yaw et al, 2003). Delay could be defined as an act or event that extends the time required to perform the tasks under a contract. It usually shows up as additional days of work or as a delayed start of an activity (Sweis et al, 2007). Refer to Aibinu et al (2002) delay is a situation when the contractor and the project owner jointly or severally contribute to the non-completion of the project within the agreed contract period. Delays in construction projects are frequently expensive, since there is usually a construction loan involved which charges interest, management staff dedicated to the project whose costs are time dependent, and ongoing inflation in wage and material prices. According to Assafa et al (1995) delay in construction could be defined as the time overrun either beyond completion date specified in a contract, or beyond the date that the parties agreed upon for delivery of a project. It is a project slipping over its planned schedule and is considered as common problem in construction projects. In some cases, to the contractor, delay means higher overhead costs because of longer work period, higher material costs through inflation, and due to labor cost increases. Project delay can also defined as a discrepancy where actual completion of the project exceeds the planed period according to the contract (Chabota et al, 2008).

2.2.1. Project Classification

Basically, projects can be classified into three resolution types (Clancy T., 2008): i. Resolution Type 1 (project success): The project is completed on-time, on-budget, fulfilled all functions and features as specified. ii. Resolution Type 2 (project challenged): The project is completed and operational but over-budget, over the time estimate, and offers fewer functions and features than originally specified. iii. Resolution Type 3 (project impaired): The project is cancelled at some point during the development cycle.

A major priority during this stage is to ensure that the project is carried out in the way and within the period that was planned. Problems frequently occur when the economic and financial environment at implementation differs from the situation expected during appraisal. It is during implementation stage that many of the real problems of projects are first identified. Because of this feedback effect on the discovery and design of new projects, and the deficiencies in the capabilities of the project action can be revealed. Therefore to allow the management to become aware of the difficulties that might arise, in recording, monitoring and progress reporting are important activities during the implementation stage.

Project success should also consider: (i) Project efficiency is reflected how the project meet the schedule, meet the budget; (ii) Impact to customer/stakeholder is reflected how the project meet the requirements and specification, customer satisfactory; (iii) Impact to the project team is reflected how the project affect the team satisfaction, team morale, skill development, team member growth; (iv) Impact to Business is reflected how the project impact on profit and service quality; and (v) Future preparation reflected how well the project helps CINTA Corpto prepare its infrastructure for the future (A. Shenhar, 2007).

One weakness found in doing a project is lacking of monitoring and evaluation for actual expenditure againts budgeting. There is only monitoring in schedule performance with little or even no project evaluation. Earned Value Analysis (EVA) is a technique which provides integrated schedule (time), progress and cost management information related to scope, and quality. EVA also a tools and technique applied in project management used to forecast potential outcomes based on possible variations of project or environmental variables and their relationships with other variables. In the day-to-day activities of the project manager, EVA provides "alarm" signals

and facilitates decisions that keep the project on time and on budget. The main objective of implementing EVA was to ensure that the project finished on time and on budget, also educating the project team. Schedule progress indicator could be seen in Schedule Variance (SV). If SV is greater than 10%, the project manager should began to consider immediate corrective action. PMBOK methodology dictates that a project with SV greater than 20% cannot be accomplished within the baseline constrains without major action taken (cited in Freddy F. 2016).

Projects exist and operate within internal and external environments that have varying degrees of influence on value delivery. Internal and external environments can influence planning and other project activities. These influences can yield a favorable, unfavorable, or neutral impact on project characteristics, stakeholders, or project teams. (PM BOOK, 2007)

2.2.2. Definition and Concept of Delay

Delay as an event that causes extended time to complete all or part of a project. Delay may also be defined as the time overrun, either beyond the date for completion specified by the contract or schedule or beyond the extended contract period where an extension of time has been granted(Sanders and etal, 2001). The type of delay we focus on in this study is the time overrun beyond the date for completion specified by project implementation schedule or by the contract not considering whether an extension of time has been granted. Project implementation delay is a global phenomenon affecting not only the parties involved in the project but also the overall economy of countries as well. Delay involves multiple complex issues all of which are invariably of critical importance to the parties, in our case the bank and its clients. These issues concern entitlement to recover costs of delay or the necessity to prolong the project with the consequential entitlement to recovery costs for adjustments to the contract schedules. In the case of Development Bank of Ethiopia, project implementation delay causes wastage of resources to process loan repayment rescheduling, processing of additional loans due to cost overrun and projects are losing substantial market shares due to delay. Questions arise as to the causes of delay and the assigning of fault often evolves into disputes and litigation (Bolton, 1990).

For the purpose of this study, the researcher has classified delay causes into three. The first is the one caused by the Bank's actions such as, unfavorable policies and procedures, bureaucratic loan disbursement, failure to give the required technical advice and feedback, inefficiency of staffs to 8

properly appraise projects and similar cases, the second is causes originating from the client such as loan diversion, plan (scope) change by clients or clients initiated variations, giving less to the project and the third is external factors such as devaluation of Birr against other currencies, delay in customs clearing, inefficient logistic, delay in suppliers and other government acts as reviewed many papers delays can be classified on categories¶. Some classified it into three Zaki Kraiem, Et Al. (1987), Delays can be classified according to liability by three major types: Compensable, Excusable and Non-excusable

2.2.3. Compensable Delay

Compensable Delay is those which is within the control of, is the fault of, or is due to the negligence of the owner. These delays can occur under different situations. They can be caused by the owner's failure to furnish the site to the contractor by an agreed date, faulty design, or incomplete drawings and specifications. There are many other ways in which a contractor could be delayed by the owner, such as changes in scope, suspension of work, differing site conditions, late delivery of owner supplied materials, and the owner's failure to disclose information vital to the contractor. For this type of delays, the contractor is entitled to a time extension and damages for extra costs associated with the delay.

2.2.4. Excusable Delay

Excusable Delays are delays that occur due to circumstances that are not attributable to the contractor and are out of control of the contractor or the third party for whom the contractor is responsible. According to the situation, an extension of time for performance or, in some cases, the contractor is given delay damages by the client. This includes delay by the client and delays which are already excused in contract document and includes delays which are unforeseeable by both the parties at the time of contracting (Ansah & Sorooshian, 2018). Excusable Delay is the failure of the construction management party in fulfilling the accomplishment time as in the agreed contract. The causes of the delay in the project are design problem, workers change by project owner, weather influence/not in a normal condition, workers conflict, and natural disasters Nenny and Kustamar (2019); Excusable Delays are those which occur when the contractor is delayed by occurrences which are not attributable to either the contractor or owner. Three major elements can represent the excusable delays:

2.2.4. Non-Compensable delay

Non-Compensable delays usually are due to acts of God, fires, unusually severe weather, strikes, floods, etc. There is always misunderstanding whether to consider delay due to weather under non-compensable suspension or not, but it only takes into consideration severe weather conditions. That means only that type of weather is found which is not anticipated at that time in that place. Non-compensable delays that are entitled to the contractor, and hence no time extension is given. But the contractor by proving his point that the delay was out of his control and asking for compensation but still he is not entitled to get money. The contractor is given a time extension, and he has to pay liquidated damages (Ansah & Sorooshian, 2018).

On other hand Project implementation delays can be broadly classified in to two as: compensable delays (caused by the client) and non-excusable delays (caused by the contractor), critical or noncritical delays, and concurrent or non-concurrent delays. The identification of the types of delays helps to identify the causes of delays, and take mitigation strategies. Mitigation of delays can be achieved by adopting the process of knowledge management and project learning which gives insight into the various problems and their solutions. Prevention of delays by adopting innovative and teamwork helps in planning and analyzing the requirements in detail which will allow the mapping of resources and identifying the risks (Hasseb et al., 2011). Cited in MeazaA. 2015.

2.2.5. Concurrent Delays

Concurrent delay is a result of one event which is delayed. It reflects a complicated situation where one or more delays occur at the same time, but the contractor is not entitled to claim an extension of time or loss and expenses for every setback. There may arise a situation where two or more delays rise independently at the same time, but together, they affect the completion period of the project. But if the client is entitled to any of those delays, then the contractor can claim for the loss and expenses (Ansah & Sorooshian, 2018) cited in the Yichalem T. 2021.

2.2.6. Effects of Delays

Projects are the basic building blocks of development. Without successful project identification,

preparation and implementation, development plans are no more than wishes and developing nations would remain stagnant or regress. The effect is nothing but change. The result may occur due to the impact of delay in the project. This effect can be a substantial financial cost for both client and contractor. Mostly it includes arbitration, time overrun, cost overrun, disputes, litigations, and may the project be stalled forever (Amoatey et al., 2015). Delay in any project primarily results in time overrun as the contractor will need an extension irrespective of whether the delay is attributable to the client or contractor. Sti ll, it is not necessary that the cost overrun is borne by the client only. The delay will also lead to cost overrun for the contractor as he is required to pay penalties for delays. But the client will also lose his revenue from the project due to this delay.

2.2.7. Factors contribute for the project implementation delay

implementation delay of Development bank financed Agricultural projects implementation delays major factors are the executing agencies to go by the terminal dates of opening L/Cs, Cost escalation on various items, Serious budget deficit resulted from fluctuation and price escalation, Shortage of equity contribution, Utilization of low unit price of civil works in estimating the cost, Poor implementation schedule on land development activities, Percentage of delay from estimated project duration , Providing low technical advice (guidance and support of the client), Management problems such as personnel, labor and contractor disputes mismatch of equipment, Land overlapping issues during collateral the agricultural project, Conditions for effectiveness of the loan are not fulfill in time, Lack of sufficient project management body of knowledge by agricultural project participants, Low capacity of the promoter to cover uneven costs while planning the project, Lack of comprehensiveness of appraisal study submitted by the bank to the promoters , Social unrest around the project site, Miss utilization of the disbursed fund and Delay in project collateralizing activities (Adane S. 2018)

The major variables are Improper Project Closure, Poor Project Initiation, Poor Implementation, Poor Controlling, Poor Communication, Poor Evaluation, Poor Project Planning and Poor Monitoring (Yichalem T.2021). Every entrepreneur should draw an implementation scheme or a time table for his project to ensure the timely completion of all activities involved in setting upon enterprise. Timely implementation is important because if there is delay it causes, among other things, a project cost overrun. In India delay in project implementation has become a common

feature. Implementation phase for an industrial project, which involves settings up of manufacturing facilities, consists of several stages. These are: - ¾ Project and engineering design ¾ Negotiation and contracting ¾ Construction ¾ Training ¾ Plant and commissioning Translating an investment proposal into a concrete projects is a complex, time consuming and risky task. Delays in implementation, which are common, can lead to 10 substantial cost overruns. For expeditious implementation at a reasonable cost, the following are useful: ¾ Adequate formulation projects ¾ Use of the principle of responsibility accounting ¾ Use of network techniques Hence, there is a need to draw up an implementation schedule for the project and then to adhere. Following is a simplified implementation schedule for a small project.

The impact of Any business initiator should select projects that are more familiar and interesting for them and scope of project should be established, controlled and must be clearly defined and be limited. This includes the amount of the systems implemented and amount of project process reengineering needed since poor project initiation is the most determinant of project delay. The study also recommended that the practices that lead to reduction in delay on implementation of projects f i nanced by D BE are use of efficient project-specific activate, assi gni ng well trained workers for specific tasks, good project planning and controlling, conflict resolution during project implementation, establishment of good governance, good public accountability, management and good forecasting of work plan, estimation project duration, assigning specific tasks to project teams and also assigning projects to specific teams.

This thesis intends to explore the determinant of DBE Adama branch project implementation delay. From different research conducted by different peoples their result shows that the implementation delay projects are almost the result of improper planning and poor implementation of prior planned work. Specific to the bank the implementation delay of project financed by DBE are highly affected external factors and internal factors to the projects. Generally these factors are Improper Project Closure, Poor Project Initiation, Poor Controlling, Poor Communication, Poor Evaluation, Poor Project Planning and Poor Monitoring are the key factors that affect project delay. Considering the above different literature review and analysis of bank operational trend, this thesis intends to analyze the determinant of project implementation delay which were not analyzed on other research paper or put on recommendation to be undertaken by successive researcher.

2.3. Empirical review

To the best of my knowledge different researcher conducted their thesis up on different understanding, views and perspective. A research conducted by for the partial fulfillment of masters of degree at St. Mary ́s University, School of Graduate Studies Faculty Of Business on Determinants Of Project Implementation Delay (Tadesa, 2017). The Case of Selected Projects Financed By Development Bank of Ethiopia he conducted study on project financed by Development Bank of Ethiopia at head office for consecutive of three years. The study took place between January 2012 and December 2014. The total project financed for consecutive of three years are 232. From these approved projects only 50 projects are completed successfully on schedule time and the rest means 182 projects recorded delay in their implementation. He used Uma Sekarar (2003) simplified formula to calculate sample sizes of finite population, the instrument of data collection method is questionnaire with non-probability data collection procedure. In the study six hypotheses, he was analyzed using methods of statistical inference. Pearson Correlation analysis was conducted to test the existence of significant relationship between the delay factors and project delay.

He found that all the independent variables (poor project initiation, poor project planning/design system; improper implementation, poor project monitoring, evaluation and controlling system, poor communication and improper project closure) are positively and significantly correlated with the dependent variable (project delay) at 1 % level of significance (P < 0.000).The highest correlation is attached to poor project monitoring, evaluation and controlling system (r = 0.923), followed by poor communication (r = 0.912), improper project closure (r = 0. 827), improper implementation, (r = 0. 778), poor project initiation (r = 0.738) and poor project planning/design system (r = 0.692).

Indhu and Ajai (2014) investigated on the delay factors and the effect on the project completion by doing a case study in on-going projects. By analyzing the reasons for delay, possible recommendations were given. The major factors identified in this case study are delays due to contractor, client and also due to natures act like rain. The most important causes were delays in contractor's payments, shortage of material in construction, change in material, the weather condition, shortage of manpower (skilled, semi-skilled and unskilled labour), frequent change of

staff, poor site management and improper management of the engineers. Some of the delays are delay in submission of drawings, space constraints, and delay in payment by client, delay in material supply and local problems like strikes. The major effects of delay are cost impact, reduced labor productivity, postponement in work, 18 changes in labor allocation etc. Not all delays can be rectified, but few of them can be overcome by improving management responsibilities.

The factors causing delays for construction projects in Hong Kong They have identified 83 hypothesized delay factors and grouped them into eight categories (Chan and Kumaraswamy 1997). The main reasons for delay were analyzed and ranked according to different groups classified on the basis of (a) role of the parties in the local construction industry (i.e. whether clients, consultants and contractors) and (b) the type of projects. They collected data from 167 local construction organizations and analyzed it by using the relative impact index method in order to rank the determinant delay factors for different types of construction projects. The results indicate the principal and common causes of delays are: Improper define the project scope and Lack recruit appropriate staff , unforeseen ground conditions, low speed of decision making involving all the project team, Poor job description for a project manager, Lack of comprehensiveness of feasibility study and Analysis client initiated variations and necessary variations of works.

Delay and cost overrun in project could be as a result of scope change. Scope is the term that defines the entire deliverables that is expected at the end of a project. Therefore, logically, it can be said that all project plans, estimation, schedule, quality and base lines are usually designed based on the initial project scope (Ambsisi A., 2011). Thus, any change in the project scope during execution will mean that the entire initial project plan will have to be reviewed such that a reviewed budget, schedule and quality will have to be developed. This means more time and resources will be needed as against the initial baseline. "With each scope change, precious project resources are diverted to activities that were not identified in the original project scope, leading to pressure on the project schedule and budget" (Narayan 2010). Project scope change could be as a result of wrong initial scope definition, inherent risk and uncertainties, sudden change of interest, project funding change, etc. this could lead to change request which in turn could lead to change in project deliverables, budget and/or even the entire project team. Poor scope change management could lead to dispute that may require spending time and money on

arbitration and litigation for what the contractor or the client believes he is entitled to. This will no doubt lead to delay and cost overrun of the project. To achieve a proper control for scope change, it is important to first identify the fact that change is inevitable in project and could equally be beneficial to the entire project success. Thus the most important thing to do is to integrate a proper change management plan such that a proactive approach could be adopted involving the project stakeholders and incorporating their needs throughout the project lifecycle. Similarly, to avoid disputes, it is important to always seek approval for changes from sponsor and communicate changes in a timely way. For highly evolving change in project, the scope could be frozen so as to concentrate on the expected deliverable.

2.4. Summary of Review

To undertake the thesis on titled determinant of project implementation delay the researcher reviewed many material, papers and literatures and concluded that project execution is based on detailed plan, which considers also external factors and constraints. Planning, execution and controlling of project is the primary field of project management. Delay as an event that causes extended time to complete all or part of a project. Delay may also be defined as the ti me overrun, either beyond the date for completion specified by the contract or schedule or beyond the extended contract period where an extension of time has been granted. The project implementation delay can be affected as per above review and trend analysis are categorized into two dimensions, from client side Educational background of the client, Age, Bankability of the client, Capital of the client, Speed of the response for the required information and from bank side Quality of document screening, Quality of due diligence undertaking, Quality of appraisal work, Experience of loan staff assigned as contact officer, Quality of customer request handling, Rework rate and Quality of follow up.

2.5. Conceptual frame work

The conceptual framework summarized from the above review the independent variables are Project implementation delay which is binary by its nature. The researcher hypothesized the following independent variables determine the project implementation delay or success from two dimension, from bank side and client side.

Client related factors are which determ i ne the success of project as per given project life are Educational background of the client, Age, Bankability of the client, Capital of the client, Speed of the response for the required information and from bank side Quality of document screening, Quality of due diligence undertaking, Quality of appraisal work, Experience of loan staff assigned as contact officer, Quality of customer request handling and Quality of follow up.

The educational background of the client determine the project implementation delay due to it determine the qualification of the client have knowhow of the project from the very establishment and to take appropriate measurement whenever the project leave prior planned track. The previous bankability of the client has the great impact on the project implementation delay or success that the client has previous relationship with this or other bank and have information about how to use credit from bank and its management. Having higher capital can increase the success of the project that whenever the budget shortfall exist the client cover it for the purpose of reducing the time spend for keeping to the date to the budget allocation through bank loan.

The same to this bank related factors determine the success and implementation delay of projects as listed if they gone good they play a great role on success of project and if they gone wrong they lead the project implementation delay. It is shown by below diagram.

Figure. 2.1. Diagram for Conceptual framework for the reviews

Client related factors

Bank related factors
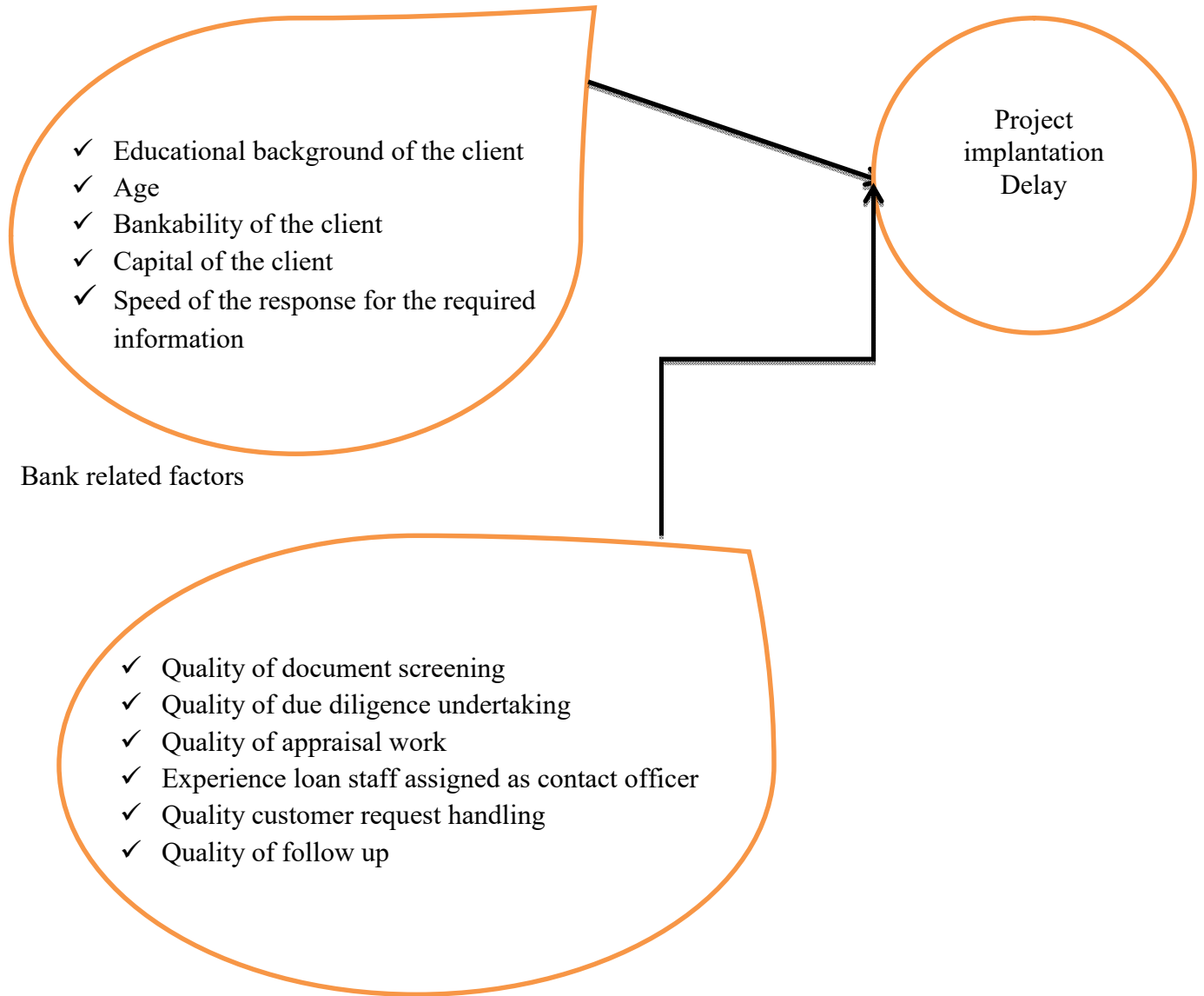
Source: Summery of the above literature review

In the above figure or conceptual frame work scheme the most of the reviews identified determining factors are the part of the summarized as listed above. The above conceptual diagram shows that the conceptual framework of the literature review above which the researcher intended to test and confirm its hypothesi

For the summarized project implementation delay determining factors the researcher assign the dependent variable project implementation delay Y, project implementation delay factors from client side $X_{(1-5)}$ and from bank side $Y_{(1-5)}$ to put them specifically

From client side

> X 1…..Educational background of the client
> X2……Age of the client
> X 3…...Bankability of the client
> X4….…Capital of the client
> X 5….…Speed of the response for the required information

From bank side

> X 6……Quality of document screening
> X7….…Quality of due diligence undertaking
> X8….…Quality of appraisal work
> X9……..Experience loan staff assigned as contact officer
> X10……..Quality customer request handling
> X 11 ……...Quality of follow up
> Therefore,

$$Y=b0+A1X1+A2X2+A3X3+A4X4+A5X5+A\ 6X6+A\ 7X7+A8X8+A9X9+A10X10+A11X11+E$$

> Whereas B0 constants that determine the level of delay when other independent factor from client side and banks side respectively are having zero value and E represents expected error level.

2.7. Hypothesis

Up the above literature review and trend analysis the research put the following hypothesis to be tested and reported on the next result and discussion part.

Hypothesis1: The higher the educational level of the client, the lower the project implementation delay.

Hypothesis 2: The lower the age of the client the lower the project implementation delay of the project

Hypothesis 3: The bankability of the client positively determine in lowering project implementation.

Hypothesis 4: the higher the capital the client possess the lower the project implementation delay that the project promoter can cover any budget short fall.

Hypothesis 5: the higher the Speed of the response for the required information by the client, the lower the project implementation

Hypothesis 6: Quality of document screening significantly determines project implementation delay in that good document screening resulted in lower project delay.

Hypothesis 7: The higher the Quality of due diligence undertaking, the lower the project implementation delays.

Hypothesis 8: The higher the Quality of appraisal work, the lower the project implementation delay and vice versa.

Hypothesis 9: The higher the Experience of loan staff assigned as contact officer possess the higher he/she dig out the required data about the client that go for decision making implementation delay.

Hypothesis 10: The higher the consideration for customer request, the lower the project implementation delay.

Hypothesis 11: The higher the quality of follow up, the lower the project implementations delay.

CHAPTER THREE

3. RESEARCH METHODOLOGY

3.1. Description of the Study Area

Development Bank of Ethiopia is a specialized financial institution established to promote the national development agenda through development finance and close technical support to viable projects from the priority areas of the government by mobilizing funds from domestic and foreign sources while insuring its sustainability. The bank earnestly the number of development banks worldwide is difficult to ascertain, due to definitional and data-related problems. Their emergence and rapid expansion in the developing world initially occurred in the 1950s and 1960s to support socioeconomic development, yet economic liberalization and reforms in the 1980s and 1990s led to a significant reduction in their numbers. Estimates by ADB show that 250 development banks were privatized between 1987 and 2003, while many others were restructured or liquidated (Olloqui, 2013).

In developing countries, development banks have emerged and evolved over time to play a similar role, namely providing long-term capital to support growth and economic transformation. That is, such banks are key in those countries embarking on accelerated economic growth and thus facing challenges in terms of financing for capital-intensive projects and maintaining institutions that can anticipate new needs, overcome technical and entrepreneurial limitations and help coordinate multiple investments taking place simultaneously(U N CTA D, 2016)

3.2. Research Design

The appropriate design used by the study was the mix of exploratory and descriptive which is non-experimental part. Because, the determinant of project implementation better to be undertaken extensively by the use of the mix the two research design. It used for statistics of data, average and frequencies. Amount of data gathered by this research and which can be used f or future references. It gives overviews of study which is helpful to determines variables used f or study. Limitation of study can use for development or as a useful tools. Research priority can be determined through exploratory design. All answer like What, Why, how we can get through data collection. Background data can be collected through explanatory design for particular topic.

3.3. Research Approach

Research designs are types of inquiry within qualitative, quantitative, and mixed methods approaches that provide specific direction for procedures in a research design. Others have called them strategies of inquiry (Denzin & Lincoln, 2011).The researcher used the quantitative and qualitative research design to effectively explore the relationship and the effect of the determining factors of implementation delay of projects from the preplanned schedule. Here why quantitative is that from the very beginning the researcher intended to explain the determinant of project implementations delay from the preplanned schedule. The relationship of determining factors, independent variable for implementation delay, dependent variable is going to be analyzed using quantitative means of analyzing method.

3.4. Data Sources

Here to elaborately find the determining factor or answer the earlier research questions the researcher will use secondary data using of project financed by DBE Adama branch. The secondary data which was collected from the selected sample of project under implementation file proportional to each year from the file held by the branch.

3.5. Sampling Design

From the target population the client of DBE Adama branch the sample was selected up on the each year projects being at the stage of implementation. These was sampling of the projects of each year categorized under projects which their implementation period is passed over six months. According the DBE loan procedure a loan signed loan contract and pass over six months needs to be reappraisal of the project budget.

3.5.1. Target Population

To answer the research questions of the research titled determinant of project implementation delay at the Development bank of Ethiopia in the case of Adama Branch the researcher selected project population of respective organization..

3.5.2. Sampling Frame

The sample frame from which the sample taken was from the target population size 271 which is 120 projects are under implementation. This is purposive selection of sample frame.

3.5.3. Sample Size

To determine the number of sample projects for this study, a formula developed by Kothari (2004:179) and recommended by Cohen et al., (2007:104) in educational research was used. Since, this formula has been practically tested and used by scholars for more than four a decade, the researcher considered the formula to correctly determine appropriate sample size for this study. The sample size determined by the Kothari formula is applied to point out from the total population of project under implementation from the year of 2015-2020. The target population is 271 projects

$$n = \frac{Z^2 * p * q * N}{(e^2(N-1)) + (Z^2 * p * q)}$$

Where: n= the required sample size Z_2 = is the abscissa of the normal curve that cuts off an area α at the tails, 1- α equals the desired confidence level. The value for Z is found in statistical tables which contain the area under the normal curve. e.g., Z=1 .96 at 95%confidence level; and Z_2=3.841. N= the population size (120) P= the population proportion (assumed to be 0.5 since this would provide the maximum sample size) q= 1-p, e = is the desired level of precision or margin of error (5% error or 0.05). Using the above sample size determination formula of Kothari the number of sample was used is 92 projects.

3.5.4. Sampling techniques

The researcher used random sampling technique and stratified sampling to select sample from each year project under implementation then make strata up on economic sector and select the proportionate of each them up on their size. The sample size will be selected up on the proportional number of each year containing project under implementation. The researcher used random sampling and stratified random sampling depending up on the economic sector of projects to take representative samples from the sample frame.

3.6. Data Collection Tool

First the permission letter detail of the research scope, usefulness and purpose from the University was given to the branch manager to kindly consider and deliver required data. The data which was used for the study was directly retrieved from the client file containing every aspect of them. The researcher used secondary data of the projects like due diligence of the projects, appraisal, rework rate, the educational background of the client and project manager, checking client banks and client response rate. All these were cumulatively used to answer research questions.

3.7. Data Analysis Tools

In the study both qualitative and quantitative methods of data analysis techniques was employed. A descriptive analysis was also used for demographic factors such as age, educational level and other. In the study the above listed hypotheses were analyzed using methods of binary logistics regression analysis model was used to test the existence of significant relationship between the delay factors and project implementation delay. For this, the study used the logistic model to analyze binary data. Then, the logistic regression analyses was used to determine the effect of independent variable i.e. delay factors on dependent variable which is project implementation delay. Tables were employed to present the data and statistical package for social science (SPSS) will be used to support the analysis of the following model.

$$Y=b_0+A_1X_1+A_2X_2+A_3X_3+A_4X_4+A_5X_5+A_6X_6+A_7X_7+A_8X_8+A_9X_9+A_{10}X_{10}+A_{11}X_{11}+E$$

Whereas X_{i-11} are independent variables from client side and independent variables from bank side and B0 is constant that determine the level of delay when other independent factor from client side and banks side respectively are having zero value and E represents expected error level.

3.8. Data quality Assurance

Data quality Assurance is about Trust worthiness (qualitative) and/or Validity &reliability (quantitative) results. Validity refers to the ability of the instrument to measure what it is designed to measure. Kumar, (2005) as cited by Ndegwa, (2013) defines validity as the degree to which the researcher has measured what he set out to measure. It is the accuracy and

meaningfulness of inferences which are based on research results. Validity therefore is whether an instrument is on target in measuring what is expected to measure. To check the validity of the instrument the researcher worked with the adviser as the expert and agreed whether the instrument was valid or not.

3.9. Ethical Consideration

Permission letter were obtained from the university and all concerned bodies to conduct the study. Participants were informed of the confidentiality in the study so to ensure respect for the dignity of participants in the study. Their confidential information will be only accessed by the researcher and the supervisor. The objective of the research was communicated to the concerned body of the organization as it is intended as a partial fulfillment of the master of art degree in project management at Harambe University.

3.10. Dissemination plan of results

The researcher believe that as far the project delay is very crucial issue internationally, in African continent specifically in Ethiopia the output of this study is very important. In project financing institutions like DBE taking mitigation measures are very important. Thus the outputs of the study will the input for the bank to put some kinds of energetic information and to undergo further research.

CHAPTER FOUR

4.1. DATA ANALYSIS AND DISCUSSION

4.1.1. Introduction

This chapter consists of results and discussion of the research objective. The general objective of the research is to examine the factor contribute for project implementation delay of investment projects financed by DBE Adama branch from 2015 to 2020 operational years. This research has three specific objectives with three respective research questions to be answered in the chapters. From the project population financed by DBE Adama branch sample was taken using formula developed by Kothari (2004:179) and recommended by Cohen et al., (2007:104) from the project population 271 financed from the operational year 2015 to 2020 was 92 projects.

When going to collect data the found only 81 project which is 88% and the data analyze was undertaken using this sample size with 95% confidence level. This chapter detailed the results and interpretation of project implementation delay focusing on determining factors which are clients related and bank related. The detail of these analyses put hereunder.

4.2. General Characteristics of Branch Projects

The researcher selected the title the determinant of project implementation delay of project financed by DBE Adama Branch depend on his experience on the area and seen the problem under consideration and decided to examine the problem by answering the above listed research questions to attain the research objective. To do this the using the secondary data held by at the branch the concluded the following points depending up the selected determining factors up on their dimensions.

4.2.1. Client related factors

4.2.1.1.   Age of the client

Table 4.1 Descriptive statistics of Age of the client

	Categories of variables	frequency	Percent	Mean	median	Std. Deviation

Age of The client	>55(0)	10	12.3			
	41-55(1)	57	70.4			
	<=40(2)	14	17.3	1.05	1.00	0.55

Source; SPSS result

As per the researcher review the age f the project owners have impact on the proper project implementation. As per the SPSS output from the sampled projects 57(70.4%) are found within the interval age of 41 to55 and 14(17.3%) project owner age are found <40 which considered to be young age client. The left 10(12.3%) project owner are found to be a project owners aged greater than 55 years old. On the other hand, the mean of the age of the project owners are 1.05 and deviated by 0.545. This shows that the age of the client or project owners has an impact on the project success.

4.2.1.2. Educational background of the client

Table 4.2. Descriptive of Educational background of the client

	Categories of variables	frequency	Percent
Educational background of the client	below diploma()	26	32.1
	Diploma()	27	33.3
	Degree()	21	25.9
	above first degree()	7	8.6

Source: SPSS result

Usually education is a very decisive variable for any kind of business success where the owner o the manager of any business or project uses it for the better result as per prior plan. Here also the researcher found that educational background of the project owner a great contribution for the proper implementation of projects plan. The quality of education is very crucial for the success of the any business established for different purpose. Based on this review the researcher concluded that the educational level of the project owner has a great contribution for the proper implementation of the project. As per the data collected from the project file held by the branch the descriptive SPSS version 26 software output the mean of educational background of the client is 1.1 and the median is 1. And its standard deviation is 0.96 and variance is 0.925. This means

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that the educational background of the project owner varied by 0.925 and deviated by 0.96 from the mean of data.

4.2.1.3. Bankability of the client

Table 4. 3 Descriᵖtive of Bankability of the client

	Categories of variables	Frequency	Percent
Bankability of the client	<5 yrs(0)	16	19.8
	5-10yrs(1)	44	54.3
	>10yrs(2)	21	25.9

Source: SPSS result

Here bankability of the client is to mean that the experience the project owners have in using credit from banking industry and developed knowhow the credit provided by the bank. This is because in developing country most of the project owners are uneducated and being rich through informal way. Here the researcher considered this variable as one determining factor for project implementation delay. As shown on the Table 4.2.1.3. from the sampled projects 44(54.3%) projects are found to be project owners having a banking experience of 5 to 10 years. 16(19.8%) projects owner are found to be less than 5 years banking experience and the remaining 21 projects holding 25.9% project owner are found to be greater 10 years banking experience. On the other hand, the mean of data collected from the sample projects about their bankability are 1.06 and standard devaition0.677. to conclude this the bankability of the client has an impact on the project implementation delay.

4.2.1.4. Capital of the client

Table 4.1.2.4 Descriptive of statistics of capital of the client

	Categories of variables	Frequency	Percent
Capital level of the Client	<2million(0)	8	9.9
	2-5million(1)	15	18.5
	5-7.5 million(2)	19	23.5
	>7.5million(3)	39	48.1

Source; SPSS result

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The capital of the client is very crucial for projected business to be successful at the budget, time and quality previously planned. Most of the time role of the level of the capital can be seen whenever the project faced shortage of the budget, liquidity problem. Here what to be considered is project owner having enough capital can be proceed to its goal and those having lower capital have a probability to stay at implementation for long time.

The period the project stay at implementation are determined by the owner role play and the level of additional capital the project require. As shown on the above table 39(48.1%) project owner have a capital level of greater than 7.5 million and 19(23.5%) project owner have a capital of 5 million to 7.5 million, 15(18.5%) project owners have a capital of 2 million to 5 million birr and 8(9.9%) projects owners have a less than 2 million capital of Ethiopian birr. On the other hand the mean of the data of the capital level of the sampled projects are 2.1and standard deviation of 1.032. To conclude this, the capital level of the client determines the project implementation delay.

4.1.2.5. Speed of response of the client to the required information

Table 4.1.2.5 Descriptive statistics of speed of response to the required information of the client

	Categories of variables	frequency	Percent	Mean	median	Std. Deviation
Speed of response to the required information	Reluctant(0)	7	8.6			
	Not follow the Progress(1)	18	22.2			
	active but not respond(2)	30	37.0			
	active and respondent(3)	26	32.1	1.93	2.00	0.95

Source: SPSS result

The speed of the response the client the researcher used is the speed or the ti me taken by the client to provide the information requested by the bank to process the request. Most of the time this is taken place when the project was approved and keeping for the condition to be fulfilled by the client. As the implementation period of the project start from the date project approved the bank have a hope on the project and expected to proceed the implementation process while keeping for unfulfilled conditions. As per DBE loan procedure after the project is approved the bank took a responsibility of ownership of 75% over the project owners and leave 25% for the client. The approval conditions set are a part of 25% to settled by the client. From the above table 30(37%) project owners are found to be active but not respond the requested information. This means that the client are active when following their project progress but showing a sign transferred ownership and knowingly refuse to respond on time. 26(32.1%) project owners are found to be active and respondent to the minimum date given and 18(22.2%) project owner are found to be not follow the implementation progress of the project. This means that after the approval the project they seems like the role is only for banks and wait for the bank action to proceed the project. The left 7(8.6%) projects are found to be reluctant client. Here what to be considered is such client are very difficult for the project life. Sometime DBE finance project founded by such type client by considering the benefit of the project for the society. Such clients need regular follow up of any activity by the banks. On the other hand the mean of the speed of response of the client for the required information are 1.93 and standard deviation of 0.946.

4.1.3. Project implementation determining factors from bank side/ Bank related

4.1.3.1. Quality of document screening

Table 4.1.3.6 Descriptive statistics of quality of document screening of the client by the bank

	Categories of Variables	frequency	Percent	Mean	median	Std. Deviation
	Low document collection and screening(0)	5	6.2			
	partially collected and screened(1)	20	24.7			
	collect the required doc but not screened(2)	36	44.4			
Quality of document screening	collect document required and screened(3)	20	24.7	1.88	2.00	0.86

Source: SPSS result

The quality of document screening for project financing purpose is very crucial for healthy financing of the investment projects. Even if there is no well-developed theory to guide, which makes project identification difficult; the difficulties become more severe as one moves up hierarchy of organizational decision –making level because of the relative uniqueness (non routiness) of higher level decisions as compared to lower level decisions. Project financing needs multidisciplinary professions from idea foundation to project close stage. These are undertaken whereby the client found project idea considered to be convincing for financing and apply for financial institutions. In DBE case to finance a single project it should pass through long pass by which the bank can assess the background of the client related with his/her business history, credit history and social character of the applicant. To do this the bank collect appropriate documents and expected undertake screening to proceed the request. Up on the review and experience the researcher selected quality of document screening as on the determining factor for project implementation delay. The descriptive SPSS version 26 output shows that from the sample taken from the project financed population 36 projects having 44.4% collected documents are found to be collected but not screened. 20(24.7%) projects document collected are found to be partially collected and screened and 20(24.7%) projects documents are found to the required documents collected and screened and the 5 projects having

6.2% found to low document collection and screening. As shown on the above pie chart and the table 4.1.3.1 the mean of quality of document screening is 1.88 and standard deviation is 0.857. This shows that there is a deviation of data from mean by 0.857. To conclude this quality of document screening is one of the determining factors is one of the determining factors for project implementation delay for the project financed by D BE Adama branch.

4.1.3.2. Due diligence Undertaking

Table 4. 7 Descriptive statistics of Quality of due diligence undertaking by the bank

	Categories of variables	frequency	Percent	Mean	median	Std. Deviation
	required format is filled Only(0)	5	6.2			
	the required format is not filled well(1)	20	24.7			
quality of due diligence undertaking	required format filled and explained well(2)	38	46.9			
	the required format filled and but not explained well(3)	18	22.2	1.85	2.00	0.84

Source: SPSS result

Due diligence is a term used for the performance of an investigation of a business, an investment, or a person with a certain standard of care. Due diligence may be a legal obligation, but the term more commonly applies to voluntary investigations. Common examples of due diligence are the process through which a potential buyer evaluates a target company or its assets for acquisition or the process through which a potential investor valuates a major investment for its costs and benefits. The theory behind due diligence holds that performing this type of investigation contributes significantly to informed decision making by enhancing the amount and quality of information available to decision makers and by ensuring that this information is systematically used to deliberate in a reflexive manner on the decision at hand and all its costs, benefits, and risks (Bing, 2007;Chapman, 2006). Development bank of Ethiopia undertake project due diligence for different purpose. From some of them due diligence undertaking for new applicants for partial project financing loan is the crucial one which details the background of the new client and determine their eligibility

for the loan they apply for. The content of the due diligence enable the bank the bank to know the background of the applicant to the expected level and assumed to protect the bank from financing ineligible applicants. Up on this review the researcher found the due diligence undertaking as one of the determining factors for the project success by enabling the bank to receive eligible client to use appropriate loan if undertaken well. From the sample taken from the SPSS out The researcher found that 38 project due diligence undertaken was required format filled and explained well having 46.9% and the left over project due diligence undertaken was considered to be low quality due diligence undertaking.

As shown on the above histogram charts the quality of due diligence undertaking of the sampled projects have a mean of 1.85 and standard deviation of 0.838. This shows that the due diligence undertaking data collected throughout the sample is deviated by 0.838. thus the researcher concluded that the due diligence undertaking by the branch for the operational years of 2015 to 2020 determine the project implementation of the projects.

4.1.3.3. Quality of Appraisal work

Table 4. 8 Quality of appraisal undertaking of the client request by the bank

	Categories of variables	frequency	Percent	Mean	median	Std. Deviation
	Partially good and partially not good(0)	14	17.3			
	not well undertaken appraisal(1)	44	54.3			
Quality of Appraisal undertaking	good and required appraisal(2)	23	28.4	1.11	1.00	0.67

Source SPSS result

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Appraisal work is one part of the first project life cycle which determines the project to be practical from the ideal part. Appraisal work is basic one to set the project is budget, opportunities and problem the project pass through and set the future picture of the project and enable the sponsor to finance the proposed project. Thus the appraisal work undertaken a specific project should be clear of any doubt and put the minimum required formality. In DBE case the bank has independent appraisal department which receive required documents from customer relationship management team and undertake appraisal work. Here what to be considered is the quality of the appraisal work undertaken. The quality appraisal work determine the quality of project implementation period set ahead, the budget requirement for the project to be established, the problem and opportunities the project . the appraisal work put the whole future aspects of the projects and enable the project owner and the bank to be proactive and put contingency for any kind shortage. In DBE Adama branch case the researcher found that 44(54.3%) projects appraisal work are found to be not well undertaken appraisal. This mean that the appraisal work was not inclusive every requirement expected to be undertaken and 23(28.4%) projects appraisal work is found to be good and required appraisal. On the other hand the mean of quality appraisal work is 1.11 and standard deviation is 0.671.

4.1.3.4. Experience of Loan staff assigned for project as contact officer

Table 4. 9 Experience of loan staff assigned for the project

	Categories of Variables	frequency	Percent	Mean	median	Std. Deviation
Experience of Loan staff Assigned	<2yrs(0)	7	8.6			
	2-4 yrs(1)	44	54.3			
	>4yrs(2)	30	37.0	1 .28	1 .00	0.62

Source: SPSS result

Experience has a great role for the project to proceed as per the plan. This to show that as the is financed by two parties by the bank and the client, the bank assigned the contact officer has a major role up on his/her experience to follow the project regularly and recommend the appropriate advice for the project owner as he/she tends to lead the project to success. From the sampled projects 44 projects 54.3% is found to be contacted with loan staff with an experience of 2 years to 4 years.30 projects having 37% is found to be contacted with loan staff having an experience of

greater than four years. On the last 7 project having 8.6% is found to be contacted with loan staff of less than 2 years.

4.1.3.5. Quality of customer request handling

Table 4.10 Descriptive statistics of Quality of customer request handling by the bank

	Categories of variables	Frequency	Percent	Mean	median	Std. Deviation
quality of customer request handling	Low document collection and screening(0)	5	6.2			
	partially collected and screened(1)	20	24.7			
	collect the required doc but not screened(2)	36	44.4			
	collect document required and screened(3)	20	24.7	1.88	2.00	0.857

Source: SPSS result

The quality of customer request handling is very essential part the project success. The customer request should analyze in line with the loan procedure and agreement held the two parties for the sake and survival purpose of the two parties. Thus whatever the request is it the bank should give care for the request the client apply for.

4.1.3.6. Quality of follow up

Table 4. 11 Descriptive statistics of quality of follow up of the projects by the bank

	Categories of variables	Frequency	Percent	Mean	median	Std. Deviation
quality of follow Up	only for criteria follow up(0)	6	7.4			
	low quality follow up(1)	39	48.1			
	good and required follow Up(2)	26	32.1			
	good periodical and required follow up(3)	10	12.3	1.49	1.00	0.81

Source SPSS result

Follow-up is defined as "the monitoring and evaluation of the impacts of a project or plan for management of, and communication about the performance of that project or plan. Quality management processes help to control the cost of a project, establish standards, and determine the steps to achieving and confirming those standards. Effective quality follow up of a project also lowers the risk of project product failure. The quality of follow up of the project is very crucial for the project success that means enabling the project to proceed along the prior plan. Considering the role of the quality of follow up for the project success at international, national level and specifically at DBE Adama branch level the researcher found it as one of the determining factors for project implementation delay at DBE Adama branch. The Above SPSS output shows that from the sample taken from the project financed population 81 projects 39 projects is found to be low quality follow up having 48.1%of the total projects. On the other hand 26 projects follow up was found to be good and required follow up having 32.1% and 10 projects are good, periodical and required follow up which share 12.3% of the total sample. The least one from the given categories which share 7.4% having 6 projects follow up was found to be only for criteria follow up.

The quality of follow shown on the above histogram charts it is skewed to left and positively skewed Related this the mean value is 1.49 and standard deviation is 0.808. The kurtosis of the quality of follow up variable is not that much clear to decide to one of the three types. It partially seems like mesokurtic and partially. This due to the distribution of the data are skewed highly to the left and mean is highly larger than median and big standard deviation. From these data the researcher concluded that the quality of follow up highly determine the project implementation delay.

4.1.4. Current status of sampled projects

Development bank of Ethiopia is a specialized financial institutions engaged in financing of governments priority area project and lease. Lease financing is the recent product in DBE history. Whereas, the project financing is the as old as DBE history Development bank of Ethiopia has a long history in financing of different project from small to mega projects which were playing a great role filling the emerging market demand. This bank was one of the government owned bank and pass through different political governance of the country and misused for different purpose

other than the objective established for. As far as the bank is the government owned bank and misused for different purpose the bank could not able to build itself to grant the loan as per the market demand. The researcher as per his review and experience in the area selected the determinant of the project implementation delay in the case DBE Adama branch for the projects financed from the operational year of 2015 to 2020. From the total sample 81 projects 67 projects having 82.7% are found to be delayed and 14 projects having 17.3 projects are found to be not delayed projects.

4.2. Regression Analysis

Regression analysis is predictive modeling technique in which we find the relationship between independent variables and a dependent variable. It is mainly used for time series modeling, forecasting and finding causal relationships between the variables. Regression is a method to determine the statistical relationship between a dependent variable and one or more independent variables. The change independent variable is associated with the change in the independent variables (Dale-Berger,2017). This can be broadly classified into two major types. The interest of the researcher is Logistic regression.

4.2.3. Logistic Regression

It is used when the output is categorical. It is more like a classification problem. The output can be Success / Failure, Yes / No, True/ False or 0/1. There is no need for a linear relationship between the dependent output variable and independent input variables. If the output has only two possibilities, then it is called Binary Logistic Regression. If the dependent output has more than two output possibilities and there is no ordering in them, then it is called Multinomial Logistic Regression. If there is order associated with the output and there are more than two output possibilities then it is called Ordinal Logistic Regression (Dale-Berger,201 7).

4.2.4. Binary Logistics Analysis

Binary logistic regression is useful where the dependent variable is dichotomous (e.g., succeed/fail, live/die, graduate/dropout, vote for A or B). We may be interested in predicting the likelihood that a new case will be in one of the two outcome categories.

4.2.5. Measures of Goodness of Model

Table 4.12 Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	48.044[a]	.548	.730

a. Estimation terminated at iteration number 8 because parameter estimates changed by less than .001.

Table 4.13. Omnibus Tests of Model Coefficients

		Chi-square	Df	Sig.
Step 1	Step	64.233	28	.000
	Block	64.233	28	.000
	Model	64.233	28	.000

The use of conventional R2 for goodness fit when the dependent variable took either 1 or 0is not appropriate long (1997). The section contains what is frequently the most interesting part of the output: the overall test of the model (in the "Omnibus Tests of Model Coefficients" table) and the coefficients and odds ratios (in the "Variables in the Equation" table). The Hosmer-Lemeshow tests the null hypothesis that predictions made by the model fit perfectly with observed group memberships. A nonsignificant chi-square indicates that the data fit the model well. As per the regression output the model is fit where Nagelkerke R Square values are 73% means the predicting variable are explain 73% of the project implementation delay and the left are explained by other variable which the researcher could not seen and put them on the recommendation

Table 4.14. Variables in the Equation

	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)	
							Lower	Upper
Educational background of the client(2)	-6.035	2.844	4.504	1	0.034	0.002	0	0.63
Age of the client(2)	1.326	1.582	0.703	1	0.402	3.768	0.17	83.66
bankability of the client(2)	-5.409	2.323	5.422	1	0.02	0.004	0	0.425
Capital level of the client(2)	4.224	1.822	5.378	1	0.02	68.324	1.923	2427.441
Speed of response to the required information(2)	-3.062	1.629	3.533	1	0.06	0.047	0.002	1.14
Quality of document screening(3)	-4.688	2.352	3.974	1	0.046	0.009	0	0.924
quality of due diligence undertaking(1)	-10.58	4.551	5.403	1	0.02	0	0	0.19
Quality of Appraisal undertaking(1)	-7.532	3.13	5.79	1	0.016	0.001	0	0.247
Quality of Appraisal undertaking(2)	0.621	1.305	0.226	1	0.634	1.86	0.144	24.028
quality of customer request handling			6.912	2	0.032			
quality of follow up(2)	5.601	2.544	4.849	1	0.028	270.756	1.851	39597.106
quality of follow up(3)	6.095	2.621	5.406	1	0.02	443.557	2.604	75547.044
Constant	-0.667	3.269	0.042	1	0.838	0.513		

a. Variable(s) entered on step 1: Educational background of the client, Age of the client, bankability of the client, Capital level of the client, Speed of response to the required information, Quality of document screening, quality of due diligence undertaking, Quality of Appraisal undertaking, Experience Loan staff assigned, quality of customer request handling, quality of follow up.

4.2.5. Measures of Goodness of Model

The use of conventional R^2 for goodness fit when the dependent variable took either 1 or 0is not

appropriate long (1997). The section contains what is frequently the most interesting part of the output: the overall test of the model (in the "Omnibus Tests of Model Coefficients" table) and the coefficients and odds ratios (in the "Variables in the Equation" table). This table contains the Cox & Snell R Square and Nagelkerke R Square values, which are both methods of calculating the explained variation. These values are sometimes referred to as pseudo $R2$ values (and will have lower values than in multiple regressions. However, they are interpreted in the same manner, but with more caution. Therefore, the explained variation in the dependent variable based on our model ranges from 54.8% to 73%, depending on whether you reference the Cox & Snell $R2$ or Nagelkerke $R2$ methods, respectively. The researcher took Nagelkerke $R2$ as reference and the explained variations are 73% of dependent variables.. To explain specifically, the variables in equations,

Educational background the client negatively affect the project implementation delay. This means that when the level of the education of the client increase the project delay will decrease where the education of the client increase by one unit the delay will decrease by6.035 units. The p* value for the educational level of the client is 0.034 which is significant.

Bankability of the client has also negative relationships with the project implementation delay which means that when the bankability of the client increase by one unit the project implementation delay will decrease by 5.409 units.

Capital level of the client has also significantly affect the project implementation delay having p* value 0.020 and directly related with project implementation delay. This is to mean that when the capital level of the client has increase by one unit the project implementation delay increase by 4.224units. As some of the branch projects report shows that many projects called delayed are project having required level of capital. As the researcher tried to collect some data with capital level of the projects, those projects having capital engaged in different busi ness operation as they have limited level of capital and experience. Those project have only low level of educational background, limited level of international project management experience rather applying the old style management and seek for resource booming. This is why the capital of the client directly related to the project implementation delay.

Quality of due diligence undertaking has as well is found to be a negative relationship with project

implementation delay of the which means that when the quality of due diligence undertaking increase by one unit the project implementation delay of the project decrease by 10.580from this value we conclude that the quality of due diligence undertaking has a great effect on the level of the delay compare the other predicting variables

Quality of document screening is also the hypothesized predicting factors found to significantly explain the project implementation delay having the p* value 0.046. When the Quality of document screening increase by one unit the project implementation delay decrease by 4.688 units which shows to proceed the project as per the planned resource the bank should increase the quality document screening.

Quality of appraisal undertaking has also significant explaining factors for the project implementation delay which the p* value is 0.016. as shown on the above table the when the quality of appraisal work increase by one unit the project implementation delay decrease 7.532 units. This implies that when the quality of appraisal undertaking by the bank has high percentage by explaining the project implementation delay.

Y=b0+A1X1+A2X2+A3X3+A4X4+A5X5+A 6X6+ A 7X7+ A8X8+ A9X9+ A10X10+A11X11+E

Whereas the actual model found from the SPSS regression model output is as follows

Y= -0.667+-6.035X 1 +-5.409X2+4.224X3+-4.688X4+-1 0.580X5+-7.532X 6+E

Where X1 is Educational background of the client, X2 is bankability of the client, X3 is Capital of the client, X4 is Quality of document screening, X5 is quality of due diligence undertaking and X6 is Quality of Appraisal undertaking are the predicting variables found to be significant.

4.4. Research finding

The research thesis undertaken by Adane Semera, 2018 on project financed by Development bank of Ethiopia at Gambella regional state shows that the major findings as determinant of the project implementation delay include extremely poor implementation follow up by the relevant staff, frequent land over lapping, improper utilization of disbursed fund by promoters, low and limited capacity of the bank staff to assist the promoter regularly, poor time management and scheduling operational activities (work breaking down), lack of well-developed system of resources (natural, human, financial, social, physical and informational).To improve the performance of the agricultural projects, and future projects that have similar nature, the Bank and the project owners should give due attention to the correlates identified determinant variables for the delay of agricultural projects implementation by this study that determine project success.

The research thesis undertaken by Tadesa Tulu, 2018 on project financed by Head office of Development bank of Ethiopia shows that Data collected were analyzed using linear regression method. According to the findings, a strong, positive and significant relationship was observed between delay factors considered as independent variables and project delay. Among the six delay factors (poor project initiation, poor project planning/design system, improper implementation, poor project monitoring, evaluation and controlling system, poor communication and improper project closure), poor project initiation was identified and concluded as the determinants with the highest influence on project completion delay. So that any business initiators should select project those are more familiar and interesting for them and scope of project should be established, controlled and must be clearly defined and be limited

From the above descriptive and regression analysis from the previously hypothesized predicting variable the researcher found the six independent variables are significantly affect the project implementation delay and six hypotheses is accepted and five are rejected. The collected data are analyzed using descriptive and binary logistics analysis, the researcher found that six significantly determining factors for the project delay. Educational background of the client, bankability of the client, capital level of the client, quality of document screening, quality of due diligence undertaking and quality of appraisal work are predicting variables found to be significant and part of the model. Those research thesis undertaken at Gambella regional and

head office of the DBE cannot explain the real picture the overall country financed project problems as this study to added the additional information to be considered whenever to implement corrective action.

To explain them qualitatively up the proper usage of the national resource and officer of the lending institutions has to have an experience of to deliver the project requirement held budget as per planned and by undertaking due assessments from the very application stage and undertake good and required follow up to check up of the proper implementation of resources. That is the reason for the educational background of the client, bankability of the client, capital level of the client, quality of document screening, quality of due diligence undertaking and quality of appraisal work are found to be significantly affect the project implementation delay of the project of the branch.

4.4.1 Hypothesis Testing

Table 4.**16** Hypothesis testing

Ho	Description	P* value	Decision
1	**Hypothesis1:**The higher the educational level of the client, the lower the project implementation delay.	0.034	**Accepted**
2	**Hypothesis 2:**The lower the age of the client the lower the project implementation delay of the project	.233	**Rejected**
3	**Hypothesis 3:**The bankability of the client positively determine in lowering project implementation	0.020	**Accepted**
4	**Hypothesis 4:** the higher the capital the client possess the lower the project implementation delay that the project promoter can cover any budget short fall.	0.020	**Accepted**
5	**Hypothesis 5:**the higher the Speed of the response for the required information by the client, the lower the project implementation.	.060	**Rejected**
6	**Hypothesis 6:**Quality of document screening significantly	0.046	**Accepted**

	determines project implementation delay in that good document screening resulted in lower project delay		
7	**Hypothesis 7:** The higher the Quality of due diligence undertaking, the lower the project implementation delays.	0.022	**Accepted**
8	**Hypothesis 8:** the higher the Quality of appraisal works, the lower the project implementation delay and vice versa.	0.016	**Accepted**
9	**Hypothesis 9:** The higher the Experience of loan staff assigned as contact officer possess the higher he/she dig out the required data about the client that go for decision making implementation delay.	0.630	**Rejected**
10	**Hypothesis 10:** The higher the consideration for customer request, the lower the project implementation delay	0.132	**Rejected**
11	**Hypothesis 11:** the higher the quality of follow up, the lower the project implementations delay.	0.168	**Rejected**

CHAPTER FIVE

5.1. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1.1. Summary

The national economy of any country depends on the properly use of skills, knowledge for better use of national resources for achievement of the strategic economic objective. Developing project is by which these nations can increase the level of their relationship with Africa. Project is an economic means by which nations can create employment opportunities and income for government. Development Bank of Ethiopia is a specialized financial institution established to promote the national development agenda through development finance and close technical support to viable projects for the priority area sectors given by the government by mobilizing fund from domestic and foreign sources. DBE's main area of focus is provision of working capital, medium and long-term loans for priority areas investment projects and currently machinery lease (Lease Financing) for small and medium enterprises.

Thus, this research thesis intended to examine the factors affecting or factors contributing for implementation delay of the investment project from the client side and bank side. Those independent factors determine the project implementation delay from client side are Educational background of the client, Age, Bankability of the client, Capital of the client, Speed of the response for the required information and from bank side Quality of document screening, Quality of due diligence undertaking, Quality of appraisal work, Experience of loan staff assigned as contact officer, Quality of customer request handling, Rework rate and Quality of follow up.

The researcher undertook the thesis on the title Determinant of project implementation delay the case of Development bank of Ethiopia Adama Branch. To do this the researcher reviewed different related literature and finally summarized the determinant of project implementation delay was categorized into two dimensions. From the client side Educational background of the client, Age of the client, capital of the client, bankability of the client and speed of the response of the client for any required information. The predicting factors from the bank side are Quality of document screening, Quality of due diligence undertaking, Quality of appraisal work, Experience of loan staff assigned as contact officer, Quality of customer request handling and Quality of follow up.

To check their relationship with dependent variable project implementation delay the researcher used descriptive form of data analysis and binary logistics analysis. On the descriptive part the researcher found that the entire predicting variables have effect on the dependent variable. When regression analysis used to check their level of relationship with the dependent variable and test hypothesis Educational background of the client, bankability of the client, capital level of the client, quality of document screening, quality of due diligence undertaking and quality of appraisal work are predicting variables found to be significant and part of the model.

5.1.2. Conclusions

The researcher reviewed different related literature and finally summarized the determinant of project implementation delay was categorized into two dimensions.

- From the client side Educational background of the client, Age of the client, capital of the client, bankability of the client and speed of the response of the client for any required information.

- The predicting factors from the bank side are Quality of document screening, Quality of due diligence undertaking, Quality of appraisal work, Experience of loan staff assigned as contact officer, Quality of customer request handling and Quality of follow up.

To check their relationship with dependent variable project implementation delay the researcher used descriptive form of data analysis and binary logistics analysis.

- On the descriptive part the researcher found that the entire predicting variables have effect on the dependent variable.

- When regression analysis used to check their level of relationship with the dependent variable and test hypothesis Educational background of the client, bankability of the client, capital level of the client, quality of document screening, quality of due diligence undertaking and quality of appraisal work are predicting variables found to be significant and part of the model.

- The predicting variables component of affecting dependent variable is 73% whereas the left over are untouched variables due to time and cost limitation.

5.1.3. Recommendations

Taking into the research output the researcher is like to put the following recommendation for whoever wants to read or use this paper.

- The researcher found that the internal problem should be solved first before going to solve the problem due to external influence. This is to mean that when we start from the client side he or she or Entity going for loan service from DBE should give due consideration for resource and the procedure of the loan the bank governed by and have to have minimum concept about project to be developed. If we look for the bank side the bank should check its internal part through check its work quality and develop independent team or committee who are responsible for crosschecking document against the project to be established.

- The researcher only cover determining factors from the client side and bank side which the researcher believed that these factors are very decisive and basic for the sustainable project problem solving. Whereas the external one needs independent research though there are unlimited number of external stakeholders who are the user or looser due to this projects. But this factor is highly dependent on the two determining factors.

- For the next researcher I highly recommend that the external factors based to the internal are very broad and very difficult to manage the scope. Therefore the researcher first need to know these two factors the bank side and client side determining factors before he or she go for external one.

References

Ababet H/mariam, 2013,Causes and effects of project Implementation Delay on Loan Recovery Performance (The case of selected projects financed by Development Bank of Ethiopia)

Ahmed et al., 2002). Azhar and Farouqui (2008) (Proceedings of the world Congress on Project Management, IPM A, Ljublianaroject pg. 360)

Aibinu AA, Jagboro GO.The effects of construction delays on project delivery in Nigerian construction industry.Int J Project Manage 2002;20:593-9.

Anderson, J. (1994) Learning and Memory, An Integrated Approach, NewYork: Wiley

Assaf SA, Alkhalil M, Al-Hazmi M. Causes of delay in large building construction projects. J Manage Eng, ASCE 1995; 11(2):45-50.

Awad, A., & Fayek, A. R. (2012). A decision support system for contractor prequalification for surety bonding. *Automation in Construction, 21,* 89-98.*Int. J. Project Organization and Management, Vol. 12, No. 1, 2020*

Awad, A., & Fayek, A. R. (2012). A decision support system for contractor prequalification for surety bonding. *Automation in Construction, 21,* 89-98. (2018 by the authors; licensee Growing Science, Canada.)

Azudin, A., & Mansor, N. (2018). Management accounting practices of SM Es: The impact of organizational DNA, business potential and operational technology. *Asia Pacific Management Review, 23(3),* 222-226.

Belay Tefera 2017, Major causes of project implementation delay, the case of development bank of Ethiopia financed projects, Addis Ababa University, Ethiopia

Bosch-Rekveldt, M., Bakker, H., Hertogh, M., & Mooi, H. (2015). Drivers of complexity in engineering projects.In *Handbook on Project Management and Scheduling Vol. 2* (pp. 1079-1101). Springer International Publishi ng.

C. R. Kothari (2009) "Research Methodology: Methods & Techniques" (Second Revised Edition), New Age International Publishers, New Delhi

Christine Kagendo D53/Pt/Cty/13785/2009f actors Affecting Successful I mpl ementati on Of Projects In Non-Governmental Organizations Within Urban Slums In Kenya. Case Of Children Of Kibera Foundation

Cosenz, F., & Noto, L. (2015). Combining system dynamics modelling and management control systems to support strategic learning processes in SM Es: a Dynamic Performance Management approach. *Journal of Management Control, 26(2),* 225- 248, Kalkhouran, Rasid, Sofian and Nedaei (2015)..

Geoghegan, L. and Dulewicz, V. (2008) „Do project managers¶ leadership competencies contributeto project success?¶, *Project Management Journal,* Vol. 39, No. 4, pp.58–67, DOI: 10.1 002/pmj .20084.

Gransberg, D. D., Shane, J. S., Strong, K., & del Puerto, C. L. (2012). Project complexity mapping in five dimensions for complex transportation projects. *Journal of Management in Engineering, 29(4),* 316-326.

Gray, C.F. and Larson, E.W. (2008).Project Management, the Managerial Process, New York: McGraw Hill, p.15. European Scientific Journal May 2018 edition Vol.14, No.14 ISSN: 1857 – 7881 (Print) e - ISSN 1857- 7431 page 3

Hassan, M.M., Bashir, S. and Abbas, S.M. (2017) "The impact of project managers¶ personality onproject success in NGOs: the mediating role of¶, *Project Management Journal,* Vol. 48, No. 2, pp.74–87.

Imaga, E.U.L., Igwe, N.N. and Nwoji, S. (2005). Groundwork of Project Management and Feasibility Analysis Owerri: Ibeson Press, pp. 1 – 2. European Scientific Journal May 2018 edition Vol.14, No.14 I SSN: 1857 – 7881 (Print) e - I SSN 1857- 7431 page 3

Kabupaten Morowali. Tesis. UniversitasTadulako. Palu. International Journal of Innovative Research in Advanced Engineering (IJIRAE) ISSN: 2349-2163 page 2

Kalkhouran, A. A. N., Rasid, S. Z. A., Sofian, S., & Nedaei, B. H. N. (2015). A conceptual framework for assessing the use of strategic management accounting in small and medium enterprises.

Global Business and Organizational Excellence, 35(1), 45-54, (Duréndez, Ruíz-Palomo, García-Pérez-de-Lema, and Di éguez-Soto 2016).

Kappagomtula, C.L. (2017) "Overcoming challenges in leadership roles – managing large projectswith multi or cross culture teams[¶], *European Business Review,* Vol. 29, No. 5, pp.572–583,DOI: 10.11 08/EBR-1 2-2015-0177.

LARSON, E.W and GRAY, C.F. 2011, Project Management: The Managerial Process, 5th Edition,
McGraw Hill.

Lavia López, O., & Hiebl, M. R. (2015). Management accounting in small and medium-sized enterprises: current knowledge and avenues for further research. *Journal of Management Accounting Research, 27(1),* 81-119.

Lopez-Valeiras, E., Gomez-Conde, J., & Naranjo-Gil, D. (2015). Sustainable innovation, management accounti ng and control systems, and i nternati onal performance. *Sustainability, 7(3),* 3479-3492.

Papke-Shields, K. E., Beise, C., & Quan, J. (2010). Do project managers practice what they preach, and does it matter to project success?. International Journal of Project Management, 28(7), 650-662.

Science Journal of Business and Management 2015; 3(3): 82-94 Published online May 29, 2015 (http://www.sciencepublishinggroup.com/j/sjbm) doi: 10.11 648/j .sj bm.201 50303.14 ISSN: 2331-0626 (Print); ISSN: 2331-0634 (Online) page 1

Pratama, Aditya B. 2018. Analisis Faktor yang Mempengaruhi Produk tivitas Tenaga kerja Konstruksi Di

Sekaran Uma. Research methods for business: a skill building approach. 3rd ed. New York: John Wiley; 2000

Serrador, P., & Turner, R. (2015). The relationship between project success and project efficiency. Project M anagement Journal, 46(1), 30–39. http://doi .org/10.1 002/pmj .21468 Ghani, N.A.A and ismail, S. / Journal of Management, Economics, and Industrial Organization, Vol.1 No.1, 2017, pp.37-42. Page 3

Shenhar, Aaron J., &DvirDov. 2007, Reinventing Project Management: the Diamond Approach to Successful Growth and Innovation, Boston: Harvard Business School Press.

Shields, J., & Shell eman, J. M. (2016). Management accounting systems in micro-SM Es. *Journal of Applied Management andEntrepreneurship, 21(1),* 19, (Lopez-Valei ras, Gomez-Conde and NaranjoGil, 2015).

UNCTAD December 2016 The Role of Development Banks in Promoting Growth and Sustainable Development in the South Economic Cooperation and Integration among Developing Countries

Theodore, T. (2009).Types of Construction Delays. Understanding them clearly, analysing them correctly. 2nd Edition. Oxford: Elsevier Inc. Pages 25-36.)

https://www .researchgate.net/publ i cati on/26374701 3_Quality_Control_and_Due_Diligence_in Project_Management_Getting_Decisions_Right_by_Taking_the_Outside_View#:~:text= D ue%20di li gence%20i s%20a%20term,Chapman%2C%202006)

(https://www . researchgate.net/prof i le/Dal e-Berger?enri chId=rgreq-e2271 47ef 50e1 63388dd1 0d996d88f 1 dX XX & enri chSource=Y292ZXJQY Wdl OzM yM D UwNTE1 OTtBUzo1NTEyM DQxOTl2OTgzNj hAM TUwODQyODcyODA2Ng%3D%3 D& el =1 _x_5&_esc=publ i cati onCoverPdf).

HARAMBE UNIVERSITY COLLEGE OF BUSINESS AND ECONOMICS

ADAMA

Data collection means/tools for the ongoing research project from the secondary sources

Objective of the questioners: **to collect required data concerning the under listed independent variable to check up their relationship and effect on the dependent variable, Project implementation delay.**

Independent variables

Thus, this research thesis intended to examine the factors affecting or factors contributing for implementation delay of the investment project from the client side and bank side.

Those independent factors determine the project implementation delay

A. <u>From client side are:</u>

1.   Educational background of the client

What is the level of Education is he/she have?

a. Degree(2) b. Diploma(1) c. less (0) d, Above degree

2.   Age,

What is the age of the client?

a. <=40(2)   b. 41-55(1)   c. >55(0)

3.   Bankability of the client,

a.   More bankable, experience of >1 0yrs(2)

b.   Medium bankable experience of 5-1 0yrs(1)

c.   Less than 5 yrs(0)

4.   Capital of the client,

a.   Having capital >7.5 million(3)

    b. Having capital 5miilon -7.5million (2)

    c. Having capital 2-5 million(1)

    d. Having capital< 2million (0)

5.   Speed of the response for the required information

    a. Active respondent and communicative(3)

    b. Active but not respond as per required (2)

    c. Respond but not active to follow the progress of his application(1)

    d. Not active not respond as per required (0)

B. **From bank side**

1. Quality of document screening,

    a. The required document collected and screened (3)

    b. the required document collected but not screened (2)

    c. the required document partially screened and collected(1)

    d. low screening and document collection(0)

2. Quality of due diligence undertaking,

  a. required format filled and added other required information to be used by next department(3)

  b. required format filled but not explained well (2)

  c. The required format is not filled well (1)

  d. the format is not given required value to have an implication on the project success(0)

3. Quality of appraisal work,

  a. good and required appraise(2)

  b. not well undertaken appraise(1)

  c. partially good partially not good (0)

4. Experience of loan staff assigned as contact officer,

  a. <2years(0)   b. 2-3 yrs(1)   c. >=4yrs((2)

5. Quality of customer request handling,

6. Quality of follow up.

    a.   Good, periodical and required follow up(3)

    b.   Good and required follow up(2)

    c.   Low quality follow up(1)

    d.   Only for criteria follow up (0)

       1.   How you can describe the implementation of this project?

       A, not delayed (no) B. delayed more than 6 months(Yes)

Qualitative part of data collection tools

       2.   If delayed what is the reason behind? Can you list them in their chronological order

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       3. Can you say brief out the relation of these factors to this project implementation delay?