# Journal of Business and Administrative Studies (JBAS)

Volume 13, No. 1

ISSN-2077-3420

January 2021

Articles:

The Effect of Organizational Commitment on Professional Employees' Turnover Intention: Evidence from United Bank S.Co

Henock Emiru and Ephrem Assefa Haile

**Risk Management in Building Construction Projects: Contractors and Con**sultants Perspectives

Alem Teferi and Dejene Mamo Bekana

**Determinants of Micro Enterprise Growth In Manufacturing Sector: The case of Jimma Town** 

Thomas Tadesse Firisa

Applications of Social Exchange, Human Capital and Dynamic Capability Theories in Management Studies: A Review

Tesfaye Tilahun

Note to contributors

Bi-annual Journal Published by St. Mary's University School of Business Addis Ababa, Ethiopia

# Disclaimer:

The findings, interpretations and conclusions expressed in this journal do not necessarily reflect the views of the publisher or those of the editors.

# Journal of Business and Administrative Studies

# (JBAS))

Volume 13	Number 1	January 2021	
Articles:			Page
<b>The Effect of Organizational Commitme</b> <b>Intention: Evidence from United Bank S</b> <i>Henock Emiru and Ephrem Assefa Haile</i>		al Employees' Turnover	1
<b>Risk Management in Building Construct</b> <b>Perspectives</b> <i>Alem Teferi and Dejene Mamo Bekana</i>	ion Projects: Co	ntractors and Consultants	26
<b>Determinants of Micro Enterprise Grow</b> <b>Manufacturing Sector: The case of Jimm</b> <i>Thomas Tadesse Firisa</i>			58
<b>Applications of Social Exchange, Human</b> <b>Theories in Management Studies: A Rev</b> <i>Tesfaye Tilahun</i>		namic Capability	76
Note to contributors			91

Bi-annual Journal Published by St. Mary's University School of Business Addis Ababa, Ethiopia

# **EDITORIAL COMMITTEE**

### **Editor-in-Chief**

Dr. Maru Shete (Associate Professor), St. Mary's University, Addis Ababa, Ethiopia. Email: maru\_shete@smuc.edu.et

### **Editorial Board Members:**

- Dr. Belete Kebede (Associate Prof.), Medaille, School of Education, New York State, USA
- Prof. Jorge Gomes, Lisbon School of Economics and Management (ISEG), University of Lisbon, Portugal
- Prof. Meskerem Tadesse, Department of Business Administration, University of the West, USA
- Dr Muluadam Alemu (Asst. Professor of Public Policy), University of Gonder, Ethiopia
- Dr. Tilaye Kassahun (Associate Prof. of Management), St. Mary's University, Addis Ababa, Ethiopia
- Dr. Zenegnaw Abiy, International Monetary Fund (IMF), Addis Ababa, Ethiopia
- 7. Dr Dereje Teklemariam (Associate Prof. of Management and Development Studies), Ethiopian Civil Service University, Ethiopia.
- Shimelis Zewudie Mersha (Asst. Prof. of Public Financial Management), Ethiopian Civil Service University, Ethiopia

**St. Mary's University (SMU)** is one of the leading private higher education institutions spearheading the dissemination of knowledge in the country. Over the past ten years, **SMU** has achieved remarkable progresses as well as successes in the transmission of knowledge.

**Journal of Business and Administrative Studies (JBAS)** is a peer-reviewed bi-annual journal published by St. Mary's University and dedicated to the promotion and production of knowledge through the scientific methods of enquiry to achieve independent analysis as well as collection, processing and interpretation of data.

Cognizant of the complementary functions of transmission of knowledge (through teaching) and the conduct of scholarly inquiry (through research), SMU has aggressively been promoting publications of journals and conducting conferences for well over a decade. On one hand, while SMU recognizes that its faculty staff, academics and practitioners in the country possess a wealth of untapped scholarly and research potential. On the other hand, we believe that this immense potential has not been realized due partly to lack of resources and partly to the absence of a reliable outlet (i.e. journals). This concern has prompted the academic leadership at SMU to launch JBAS.

JBAS shall hopefully fill the vacuum created by the absence of outlets in the realm of business, economics and administrative studies in the country. The purpose of this Journal is to provide practitioners and scholars with a forum through which they would get opportunities to publish their research based debate as well as discourse in the fields intimated. Equally important, it shall offer insight into developments in the fields bringing Ethiopian realities under purview.

Contributors shall thus come from a broad range of fields and disciplines seeking to reflect on the theoretical and practical developments in the areas of accounting and finance, economics, management, marketing, public management as well as governance and related fields.

# The Effect of Organizational Commitment on Professional Employees' Turnover Intention: Evidence from United Bank S.Co

#### Henock Emiru

Acting Relationship Manager at Corporate Banking Department, Hibret Bank S.Co. Email address: henocke@hibretbank.com.et

### Ephrem Assefa Haile<sup>1</sup>

Assistant Professor, School of Business, St. Mary's University, P.O.Box 1211, Addis Ababa, Ethiopia. Email address: ebezu.4ever@gmail.com

#### Abstract

Employees' level of commitment to their organization is presumed to a positive effect on organizational performance. Although turnover is important if less performing and committed employees leave their organization, it causes detrimental effects when employees quit their job. Building on the social exchange theory, this study is aimed to determine the effect of organizational commitment on professional/skilled employees' turnover intention in the case of United Bank S.Co. Recently, high labour turnover has become a major problem for the banking industry in Ethiopia. Thus, well experienced and qualified professionals in the banking industry leave their positions which in turn create undesirable cost and harming organizational productivity. United Bank S.Co is one of the victims of skilled labour turnover in the country. Perceptual data related to the level of organizational commitment and intention to leave the organization was gathered via structured questionnaire from 205 professional employees of the bank. Descriptive and inferential statistics were used to analyze quantitative data. Regression analysis results showed that out of the three organizational commitment dimensions, only normative commitment had caused a statistically significant effect ( $\beta$ =-0.235, p< 0.05) on turnover intention. However, in contrary to theory, the study didn't report any significant effect of affective and continuance commitment on turnover intention. This implies that other factors could also have an impact on professional employees' intention to leave their organization. Based on the findings of the study, the bank management is highly recommended to develop retention strategies that would help it to retain and benefit from its professional employees. As a result, the bank will be able to decrease turnover rate and turnover-related costs and increase the firm's overall performance.

Keywords: Organization commitment, affective commitment, continuance commitment, normative commitment, professional employees, turnover intention

<sup>&</sup>lt;sup>1</sup> Corresponding author

# 1. Introduction

# 1.1 Background of the Study

The dynamic business environment is not only affecting organizations but also employees who are working in them. Human resources management has played a vital role in managing employees to meet organizational objectives (Hassan *et al.*, 2011). Employees are an important asset to every organization. In fact, the success of every organization rests on how it effectively utilizes its workforce. An organization may invest many resources into its core operations and activities, but without a highly effective human resource, success in the long run cannot be achieved (Ton and Huckman, 2008). Nowadays, no organization can perform at full potential unless each employee is committed to the organization's objectives. Hence, it is important to understand the concept of organizational commitment and its feasible outcome.

Commitment from employees is a powerful gift for any organization. One needs to ensure that the work environment challenges employees to grow and stretch in their ability to contribute. One must also realize that the work environment must also nurture employees in employee-friendly ways. Committed employees who are also highly motivated to contribute their time and energy to the pursuit of organizational goals are increasingly acknowledged to be the primary asset available to an organization (Harris, 2005). They provide the intellectual capital that, for many organizations, has become their most critical asset. Furthermore, employees who are committed to their organization and collective wellbeing are more suitable to generate the social capital that facilitates organizational learning.

Organizations get their work accomplished through employees who perform different tasks. Therefore, to improve the performance of organizations, employee commitment is necessary as it enhances the level of employee performance. Highly committed employees are of great value to the organization as they may need little or no supervision to accomplish the tasks assigned to them (Brown, 2011). Every employee needs to be committed to the company's goals and objectives, performs duties as effectively as a member of the team to realize organizational objectives. Committed employees remain within the organization, therefore, saving the organization of the costs required to recruit, train and develop new staff. Employee commitment continues to be a major focus of inquiry given its predicative power on employee, and organizational, relevant outcomes (Meyer, 2002). Employee commitment to an organization is a demonstration of employee satisfaction with the employers in terms of their expectations. When an employer meets the expectation of the employee, the employee in turn provides commitment. This is what makes work get done. Commitment comes if an employee has been provided with an enabling environment to be able to maximize of their full potential.

There is no general agreement as to what can increase an employee's commitment to the organization as every organization is different from another (Luchak, 2007). Looking at the organizational working environment in the 21<sup>st</sup> century together with its challenges, not all employees are equally committed to their work and; therefore, managers need to be aware of the individual and situational factors that build employee commitment to overcome turnover intentions (Hussain, 2012).

These days, organizations are working on designing retention strategies for the employees so that thier talent can be utilized in the best possible way. Employee turnover basically means the percentage of employees who within a particular period of time decide to leave the company or business for other companies. This enforces the company to replace them with new employees at an additional cost (Tracey and Hinkin, 2008). It is a measure of the extent to which the old employees leave, and new employees enter the organization in a given period. On the other hand, turnover intention refers to an employee's desire or intention to leave the organization (Kaur, 2013). It is a measurement of whether employees plan to leave their positions or whether that organization plans to remove employees from positions.

Turnover intention has been considered as the best predictor of actual turnover. Organizations incur direct and indirect costs due to employee turnover. Direct costs include the cost of leaving, replacement costs, and transition costs, while indirect turnover costs includes the loss of production and reduced performance (Cascio, 2003; Laura, 2016). Employee retention is a vital issue and become a challenge to all organization because of the costs associated with recruiting, selecting and training new employees (Allen *et al.*, 2010). A successful company often has a high employee retention rate. To have a competitive edge over the other organizations, the turnover must be controlled by taking measures which in turn leads to increase in employees' level commitment

towards their organization (Arshadi, 2013). It is argued that turnover has positive and negative effects on organizations. It is to the benefit of an organization if incompetent employees leave their positions; while it detrimentally affects the performance of an organization when skilled and professional employees leave their job. This study is, therefore, aimed to unlock the effect of organizational commitment on professional employees' turnover intention in the case of United Bank S.Co.

# 1.2 Statement of the Problem

Prior empirical studies have reported conflicting results with regard to the relationship between organizational commitment and turnover intention. Some studies have reported inverse relationship between organizational commitment and turnover intention (Sow, 2015; Pawirosumarto *et al.*, 2017; Harden *et al.*, 2018; Adem, 2019), others have discovered the positive effect of affective and continuance commitment on intention to leave (Gursu, 2016) while still some others (Bonds, 2017) couldn't find substantial empirical evidence on the relationship between these two constructs. This implies that there is still lack of conclusive knowledge about the link between the above constructs.

Moreover, most of prior studies were carried out in developed countries leaving little empirical evidence in developing countries. Sisikin (2016) has investigated the moderating effect of embeddedness on the commitment and turnover intentions relationship in California State University. Based on survey conducted on 154 employees, the study revealed that both job and organizational embeddedness moderated the commitment-turnover relationship. Harden, et al, (2018) have investigated the turnover intention of technology professionals based on data gathered from 800 IT employees of US federal agency. The findings of the study revealed that organizational commitment has a significant negative effect on turnover intentions.

Pawirosumarto *et al.*, (2017) investigated the effect of organizational commitment on turnover intention in case of Narada School, in Indonesia. The researcher affirms that the three dimensions of organizational commitment namely affective, continuance, and normative commitment have a significant negative effect on turnover intention at Narada School. Another study by Dogar (2008) attempted to answer weather organizational commitment varies according to demographic factors on banking sector in Turkey. Based on data gathered from 200 respondents, the researcher found that affective and

continuance commitment increased with age and job experience, and all components of commitment increase according to time in the previous job.

Contrary to theory, Faloye (2014) based on study on 144 respondents from selected paramilitary organisation in Akure, Nigeria has reported the positive relationship between the three dimensions of organizational commitment (affective, continuance and normative) and intention to leave. Likewise, Gürsu (2016) in his study on employees of 6 largest private banks in Alanya city in Turkey has indicated that affective and continuance commitments have positive relationship with intention to leave. However, normative commitment negatively influences the turnover intention.

Looking at studies conducted in Ethiopia, Asmamaw (2011) has examined the causes of professional employee turnover in the case of Ministry of Finance and Economics Development. The research findings indicate that employees are dissatisfied with pay, working environment, supervision, became stressful and their level of commitment to the organization was low. Moreover, Adem (2019) has conducted a study on the effect of organizational commitment on employees' turnover intention in the case of Ethiopian Trading Business Corporation (AlleBejimla). The research findings showed that in organizational commitment, at aggregate level is negatively related to turnover intention. Furthermore, while all three dimensions of commitment have a negative relationship to the dependent variable i.e. turnover intention; affective commitment was found to have a strong negative relationship with turnover intention while the other two had a moderate negative relationship.

In general, most of prior studies on the effect of organizational commitment on turnover intention were conducted in developed countries and focused on manufacturing industry with little emphasis accorded to turnover intention in developing countries particularly in the banking sector. Moreover, although the turnover rate of United Bank S.C is declining from time to time, still it can be considered as a major problem which requires scientific investigation to take pragmatic solutions. For instance, in 2015/16 the turnover rate of the bank was 4.6 % (149 employees) and this has declined to 3.11% (111 employees) in 2019. Turnover intention would affect employee work related behaviour such as morale and productivity, and increases organizational costs.

The researchers argue that different groups of employees (such as core/knowledge-based, contractual, job-based and alliance) have different level

of strategic importance to an organization and hence require different retention approaches. Core or professional employees have a specialized and firmspecific knowledge which are strategically important to boost firm performance (Lepak and Snell, 2002). Different from other employee groups, knowledge based employees' turnover could deteriorate organizational performance. This study is, therefore, conducted to fill the above gap by examining the effect of organizational commitment and its dimensions namely affective, continuance and normative commitment on skilled employees' turnover intention in the case of United Bank S.C.

# 2. Literature Review 2.1 Social Exchange Theory

The theoretical foundation of this study is built on the social exchange theory. This theory asserts that social behaviour is an outcome of continuous social exchange processes between workers and managers, coworkers and organization. The relationship is a long-term process and is based on the norm of reciprocity (Rai, 2013). The theory states that if employers care much about their employees (such as creating good working conditions, offering better rewards, providing managerial support and the like), then employees will reciprocate back with better performance. Furthermore, in return for organizational support, employees tend to be morally obliged to remain committed to their organization (Cropanzano & Mitchell, 2005). This exchange process could have social and economic features. The social aspect of the exchange process is related to enhancing social bondage and developing status within a given social network; whereas the economic aspect of the process is tied to providing better financial rewards and benefits to employees (Harden, et al, 2018).

# 2.2 The Concept and Dimensions of Organizational Commitment

The modern concept of commitment was developed considering that the organization's interests must always succeed over the interests of individuals or groups of employment. But, it was in the 1980s, when employee participation in the workplace was a point of substance discussion and a burning issue (Payne, 2003). Organizational commitment is a situation where employees are favoring a particular organization and its goals, and they are willing to maintain membership in the organization (Robbins & Judge, 2008). It also refers to the extent to which individuals psychologically identify with their work

organizations (Idris & Manganaro, 2017). Luthan (2006) defined organizational commitment in three stages- a strong desire to remain as a member of a particular organization; the desire to strive according to desire of the organization; and a certain belief and acceptance of the values and goals of the organization. Commitment is regarded as a function of satisfaction with the service provider, quality of alternative providers and investment in the relationship (Suliman & Iles, 2000). Organizational commitment is reflected in at least three general forms: (1) affective commitment, (2) normative commitment, and (3) continuance commitment. Details of the three general forms of commitment are presented below.

1) Affective commitment: It is based on intrinsic personal desire, which entails employee's emotional attachment to the organization, its identification with the organization and involvement in its operation, namely, the agreement of objectives of the organization and of the individual. Affective commitment implies employee's involvement in organizational activities, a strong willingness to contribute to achieving organizational goals and a strong desire to remain with the organization (Idris & Manganaro, 2017). Affective commitment is the result of an agreement between the values and goals of individuals and organizations. They are committed to the organization; they also feel competent to do the job as well as satisfied with their role in the organization (Krikwood, 2006). This form of commitment indicates a strong emotional bond resulting from an individual's ability to identify its relationship with the organization, and then they will feel closeness to the organization (Chu & Li, 2010). This dimension of organizational commitment involves emotional attachment, identification with the organization and internalization of organizational values. Employees who are very affectively dedicated to organization remain in it because they want to be. Members who are committed on an affective level stay with the organization because they view their personal employment relationship as congruent to the goals and values of the organization (Beck, 2000).

3) **Continuance commitment:** Continuance commitment implies employee's commitment to his/her organization arising from the associated costs involved in leaving the organization (Tekingündüz *et al.*, 2017). It refers to the awareness of the costs associated with leaving the organization. The potential costs of leaving the organization involve the threat of wasting time and effort spent on the acquisition of non-communicable skills, loss of attractive benefits, waiver of privilege that brings long years of service, and the collapse of family and personal partnerships. In addition to costs related to leaving the organization, continual commitment will also develop in the absence of alternative employment opportunities.

This form of commitment can be regarded as an instrumental attachment to the organization, where the individual's association with the organization is based on assessment of economic benefits gained (Beck, 2000). Individuals stay in the organization because of the investments they accumulate due to the time spent in the organization, not because they want to. This is different to affective commitment wherein individuals stay in the organization because they want to, and they identify with the organization and its values. The key to this form of commitment is a necessity for survival (need to). Continuance commitment involves the price to be paid to employees who leave the organization and the commitment of those staying in the organization (Chu & Li, 2010).

2) Normative commitment: Normative commitment by is defined as the condition where an employee does not quit job because of the moral responsibility and obligation towards his/her organization (Ayondele et al., 2013). This sense of obligation to remain in the organization can be realized from the internalization of normative pressures on the individual primarily to approach the organization itself (family or cultural reasons) or from the organizational orientation when influential individuals in the employee environment can exercise strong pressure on the employee to feel a moral responsibility towards the organization. As Gonzales and Guillen (2007) have stated, this form of commitment is based on the feeling of obligation to remain a member of an organization based on morality. Mowday in Sopiah (2008) also argues that normative commitment is commitment to the organization based on the norms that exist within the employees; their individual beliefs would be the responsibility of the organization. Employees feel that they have to stay because of loyalty. The key to this commitment is the obligation to stay in an organization (ought to).

Normative commitment consists of two dimensions: feeling obligation and moral commitment (Gonzales & Guillen, 2007). The strength of normative organizational commitment is influenced by accepted rules about mutual obligation between the organization and its members. The mutual obligation is based on the social exchange theory, which suggests that a person receiving a benefit is under a strong normative obligation or rule to repay the benefit. Overall, employees with a strong normative commitment survive because they think they must do so.

### 2.3 Turnover Intention

Employee turnover basically refers to the percentage of employees who within a particular period of time decide to leave the company or business for other companies. These enforce the company to replace them with new employees at an additional cost (Tracey & Hinkin, 2008). Harrison *et al.*, (2006) have defined turnover intention as an individual's preference to quit the job. Turnover intentions are a product of many factors. These include: an employee's attitude and potential, appraiser, peers, management, organizational environment, external compatible job demands, job satisfaction, trust and commitment (Rahman & Nas, 2013). It is considered as the best predictor to identify the behavior of turnover among employees of an organization (Culpepper, 2011).

Turnover intention, like turnover itself, can be either voluntary or involuntary (Michaele, 2016). Voluntary employee turnover occurs when an employee leaves the organization with his own will and arises from low level of job satisfaction, bad working condition, limited promotion and growth opportunities, and better job opportunities elsewhere. Contrarily, involuntary turnover occurs when the organization terminates an employee due to his/her inability to do the job (poor performance), and the staff member resigns from his or her position unwillingly. It can also result from uncontrollable factors such as death and poor health.

Turnover could also be functional or dysfunctional. Functional turnover happens when the employees' departure becomes advantageous to the employer, whereas in dysfunctional turnover, the employer has an interest of retaining the leaving employee. Functional voluntary and involuntary turnover could benefit an organization. For example employee turnover at subordinate organizational levels could be beneficial to banks because advances in technology continue to reduce the need for lower level skills in the banking sector. On the other hand, the need for non-manual, intermediate and high level skills as well as value-adding competencies such as autonomy and discretion are on the rise in the banking sector. Therefore, both voluntary and involuntary turnover could be dysfunctional if the result is a loss of human capital (Pietersen, 2014).

Turnover could also be distinguished between avoidable and unavoidable turnover. Avoidable turnover is something organizations can prevent by hiring, evaluating and motivating their employees more effectively. On the other hand, unavoidable turnover is brought about by life decisions that are out of the employee's control, like transferring to another area to join a spouse (Sandra, 2012).

Different factors affect employees' turnover intention including age, length of employment, education level, and attachment to the company (Novliadi, 2007). Turnover intention could also be affected by poor wages and promotion system, work and working conditions, working hours, rest and recreation time, insufficient oversight, lack of information and communication, job dissatisfaction, inadequate or lack of social services in the workplace, poor pricing system and poor administrative practices (Simsek *et al.*, 2005).

# 3. Research Methodology

# 3.1 Research Approach and Design

Data were gathered via structured questionnaire, and hence the study applied a quantitative research approach to meet the research objectives. Moreover, an explanatory research design was used in order to unlock the strength and direction of effect of organizational commitment on professional or knowledge-based employees' turnover intention in the case organization.

# 3.2 Sample Size and Sampling Technique

According to the bank's statistical records, there are 4245 employees who are working in the bank. The bank has divided its branches into four grades (namely A, B, C and D grades) based on deposit mobilization, the number of accounts opened and transaction and size of remittance and the number of customers. However, the researchers have chosen "A grade" branches as they have a large number of skilled employees as well as sub branches than grade B, C and D. There are 14 "A grade" branches in the bank.

No	Name of 'Grade A'	Total employees'	Skilled employees	Sample size	
	Branch	Population in the population in			
		branch	branch		
1	Bole	29	17	17	
2	Lideta	23	15	15	
3	Bole Medhanealem	38	18	18	
4	Bombtera	29	20	20	
5	Tana	27	15	15	
6	Mehal Arada	20	14	14	
7	Leghar	29	18	18	
8	Ayer Tena	25	10	10	
9	Wellosefer	21	14	14	
10	Hilton	23	18	18	
11	Bisrategebriel	20	13	13	
12	YererBer	21	13	13	
13	Genet	14	10	10	
14	СМС	20	15	15	
	Total	339	220	220	

 Table 1: Employees' Population Working in Grade A Branches

Source: Own survey data (2020)

As shown in table 1, there are 220 professional employees who are currently working in 'Grade A' branches of the bank. Furthermore, each branch has three sub divisions/ sectors (operation, loan, and trade finance). Due to manageable population size, the researchers have conducted census. This study focused on core or professional/knowledge-based employees who use much of their brains rather than their muscles to do their job. Knowledge-based employees possess strategically valuable and unique knowledge (Lepak & Snell, 2002) and hence need to be treated very well to reduce their intention to leave the organization.

### **3.3 Conceptual Framework and Research Hypotheses 3.3.1 Conceptual Framework**

The conceptual framework of the study is based on the social exchange theory. The theory avers that the more the organization treats its employees, the higher will be employees' performance and level of commitment to their organization (Cropanzano & Mitchell, 2005). Commitment is a psychological state with at least three separate components reflecting a desire, a need, and an obligation to maintain employment within an organization. Thus, organizational commitment is a multidimensional construct composed of affective, continuance and normative commitment. Empirical studies often indicate that employees' commitment to an organization is inversely related with their intention to leave an organization. The framework below, drawn from theoretical and empirical literature, portrays the relationship between organizational commitment (independent variable) and intention to leave an organization.

### **Organizational commitment**

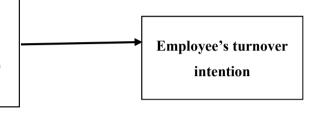
- Affective commitment (H<sub>1</sub>)
- Continuance commitment (H<sub>2</sub>)
- Normative commitment (H<sub>3</sub>)

### Figure 1: Conceptual Framework

Source: Authors' (2020)

### 3.3.2 Research Hypotheses

1) Affective commitment and professional employees' turnover intention Affective commitment refers to an employee's emotional feelings, identification and level of involvement with his/her organization. Prior literature has reported the negative effect of this form of commitment on an employee turnover intention. According to Novliadi (2007), factors that influence the occurrence of turnover intention are quite complex and interrelated one to another. These factors include age, length of employment, education level, and attachment to the company. It is also argued that, compared to normative and continuance commitment, affective commitment is said to have the strongest negative effect on turnover intention (Meyer et al., 2002). Moreover, based on a study conducted on Turkish banking sector, Ebru Gursu (2016) discovered an inverse relationship between affective commitment and turnover intention. Similarly, based on his study on healthcare internal auditors in US, Sow (2015) has reported the negative effect of affective commitment on turnover intention. Similar findings were reported by Luz et al., (2018). Thus, based on the above theoretical and empirical backdrop, the second hypothesis is stated as follows:



*H*<sub>1</sub>: Affective commitment causes statistically significant negative effect on professional employees' turnover intention.

# 2) Continuance commitment and professional employees' turnover intention

Continuance commitment refers to employee commitment to the organization based on the perceived cost of leaving the organization (Vandenberghe & Tremblay, 2008). This implies that if employees perceive that the cost of leaving the organization is high, then they will be less likely to quit their job or leave their organization. Some prior studies have supported the inverse relationship between continuance commitment and turnover intention. Gürsu (2016) has investigated the relationship between organizational commitment and turnover intention in the private banking sector in Alanya city in Turkey. The findings of the study indicated that continuance commitment was inversely correlated with intention to leave. Thus, based on this theoretical background, the third hypothesis is stated as follows:

# *H*<sub>2</sub>: Continuance commitment has a statistically significant negative effect on professional employees' turnover intention.

# 3) Normative commitment and professional employees' turnover intention

Normative commitment refers to the commitment employees have to their organization arising from their moral obligation (Vandenberghe & Tremblay, 2008). In other words, it is the feeling of obligation to remain in the organization. This sense of obligation to remain in the organization can be realized from the internalization of normative pressures on the individual primarily to approach the organization itself (family or cultural reasons) or from the organizational orientation when influential individuals in the employee environment can exercise strong pressure on the employee to feel a moral responsibility towards the organization. As Gonzales & Guillen (2007) have pointed out, this form of commitment consists of two dimensions- feeling obligation and moral commitment. According to social exchange theory, an employee tends to remain loyal to the organization and reciprocate back with good performance provided that the organization positively treats him/her. Prior studies have reported negative relationship between normative commitment and intention to leave (Ebru Gursu, 2016; Andrea A. Bonds, 2017). Moreover, based on their study aimed to determine the effect of organizational commitment and job satisfaction on turnover intention on a sample of 172 IT professional in Brazil, Luz, et al, 2018) have discovered that satisfaction with pay, affective and normative commitments have negatively influenced turnover intention. Thus, based on the aforementioned information, the fourth hypothesis is stated as follows:

# *H<sub>3</sub>: Normative commitment has a statistically significant negative effect on professional employees' turnover intention.*

### 3.4 Measurement of Variables

### 3.4.1 Measuring Organizational Commitment

The researchers have adapted a scale developed by Meyer *et al.* (1993) to measure organizational commitment. The measurement scale was composed of 18 items divided into three dimensions, namely affective, continuance and normative commitment. Thus, skilled employees in the bank were asked about their opinion towards each of these dimensions of commitment by using a 7-point Likert scale (1= strongly disagree, 7= strongly agree). Sample items include 'I would be very happy to spend the rest of my career with this organization', 'Too much of my life would be disrupted if I decided I wanted to leave my organization now' and 'I would feel guilty if I left my organization now.' The scales were tested to be free from reliability and validity concerns. The reliability coefficient for affective commitment, continuance commitment and normative commitment were 0.930, 0.72 and 0.85, respectively. This implies that the scales are reliable since the coefficients are above the minimum threshold (0.70).

### 3.4.2 Measuring Turnover Intention

In this study, professional employees' turnover intentions were measured by a scale (TIS-6) initially developed by Roodt (2004) and later modified by Bothma and Roodt (2013). The later scholars have reduced the initial items from 15 to 6 items. The Cronbach's alpha coefficient of the scale was 0.913, which is above 0.70, and hence found to be highly reliable. Sample items include '*I often consider leaving my job' and 'I am likely to accept another job at the same compensation level if offered to me'*. Thus, professional employees were asked about their likelihood of the organization using a 5-point Likert scale (1= Strongly disagree, 5= Strongly agree).

# 4. Results and Discussions4.1 Profile of Survey Respondents

Variables	Response category	Frequency	Valid percent
Sex	Male	131	63.9
	Female	74	36.1
	Total	205	100.0
Age	18 – 24	31	15.1
	25 - 34	118	57.6
	35 - 44	51	24.9
	45 - 54	5	2.4
	55 and above	0	0.00
	Total	205	100.0
Level of Education	Diploma	15	7.3
	Bachelor degree	148	72.2
	Master's degree and above	42	20.5
	Total	205	100.0
Job position	Customer service clerk	28	13.7
	Customer service officer	90	43.9
	Loan & Trade Finance officer	34	16.6
	Auditor	15	7.3
	Supervisor	7	3.4
	Assistant manager	5	2.4
	Branch Manager	26	12.7
	Total	205	100.0

#### Table 2: General profile of survey respondents

Source: Own survey data (2020)

Table 2 presents profile of respondents. Out of 220 questionnaires distributed to the sampled employees of United Bank S.Co, 205 were returned making the response rate 93.18%. The general profile of survey respondents is shown in table 2. In terms of sex, 131 were male and the remaining 74 were female. Looking at the age of respondents, the majority (57.6%) fall between 25 and 34 age category. This age group is followed by 51 (24.9%) respondents who were

between 35 and 44 age, 31 (15.1%) respondents between 18 and 24, and the remaining 5 respondents (2.4%) were between 45 and 54. In terms of the level of education, the majority of respondents have bachelor degree (72.2%), followed by master's degree holders and above (20.5%) and diploma holders (7.3%). As far as job position is concerned, the vast majority of respondents were customer service officers (43.9%) and the least were assistant managers (2.4%).

### 4.2 Descriptive Statistics for the Constructs

The underneath table shows descriptive statistics about the dependent and independent variables. Accordingly, organizational commitment, which is a multidimensional construct, is composed of three dimensions.

Construct	Factor (dimension)	Mean	N	
Organizational	Affective commitment	3.70	220	
commitment	Continuance commitment	3.92	220	
	Normative commitment	4.12	220	
Turnover intention	Turnover intention	3.27	220	

Table 3: Mean value of research constructs

Source: Own survey data (2020)

As depicted in the table 3, the mean score  $(\bar{x})$  of affective, continuance and normative commitment are 3.70, 3.92 and 4.12, respectively. This indicates that the level of professional employees' commitment to the organization was relatively low. However, the level of normative commitment of respondents was higher than that of their affective and continuance commitments. Moreover, the mean score  $(\bar{x})$  for turnover intention was 3.27.

### 4.3 Results of Inferential Statistics

The researchers have applied regression analysis in order to test the effect of organizational commitment on professional employees' turnover intention. Before testing the research hypotheses, the researchers have tested the data to fulfill the basic assumptions of multiple linear regression analysis. As a test of normality, the researchers have used skewness and kurtosis statistics. As Hair et al., (2010) have stated, to be a normally distributed data, the Z-statistics should fall within  $\pm$  1.96. The Z-statistics is calculated as a ratio of standard

skewness/standard error. Thus, Z-value (Skewness) for affective, continuance and normative commitment were 0.317 (.054/.170), -0.188 (-.032/.170) and -1.223 (-.208/.170), respectively. Likewise Z-value (Kurtosis) for affective, continuance and normative commitment were 0.973 (.329/.338), -.565 (-.191/.338) and -1.792 (-.606/.338). Moreover, the P-P plots appeared to be in a straight line which satisfied the linearity assumption. Furthermore, as Hair et al., (2010) have pointed out, a tolerance value below 0.10 and a variance inflation factor (VIF) above 10 indicate multicolinearity problem. As shown in table 4, the tolerance value for affective, continuance and normative commitment were 0.775, 0.888 and 0.756, respectively. These results were above the aforementioned cutoff point and hence indicate the absence of multicolinearity problem. Besides, the VIF for affective, continuance and normative commitment were 1.290, 1.126 and 1.323, respectively. Thus, based on the above tolerance and VIF values, it can be stated that the independent variables were less correlated.

The  $R^2$  value for this study was found to be 1.00 implying that the variability in the dependent variable (turnover intention) was fully explained by the three dimensions of organizational innovation, namely affective, continuance and normative commitment.

Model	Unstandardized Coefficients		Standardized Coefficients	Т	Sig.	Collinearity Statistics	
	В	Std.	Beta			Tolerance	VIF
		Error					
(Constant)	3.581	.220		16.306	.000		
Affective	.006	.047	.010	.133	.894	.775	1.290
Continuance	.064	.044	.106	1.453	.148	.888	1.126
Normative	136	.046	235	-2.976	.003	.756	1.323

#### **Table 4: Regression Model Summary**

Note: the dependent variable is turnover intention

The effect of affective commitment on professional employees' turnover intention was tested via linear regression analysis. As shown in the above regression table (table 4), the effect of affective commitment on turnover intention was not found to be statistically significant (P value > 0.05). Although prior studies (Sow, 2015; Pawirosumarto, 2017; Harden *et al.*, 2018; Luz *et al.*, 2018; Adem, 2019) have reported the negative effect of affective commitment

on intention to leave, this study could support it empirically. In line to the present finding, onds (2017) could not find a statistically significant effect of affective commitment on intention to leave. Thus, the first hypothesis is rejected.

Moreover, based on linear regression analysis the researchers examined the effect of continuance commitment on professional/knowledge-based employees' turnover intention. As shown in table 4, continuance commitment could not have a statistically significant effect on intention to leave (P value >0.05). This finding is in congruent with a study conducted by Bonds (2017) who couldn't find any significant relationship between continuance commitment and intention to leave. This implies that the cost of leaving an organization by itself is not sufficient to determine professional employees' intention to leave an organization. Therefore, based on the above regression result, the second hypothesis is rejected.

Finally, the study tested the effect of effect of normative commitment on professional employees' turnover intention using linear regression analysis. Based on the result of the above regression model (table 4), normative commitment has caused a statistically significant negative effect ( $\beta$ =-0.235, p< 0.05) on turnover intention. This implies that, a one unit increase in activities aimed to boost the level of normative commitment would lead to a 0.23 units decrease in professional employees' intention to leave the organization. In other words, the higher the employees are morally committed to their organization; the lower will be their intention to leave the organization. This finding is in congruent with prior studies (Gursu, 2016; Bonds, 2017; Luz *et al.*, 2018) who reported the negative relationship between normative commitment and intention to leave. On the basis of the above regression result, the third hypothesis is accepted.

# 5. Conclusion and Implication

This study was conducted to unlock the relationship between organizational commitment and professional employees' turnover in the case of United Bank S.C. In this study, organizational commitment was treated as a multidimensional construct composed on affective, continuance and normative commitment. Pertinent data were gathered via questionnaire from 205 professional employees working in the bank. As far as the mean of the

constructs is concerned, the mean for normative commitment ( $\bar{x}$ = 4.12) is relatively higher, followed by continuance ( $\bar{x}$ = 3.92) and affective commitment ( $\bar{x}$ = 3.70). Moreover, the mean score ( $\bar{x}$ ) for turnover intention was 3.27.

Linear regression analysis was used to test the effect of organizational commitment and its three dimensions (affective, continuance and normative commitment) on professional employees' turnover intention. The research findings indicated that only normative commitment has caused a statistically significant negative effect on turnover intention. The strength of normative commitment is influenced by accepted rules about mutual obligation between the organization and its members. The mutual obligation is based on the social exchange theory, which suggests that a person receiving a benefit is under a strong normative obligation or rule to repay the benefit.

Although there is a substantial empirical evidence for the negative effect of affective and continuance commitment on turnover intention, this study however couldn't support it empirically. Similar results are reported by prior scholars (Bonds; 2017; Sow, 2015). The former scholar indicated that among the three forms of organizational commitment, only normative commitment has caused a significant negative correlation with turnover intention. The second scholar, based on a study on healthcare internal auditors in US, couldn't find any significant relationship between continuance commitment and turnover intention. This indicates that other factors could also determine professional employees' intention to leave their organization.

This study brings valuable contributions in theoretical and practical terms. For practitioners (bank managers), the findings of the study indicate that the more the organization (bank) invests to create favorable conditions to build professional employees' moral obligation, the better will be their level of commitment to the organization. Highly committed professional/knowledge-based employees to their organization can make significant difference between firms in the face of competition. Therefore, in order to remain competent in today's highly dynamic business environment, the bank management is highly recommended to prepare and implement retention strategies towards its core employees. In other words, to create a highly committed professional workforce, the bank is expected to hire competent professionals, build trust between employees and the management, put in place attractive reward and incentive mechanisms, build their capacity and offer them growth opportunities, and ensure job security. Contrary to the extant theory, the study

couldn't find a statistically significant effect of affective and normative commitments on intention to leave. This implies that other contextual factors could determine professional employees' turnover intention. Future scholars could focus on these factors.

# 6. Limitations and directions for future research

This research is not without limitations. First of all, the study was based on small sample size (n = 205) and was limited to the banking industry. Therefore, future studies should be based on large samples and multiple industries (such as manufacturing and other types of service sectors) so as to show how the relationship between organizational commitment and turnover intention varies across industries. Moreover, this study attempted to test the direct effect of organizational commitment on professional employees' turnover intention without considering contextual factors. Therefore, future studies should take into account the role of mediator and moderator variables in the relationship between the above two constructs. Furthermore, this study collected cross-sectional data at one specific point in time. However, since the decision to leave an organization is assumed to be more of a process rather than a one-time act, it would have been better if the study was based on longitudinal data.

# References

- Allen, D. Bryant, P and Vardaman, M. (2010). Retaining Talent: Replacing Misconceptions with Evidence-Based Strategies. Academy of Management Perspectives, 48-64.
- Arshadi, A. (2013). The Relationship of Job Stress with Turnover Intention & Job Performance: Moderating Role of OBSE. *Procedia-Social & Behavioral Sciences*, 84.
- Asmamaw, A. (2011). Professional Employee Turnover and Retention Practice of MoFED. MBA thesis, Addis Ababa University. Unpublished Material.
- Ayondele, O. K., Adenguga, R. A., & Adenuga, F. T. (2013). Organizational Commitment and Turnover Intention among Private Universities' Employees in Ogun State, Nigeria . Open Journal of Education, 31-36.
- Beck, N. &. (2000). Development of affective organizational commitment: A cross-sequential examination of change with tenure. *Journal of Vocational Behavior*, 114-136.

- Blau, M. P. (1964). Justice in Social Exchange. Sociological Inquiry, 34 (2).
- Bonds A. Annette (2017). Employees' Organizational Commitment and Turnover Intentions. Walden Universitys.
- Bothma C., and Roodt, G (2013). The validation of turnover intention scale. *SA Journal of Human Resource Management*, 11 (1).
- Brown, S. M. (2011). Workplace Performance, Worker Commitment and Loyalty. Bonn: Institute for Study of Labour (IZA).
- Luz, C.M.D.R, de Paula S.L, and de Oliveira L.M.B (2018). Organizational commitment, job satisfaction and their possible influences on intent to turnover. *Revista de Gestão*
- Cascio.W. (2003). *Managing Human Resources* (6<sup>th</sup> ed). New York: Mcgraw-Hill Co. inc.
- Chu, K-K. & Li, C-H. (2010). The Study Of The Effects of Identity-Related Judgment, Affective Identification And Continuance Commitment On WOM Behavior. *International Journal of Business*, 46. 221-236.
- Cropanzano R,, and Mitchell M. (2005). Social Exchange Theory: An interdisciplinary review. *Journal of Management*, 31(6):874–900.
- Culpepper, R.A. (2011). Three-component commitment and turnover: An examination of temporal aspects. *Journal of Vocational Behavior*, 79(2), 517-527.
- Dogar, N. (2008). Relations between organizational commitment and demographic factors: a research in banking sector. Academicus *International Scientific Journal*, 103-115.
- Faloye, D. O. (2014). Organisational commitment and turnover intentions: evidence from Nigerian paramilitary organisation. International Journal of Business and Economic Development (IJBED), 2 (3), 23-34.
- Furtado, L. B. (2011). Leadership's impact in turnover and career abandonment intention: The Azorean hospital nurses' case. *Hospital Topics*, 51-59.
- Harden, G. Kwabena, Boakye G. & Ryan, S. (2016). Turnover Intention of Technology Professionals: A Social Exchange Theory Perspective. *Journal of Computer Information Systems*, 1-10

- Gonzales, T.F., & Guillen, M. (2007). Organizational Commitment. A proposal for a wider ethical conceptualization of normative commitment. *Journal of Business Ethics*, 78. 401-414.
- Gauri S. Rai, (2013). Impact of organizational justice on satisfaction, commitment and turnover intention: Can fair treatment by organizations make a difference in their workers' attitudes and behaviors? *International Journal of Human Sciences*, Vol.10 (2).
- Gürsu E., (2016). Organizational Commitment and Turnover Intention in Private Banking Sector: The Case of Alanya. M.A Thesis, Eastern Mediterranean University.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis*: A Global Perspective. New Jersey Pearson Prentice Hall.
- Harris, D. (2005). Dealing with sickness absence. Training Journal.
- Hassan, M., Hassan, S., Din Khan, K., and Naseem, M. (2011). Employee retention as a challenge in leather industry. *Global Journal of Human-Social Science Research*, 11(2), 9-14.
- Hussain, T. a. (2012). Is employees' turnover intention driven by organizational commitment and perceived organizational support? Journal of Quality and Technology Management, 8(2), 1-10.
- Idris, A. M., and Manganaro, M. (2017). Relationships between psychological capital, job satisfaction, and organizational commitment in the Saudi oil and petrochemical industries. *Journal of Hum Behaviour in the Social Environment*, 27 (4), 251–269.
- Kaur, B. (2013). Antecedents of Turnover Intentions: A Literature Review. Global Journal of Management and Business Studies, 3(10), 1219-1230.
- Krikwood, C. (2006). Effect of Conscientiousness and Professional Work Autonomy On Nurses' Organizational Commitment (Affective and Continuance) And Intent to Stay. Unpublished Thesis. Queen University. Canada.
- Laura, P.D. (2016). Human Resource Management. Retrieved from http://www. catalog.flatworldknowledge.com/bookhub/2807. viewed 08 March 2016. 53

- Lepak, D.P., and Snell, S.A. (2002). Examining the Human Resource Architecture: The Relationships Among Human Capital, Employment, and Human Resource Configurations. *Journal of Management*, 28(4):517-543
- Luchak, A. &. (2007). A comparison of linear and nonlinear relations between organizational commitment and work outcomes. *Journal of Applied Psychology*, 92, No3, 786-793.
- Luthans, F (2006). Organizational Behavior (9th ed). New York: McGraw Hill.
- Megfira A. (2019). The Effect of Organizational Commitment on Employees' Turnover Intention: In the Case of Ethiopian Trading Business Corporation (Alle Bejimla). MBA thesis, Addis Ababa University, Addis Ababa. Unpublished Material.
- Meyer, J. &. (1991). A three component conceptualization of organizational commitment. *Human Resource Management Review*, 1(1), 61-89.
- Meyer, J. S. (2002). Affective, continuance and normative commitment to the organization: A meta-analysis of antecedents, correlates and consequences. *Journal of Vocational Behavior*, 61, 20-52.
- Meyer, J. P., & Allen, N. J. (1991). A three-component conceptualization of organizational commitment. *Human Resource Management Review*, 1, 61-98.
- Meyer, J. P., Allen, N. J., & Smith, C. J. (1993). Commitment to organizations and occupations: Extension and test of three-component conceptualization. *Journal of Applied Psychology*, 78, 538-551.
- Meyer JP, Stanley DJ, Herscovitch L, L. Topolnytsky (2002). Affective, continuance, and normative commitment to the organization: A meta-analysis of antecedents, correlates, and consequences. *Journal of Vocational Behavior*, 61 (1), 20–52.
- Michaele, C. (2016). What Is Turnover Intention? Retrieved fromhttp://www.chron.com/turnover-intention-12753.html>., Demand media, viewed February 02, 2016 and 08 March 2016.webpage.
- Mowday, R. T., Steers, R. M., & Porter, L. W. (1982). Employee-Organization Linkages: The Psychology of Commitment, Absenteeism & Turnover. New York: Academic Press.

- Novliadi, F. (2007). Intensi Turnover Karyawan Ditinjau Dari Budaya Perusahaan. Tesis. Program Studi Psikologi FK USU. Universities Sumatra Utara. Medan.
- Pawirosumarto, S, Setiawan, K., Elmi, F. (2017). The effect of Organizational Commitment toward Turnover Intention at Narada School, Indonesia. *Russian Journal of Agricultural and Socio-Economic Sciences*.
- Payne, A. M. (2003). *Relationship marketing for competitive advantage* (2nd ed.). Great Britain, Butterworth Heineman.
- Pietersen, C. (2014). Employee Turnover in a Regional Commercial Bank. Mediterranean Journal of Social Sciences, 5, 371.
- Rahman, M. S., Ferdausy, S., & Karan, R. (2013). Determining the relationships between the components of organizational commitment and job performance: An empirical study. *ABAC Journal*, 35(1), 30-45.
- Rhodes, S. &. (1981). Conventional vs. worker owned organizations. *Human Relations*, 34(12).
- Robbins, S.P. (2008). Organizational behavior (10<sup>th</sup> ed), New Jersey: Presntice Hall.
- Roodt, G. (2004). Turnover intentions. Unpublished document. Johannesburg: University of Johannesburg.
- Sandra R.C. (2012). Assessing employee turnover. Faculty of Economics and Management Sciences School of Public Leadership, South Africa.
- Simsek, Z., Lubatkin, M., Veiga, J., & Dino, R. (2005). Modeling the multilevel determinants of top management team behavioral integration. *Academy* of Management Journal, 48, 69.
- Sisikin M. E., (2016). An exploratory analysis of the commitment-turnover intentions relationship: The moderating effects of embeddedess. California State University - San Bernardino.
- Sopiah. (2008). Perilaku Organisasi. Yogyakarta.
- Sow, M. T., (2015). Relationship Between Organizational Commitment and Turnover Intentions Among Healthcare Internal Auditors. Walden University.

- Suliman, A & Iles, P. (2000). The multi-dimensional nature of organizational commitment in a non-western context. *Journal of Management Development*, 19 (1), 71-81.
- Takase, M. (2009). Concept analysis of turnover intention: Implications for nursing management. *Collegian*, 17, 3-12.
- Tekingündüz, S., Top, M., Tengilimoglu, D., and Karabulut, E. (2017). Effect of organisational trust, job satisfaction, individual variables on the organisational commitment in healthcare service. *Total Quality Management & Business Excellence*, 28, 522–541.
- Ton, Z., and Huckman, R. S. (2008). Managing the impact of employee turnover on performance: The role of process conformance. *Organization Science*, 19(1): 56-68.
- Tracey, J. B. and Hinkin, T. R. (2008). Contextual factors and cost profiles associated with employee turnover. *Cornell Hospitality Quarterly*, 49(1): 12-27.
- Vandenberghe, C., and Tremblay M. (2008). The role of pay satisfaction and organizational commitment in turnover intentions: A two-sample study. *Journal of Business Psychology*, 22(3):275–286.

# Risk Management in Building Construction Projects: Contractors and Consultants Perspectives

### Alem Teferi

Technical and Operations Manager, Root Electromechanical Engineering Company, Addis Ababa. E-mail: alem teferi@yahoo.com

### Dejene Mamo Bekana<sup>1</sup>

Assistant Professor of Finance and Political Economy, College of Finance, Management and Development, Ethiopian Civil Service University, P.O.Box 5648, Addis Ababa, Ethiopia. Email: dejenemamo@gmail.com

### Abstract

This investigation aims at identifying the major risk factors that contribute to the possible occurrence of risk on building construction projects in Addis Ababa. Participants of the study, located in Addis Ababa, were grade one contractors and consultants. To achieve its objective, a mixed method research design approach was deployed in this study. It also implemented descriptive research design for the purpose of describing situations and facts to the research questions. Ouestionnaire survey was conducted for collecting data from a simple random sample of 100 people. The collected data was analyzed through Statistical Package for Social Science / IBM SPSS 24/ and the results are presented through statistical tools such as frequency tables, graphs, and charts, etc. The research findings indicated that 5 critical risk factors were identified based on an assessment of their probability of occurrence on building construction projects. These were "high inflation rate", "delayed payment by client", "poor resource management", "risk of corruption", and "economic instability" that have influence on project objectives. Financial factor was the most significant risk category recognized by participants. Hence, the two most critical possible risks identified were time overrun and cost overrun. It was also indicated that for effective risk alleviation risk transfer and reduction measures were the major strategies recognized by participants. Further investigation of opinions from the study revealed that there was lack of knowledge of risk management which needs to be improved. It was concluded that consultants and contractors as well as other stakeholders need to work in tandem to improve the environment of risk management in building construction industry.

**Key words:** *Risk; Risk Management; Construction Projects; Building Construction; Risk Factors.* 

<sup>&</sup>lt;sup>1</sup>Corresponding author

### 1. Introduction

Construction projects are introduced in complex and dynamic environments resulting in conditions of high uncertainty and risk, which are compounded by challenging time constraints and cost overruns. It is an industry predominantly originated by private developers, government, and other institutions and is susceptible to technical and business risks from initiation up to close out of projects (Jayasudha and Vidivelli, 2016). "Due to the fact that each construction project is unique and dynamic, the construction operation involves numerous uncertainties, multiple intricacies, various techniques and divergent environments" (Jarkas and Haupt, 2015: p.166). Iqbal, Choudhry, Holschemacher, Ali & Tamošaitienė (2015) stated construction projects from PMI (2004) in general are apparent to have more inherent risks due to participation of many contracting parties, such as clients, consultants, contractors, subcontractors, suppliers, etc. Wiguna and Scott (2005) also noted that risk plays a major portion in decision making to construction projects, and may affect the performance of a project. It may result in cost overruns, time overruns, and even poor quality of deliverables if they are not dealt with properly.

Thus, detecting and handling the possible risk factors, which can considerably differ from project to project accountable on numerous circumstances, plays a decisive role in improving the performance and achieving the effective and efficient supply of the deliverables. Researchers in several publications sort out and identify major risk factors, which may possibly occur in building construction projects and classifying in diverse collections based on their sources and magnitude of influences, as vital contributions to the industry. In their study "Risk Management in Construction Projects' ' Serpella, Ferrada, & Howarda (2014) addressed the problem by means of a knowledge based approach and through a system perspective. On the other hand, Iqbal et.al. (2015) conducted an investigation to identify the attitude of construction practitioners towards different types of risks and respective responsibility as well as the most effective methods in averting/alleviating various types of risks.

According to Yimam (2011) described that projects function in extremely unstable, irregular, ill-resourced and uncertain/risky situations resulting in unfinished, uncontrolled, and unfitted to the original plan or goal of projects and suggested methods of improving project management practices with particular reference to contractors for identified areas of problems. Also, in his study, "construction contract risk management practices in Ethiopian building construction projects" Mesfin (2014) identified the level of use of construction contract risk management techniques in building projects and stated the importance of identifying risks and deploying risk mitigation methods related with various types of contracts and assigning them to different stakeholders participated in the project to make the project successful. The role of risk management in building construction projects is an important element that should be combined with all functioning and managerial processes of the building construction projects. "Risk management is a formal and orderly process of systematically identifying, analyzing, and responding to risks throughout the life-cycle of a project to obtain the optimum degree of risk elimination, mitigation and/or control" (Wang *et al.*, 2004, p.238).

Santoso et al. (2015, p.43) stated that "The construction industry is subject to more risk and uncertainty than many other industries". The progression of building construction is featured by many unanticipated situations and goes through many unexpected changes during implementation. Consequently, effective risk management has turned out to be a main problematic area that challenges the building construction sector. For instance, usually risk is used to be taken care of with extra finances and time without a detailed and wide range of study which is able to impact a specific project, and that most of the time it is undoubtedly inadequate to protect the magnitudes of risks that come about in the course of project implementation. At that moment, in the majority of the circumstances projects completed beyond budget and schedule (Serpella et.al, 2014). In view of stakeholders who took part in Ethiopian building construction projects, most projects are not finalized in accordance with the initial plan (Mesfin, 2014). The risks originated all the way through the period of a construction project might be reasons for deviations in project objectives if they are not handled properly. From empirical evidence, Yimam (2011) found out that the risk management maturity level of Ethiopian construction projects is very low. "The very low level of reported maturity for risk management and the low importance given to it (risk management is ranked to be less important than all the other knowledge areas except safety management and communication management). This may indicate the low level of awareness about the importance of risk management in the construction industry of the country. As developing countries are characterized by a very volatile and uncertain environment, management of risk should have been a logical priority" (Yimam, 2011, p.148).

The above mentioned cases proved that managing risk in the construction industry in Ethiopia, are in a very early stage and it focuses only on few aspects of the project management process. For instance, Mesfin (2014) "construction contract risk management practices in Ethiopian building construction projects"; Chemir (2018) "Project Risk Management Practices of Selected Chinese Building Contractors in Ethiopia", Yimam (2011) "Project Management Maturity in The Construction Industry of Developing Countries (The Case of Ethiopian Contractors)" are among others. It can be said that risk management practice in Ethiopian construction sector is not well- known and by and large not investigated appropriately. Therefore, this study attempted to identify the major risk factors that contribute to the possible occurrence of risk on building construction projects in Addis Ababa. The research questions are:

- 1. What are the major risk factors on building construction projects?
- 2. What are the possible risks that may occur on building construction projects?
- 3. What are the effective response strategies for the identified critical risks?

# 2. Literature Review

# 2.1 Theoretical Literature Review

Steyn and Nicholas (2017, p.366) argued that "project management is risk management" in that it complements and is "part of other project management practices such as requirements and work definition, scheduling, budgeting, configuration management, change control, and performance tracking control. With all of these, managers identify and assess the risks so they can proactively reduce them or plan for the consequences". The above-mentioned concept of Steyn and Nicholas (2017) complemented by other scholars is that "all project management is risk management"; the reason behind this notion is that risk is inherent in all knowledge areas of project management and it is the fundamental job of project manager. In addition, "all project activities can be constructed as managing risk, but the risk management process is a specific set of activities you will consciously perform to identify and manage risks on the project" (Verzuh, 2016, p.139).

Effectiveness of risk management and its contribution is influenced by the degree to which the identification process affects the overall project management of any particular project (Chapman, 2001. Thus, a logical

methodology needs to be engaged to manage risks all the way through the progress of a project. In order to classify risk, the meaning of a project risk must be defined. "Risk is an uncertainty that matters; it can affect project objectives negatively or positively. Chapman and Ward (2003, p.6) cited the definition of Risk from PMI as "an uncertain event or condition that, if it occurs, has a positive or negative effect on a project objective". They also cited from APM (Association for Project Management) as "an uncertain event or set of circumstances that, should it occur, will have an effect on the achievements of projects objective". Besides the diverse meanings of risk, there are several approaches for classifying risk for varied objectives as well. Some of the following are listed as follows: In view of Cooper et al. (2005, p.3) risk is classified as business risks, project risks, operations and processing risks. Business risks include all those risks that might impact on the viability of the enterprise, including market, industry, technology, economic and financial factors, government and political influences. Project risk includes all those risks that might impact on the cost, schedule or quality of the project. Operational and processing risks include all those risks that might impact on the design, procurement, construction, commissioning, operations and maintenance activities, including major hazards and catastrophic events. According to Jayasudha & Vidivelli (2016) risks are either acceptable or unacceptable. An acceptable risk is one that negatively affects a task on the non-critical path. An unacceptable risk is one that negatively affects the critical path. Risks are either short or long term.

Managing risk is a central component of proper project management and vital to obtaining appropriate business and project results and the effective procurement of goods and services (Cooper et.al, 2005, p.2). Risk management is the method of classifying, evaluating, ranking diverse categories of risks, planning risk alleviation, employing alleviation strategy, and monitoring the risks. It is a step towards achieving the goal of thinking analytically about the probable risks, complications, or calamities earlier they occur and planning the method that will evade the risk, or decrease the influence, or deal with the effect (Rumane, 2018). In their research Smith, Merna, & Jobling (2006, p.2) revealed that risk management as "one of the most creative tasks of project management" and consist of four steps that are "to identify the risk sources, to quantify their effects (risk assessment and analysis), to develop management responses to risk and finally to provide for residual risk in the project estimates". "The language of project risk management explains this

phenomenon: Known unknowns represent identified potential problems, and unknown unknowns are the problems that arrive unexpectedly" (Verzuh, 2016, p.138). Project management body of knowledge defined project risk management as:

Project Risk Management includes the processes of conducting risk management planning, identification, analysis, response planning, response implementation, and monitoring risk on a project. The objectives of project risk management are to increase the probability and/or impact of positive risks and to decrease the probability and/or impact of negative risks, in order to optimize the chances of project success (PMBOK Guide 2017, p.395).

According to Cooper et al. (2005) and Zavadskas et al. (2010) better business and project outcomes are facilitated by risk management. It ensures this by allowing understanding, awareness and assurance for improved judgmentcreating. This results in better confidence and a decrease in overall risk response. Furthermore, risk management in a project according to Jayasudha and Vidivelli (2016) incorporates categorizing impacting aspects that might possibly undesirably influence a project's budget, timetable or standard starting position; measuring the related likely influence of the recognized risk; and carrying out processes to handle and alleviate the possible effect. Banaitiene and Banaitis (2012, p.443) claims that "Risk management in the construction project management context is a comprehensive and systematic way of identifying, analyzing and responding to risks to achieve the project objectives"). Therefore, by means of risk management, one can perform to enhance the likelihood and influence of chances on the project (constructive happenings), whereas reducing the likelihood and influence to cause damage to the project (destructive happenings) and this is the central reason for accomplishing risk management. Moreover, risk management delivers an outline that prevents unexpected events from happening and validates careful risk minimizing and alleviation procedures (Cooper et al., 2005; Worku Asratie Wubet et al., 2021).

Risk management process is planned to decrease or remove the risk of some categories of activities taking place or having an influence on the project (Osei-Asibey *et al.*, 2021; Rumane, 2018). Risk management processes of construction projects describe the work of all project life cycles. Project management body of knowledge described risk management processes, "plan risk management, perform qualitative risk analysis, perform quantitative risk analysis, plan risk responses, implement risk responses, and monitor risks"

(PMBOK Guide 2017, p.395). In view of Risk Management Task Group (2012) all methods to project risk management attempt to exhaust the possibilities of effectiveness and efficiency. Risk management has three important parts: identification, analysis, and action, even if the particulars of risk processes might vary contingent on the project.

Risk management process emphases on the requirements and the main concern of the customer and comprises approaches, systems and instruments particularly established for this goal. The procedure is frequently led by a risk chief or expert who is in charge of forming a system for digging out data from project main staff by means of risk identification and assessment (Smith et al., 2006; Olcay Genc, 2021; Alvand et al., 2021). The process is repetitive with circles in return to preceding phases that acquire confirmation and project group control. One of the very significant aspects in the risk management process is the assembly of crucial staff with a single aim only; to talk over, evaluate and if possible measure the risks that might influence the project's goals. According to Cooper et.al, (2005), the risk management process involves the systematic application of management policies, processes, and procedures to the tasks of establishing the context, identifying, and analyzing, assessing, treating, monitoring, and communicating risk and applies across all phases of the project. However, with particular reference in building construction sector, in view of Wang et al. (2004) risk management is a structured methodology that comprises of three central phases: a) risk identification; b) risk analysis and evaluation; and c) risk response. The risk management process instigates with the primary identification of the significant and prospective risks accompanying with the building project. It is of extensive significance as the progression of risk investigation and response management could only be accomplished on recognized prospective risks (Ezzeddine et al., 2021).

Szymanski (2017, pp.176-177) classified risks into five major categories in a building project: "Preliminary design, tender, detailed design, construction works, and financing the investment". Santoso et.al. (2003) classified risks into nine groups: physical risk, personal risk, technical risk, safety-accident risk, construction design cause risk, political and regulation risk, financial risk, contractual risk, environmental regulations cause risk. Each personal risk and technical risk is divided into six sub-groups; i.e.; technical and labor, sub-contractor, staff/foreman, engineer, consultant, client; and material, equipment,

technique, construction process, construction site, and ground condition respectively. The outcomes indicated very evidently that the managerial and design factor is the main and most important problem in high rise construction projects both in terms of rate of incidence and magnitude of risk influence.

# 2.2 Empirical Literature Review

In their study, "Major Construction Risk Factors Considered by General Contractors in Qatar" Jarkas and Haupt (2015) conducted a structured questionnaire survey of 95 samples out of the total population of 126 participants, to classify, discover, rank the relative importance and determine the dominant distribution response tendencies of the most important construction risk factors taken into account by general contractors functioning in the State of Qatar. They further explained how critical it is to conduct a study to analytically identify, categorize and assess the possible risk factors which can undesirably influence the performance of projects although the sensibility to assess the possible positive risk factors to improve the effectiveness boundaries of construction deals. Moreover, Wiguna and Scot (2005) in their research "Nature of The Critical Risk Factors Affecting Project Performance in Indonesian Building Contracts", studied to conclude the risk factors initiating time and cost overruns in Indonesian building projects. To assess risk levels in terms of time and cost the study was mainly founded on interviews with project managers by means of a structured questionnaire. Twenty-two building projects were surveyed. The result found out the subsequent as most critical: high inflation of prices; defective design; design change by owner; delayed payments on contract; inclement weather; unforeseen site ground condition; poor cost control; defective construction work; delay in providing detail drawings; and problems with availability of labor, material and equipment. It also revealed the critical risks affecting both project time and cost apparent by the building contractors were related. In order to manage various risks and to effectively identify the vital ones, for overseas construction projects, "Risk management for overseas construction projects" were studied (Zhi, 1995). This was a case study conducted in northern China between a foreign company and a local government based company that agreed up on joint venture development. To identify the potential market and development risk, a survey was conducted.

"An Assessment of Risk Identification in Large Construction Projects" studied focusing on risk identification in Iran (Tadayon *et al.*, 2012). A questionnaire

survey from participants in large construction projects was conducted. In the study, government, consultants and contractors participated. The outcome of the study exposed that the most significant types of risk in construction projects are financial risks, construction risks, demand or product risks, and political risks were ranked from one up to fourth hierarchically (Tadayon et al., 2012). Furthermore, Jayasudha & Vidivelli (2016) "Analysis of Major Risks in Construction Projects" examined the empirical Indian construction industry survey of two hundred companies on the awareness of professionals (Project Managers, Engineers, Site Engineer, Architect, Contractors, Sub-Contractors), who are observed as the major participants in the construction sector, whether they are using planning tools and techniques as a major tool for effective project implementation or not. The study disclosed that ranking of risk factors technical risk, time risk, construction risk, design risk, and legal risk were the most significant factors respectively. There was also low awareness on the application of practice of construction planning tools and ran and recommended that the use of the construction planning tools and techniques should be applied in all building projects and there should be regular adequate training of professionals on the effectiveness and improvement in Information Technology in the construction industry especially in project planning and execution.

Identification and Assessment of Risk Factors Affecting Construction Projects were studied by Rauzana (2016) to the implementation of construction projects in North Aceh, Indonesia. The empirical study was aimed to identify risk factors that influence the construction project and determine the most dominant risk factors that affect the performance of the project. Structured questionnaire survey was used on 47 companies. The outcome of the study revealed that material resource management was the most influential risk factor preceding the equipment and financial factors respectively. In addition, Odeyinka *et al.* (2006) in their study, examined "Assessing Risk Impacts on Construction Cost". Checklist of risk factor and questionnaire survey were used to carry out investigation in order to determine their relative importance. Construction practitioners in contracting organizations, consultancy firms and government organizations were among the participants. The survey result showed that the major risk factors inherent in construction were financial, political, physical, and construction respectively that have impact on construction cost.

Also in the study "Identification and assessment of risk factors affecting construction projects" to identify and assess risk factors during the construction phase of construction projects in the Gulf region focusing on two countries of the Gulf region - the State of Kuwait and Kingdom of Bahrain (Altoryman, 2014). Interview and questionnaire surveys were deployed in the study to contractors, consultants, and clients. The study showed that the perception of the risk factors on the categories level, both countries agreed on the finance category as the main factor threatening project completion. "An Evaluation of Risk Factors Impacting Construction Projects in Ghana" Chileshe (2012) studied the probability of occurrence and degree of impact of the risk factors on construction projects within the Ghanaian construction industry. Sample survey of randomly nominated respondents of 34 contractors, 46 consultants, and 23 clients or owners was participated. In their study, the result showed that there is inequality of the ranking of the degree of occurrence and impact in the midst of the participants. However, the results indicated that there was whole agreement between the three participants concerning the ranking of the financial risk factor of "delay in payment" comparative to the degree of risk impact. The result also revealed that "inflation" and "financial failure" were the second and third most ranked factors having an impact on project objectives. One of the main objectives of the construction industry policy is to improve the capacity and competitiveness of the local construction enterprises (contractors, consultants and informal sectors) (Ibid).

According to the report of the Construction Industry in Ethiopia (2018) the Ethiopian construction industry is characterized by a large number of microentrepreneurs, the majority of whom operate in the country's informal economy. Ethiopia's formal construction sector comprises endogenous and indigenized firms, as well as numerous foreign civil engineering and construction companies. Public and private expenditure on infrastructure and other construction works has served as a catalyst for Ethiopia's rapid economic development. The country has consistently invested more than 30% of GDP into Gross Fixed Capital Formation (GFCF) expenditure since 2010 (Ibid). Based on the Ministry of Urban Development and Construction (MUDC) construction industry policy (First Draft) July (2012) the percentage share of the construction sector to GDP at constant price has increased from 4.5% in 2000/01 to 5.8% by 2009/10. Similarly, the market value of the construction sector is currently estimated at more than US\$7bn. According to the 2017 edition of African Economic Outlook report, construction activities in Ethiopia accounted for 15.9% of GDP at current prices during the 2015/16 fiscal year. Regardless of this economic impact, project risk management practice maturity of the construction sector apparently seems to be at its very early stage. A small number of studies that were conducted displayed that risk management practices in Ethiopian construction projects are in general insufficient. For instance, in his study result, with a specific preference of Ethiopian contractors, Yimam (2011) indicated that generally the maturity of the development aspect of construction project management is identified at the causal development maturity stage. It is also described that risk and safety management are the least matured among project management knowledge areas. Essentially it can be reflected that these two knowledge areas are completely unfamiliar or experienced rarely in the construction sector. Based on the outcome of an empirical evidence of the study, about 2/3 of the contractors don't have risk management practice. Nearly 24% of contractors practiced risk management poorly.

# 3. Research Methods

The study used both primary and secondary sources of data. The primary sources of data were survey questionnaires. The researcher collected the primary data from contractors and consultants. Furthermore, published or unpublished particularly survey based secondary data that have already been collected and analyzed by other scholars or government institutions/ building construction policies, regulations, and reports, etc., were used in this study. This helped compliment on the primary data in order to answer the research question and attain the research objective. In this study, the populations involved are two types of participants. These were building contractors and design consultants who are the major operators in the construction industry located in Addis Ababa. It included grade one contractors (BC-1) (highest grade contractors) and Consultants (CAE-1) (highest level consultants) which are engaged in the construction industry. The reason why those participants were selected was in consideration of the fact that they have better financial, material, and human resources (professionals/ expertise, knowledge, and practice) than others. They usually design and carry out large building construction projects compared to the other lower grades of contractors and consultants.

Sample surveys of contractors and consultants were implemented in the study. "A sample design is a definite plan determined before any data are actually collected for obtaining a sample from a given population" (Kothari, 2004, p.14). This assisted to determine the corresponding value of the population, with less cost and time. Therefore, the sampling frame of this research included a list of all contracting companies (69) and consulting firms (59) located in Addis Ababa. These firms are registered by MoWUD (Ministry of Works Urban Development) and by Addis Ababa City Construction Bureau respectively which functioned actively in license renewal of the year 2018/2019 (2011 E.C.). From the sampling frame sample size was determined by using Yamane formula:

$$n = N / (1 + Ne^2)$$

Where, n= sample size

N= known population size

```
e = error level (5\%)
```

Thus, the sample size for contractors and for consultants are 59 and 51 respectively.

Therefore, from the above result, the sample size for contractors was 59 and consultants were 51, which constituted a total of 110 samples. Simple random sampling was used since there was an accurate and easily accessible sampling frame that listed the target population of both contractors and consultants. In addition, due to the homogeneous nature of both building contractors and consulting firm's samples were selected using simple random sampling techniques. In this study, a questionnaire was, used in order to collect data from the sample and to describe or explain their knowledge, attitudes, and behavior on the major risk factors that contribute to the possible occurrence of risks. The questionnaire was divided into three main parts having a total of 64 questions. Part I solicited general (factual) information about respondents. Part II consisted of a total of 50 risk factors (attitude and opinion variables). These risk factors were categorized into five major groups. Ten risks were associated with preliminary and detailed design, six to tender, twenty to construction works, nine to finance and economic, and five associated to political and legal aspects. Respondents were requested to rate the probability of occurrence of these risk factors, possible risks and response strategies as Very Infrequent (VI), Infrequent (I), Neutral (N), Frequent (F), and Very Frequent (VF) respectively.

Part III included 2 open ended questions that asked respondents to state their opinion and challenges encountered about risk management briefly.

Reliability Statistics			
Cronbach's Alpha	Number of Items		
0.933	58		
Source: Own Survey (2019)			

 Table 1: Reliability Statistics of Respondents

In addition, reliability analysis (Cronbach's alpha) was conducted by Statistical Package for the Social Science /IBM SPSS Statistics 24/ software for all the valid samples to measure the internal consistency across the raters. The alpha coefficient ranges in value from 0 to 1, and used to describe reliability of factors extracted from ordinal rating scale questionnaires Jarkas & Haupt (2015). Therefore, the internal consistency of, 50 risk factors, 4 possible risks, and 4 response strategies which constitute a total of 58 variables of Likert Scale questions were verified by calculating "Cronbach's alpha" from the valid responses. The higher the alpha coefficient score, the more reliable the generated scale is. A value of 0.700 is an acceptable coefficient (Ibid). The result showed an alpha coefficient value of 0.933 very close to 1 that confirmed the reliability measures applied. Also "Relative Importance Index" (RII) method was applied to measure the response related to the rating and importance level of each variable based on the mean scores identified. This method was used to generate scores of the variables which were used to analyze and to find the hierarchical risk factors and measure the level of importance (significance) of each factor based on a five-point Likert scale Akadiri (2011). The RII value ranges from 0 (not inclusive) to 1, low (0<RII<0.2), mediumlow (0.2<RII<0.4), medium (0.4<RII<0.6), high medium (0.6<RII<0.8), and high level (0.8 < RII < 1). The RII was computed by the formula shown in equation below.

$$\mathbf{RII} = \frac{5(n5) + 4(n4) + 3(n3) + 2(n2) + n1}{5(n1 + n2 + n3 + n4 + n5)}$$

Where n1, n2, n3, n4, and n5 are the number of respondents who selected 1, for Very Infrequent (VI), 2, for Infrequent (I), 3, for Neutral (N) 4, for Frequent (F), & 5, for Very Frequent (VF) correspondingly. Furthermore, content analysis was implemented which was the most common method of doing by code of written answers on an open-ended question (Dawson, 2009)? First the written answers were thoroughly looked through and grouped into possible categories that have different themes. Then each theme was given a code and assigned to each one of the responses. Common themes were identified from the number of responses that were applied. Afterwards their corresponding frequency count and percentage of response were calculated.

#### 4. Results and Discussions

The perception of 50 risk factors considered by consultants and contractors were determined. The Relative Importance Indices (RII), ranks, and importance level of the factors surveyed were presented and discussed. Table 2 Illustrates the overall insight of respondents Mean, RII, Rank, Importance Level, and Occurrences for each risk factor.

Importance I					
Risk Factors	Mean	RII	Rank	Importance	
				Level	Occurrences
High inflation rate	4.25	0.85	1	High	Frequent
Delayed payment by client	4.18	0.84	2	High	Frequent
Poor resource management	4.11	0.82	3	High	Frequent
Risk of corruption	4.01	0.80	4	High	Frequent
Economic instability	4.00	0.80	5	High	Frequent
Improper cost plan	3.98	0.80	6	High-Medium	Frequent
Design change by the client	3.95	0.79	7	High-Medium	Frequent
Financial failure of	3.89	0.78	8	High-Medium	Frequent
contractor					
Low labor and equipment	3.88	0.78	9	High-Medium	Frequent
productivity					
Unrealistic construction	3.87	0.77	10	High-Medium	Frequent
schedule					
Poor cost control	3.85	0.77	11	High-Medium	Frequent
Poor organization of work	3.83	0.77	12	High-Medium	Frequent

 Table 2: Descriptive Statistics & RII of Risk Factors with Frequency & Importance Level

Poor construction materials quality	3.78	0.76	13	High-Medium	Frequent
Inadequate program	3.76	0.75	14	High-Medium	Frequent
Lack of competent &					
qualified	3.75	0.75	15	High-Medium	Frequent
Professionals					
Using predatory pricing by	3.72	0.74	16	High-Medium	Frequent
competitors					
Delays in solving contractual	3.72	0.74	17	High-Medium	Frequent
issues					
Poor employees' work	3.68	0.74	18	High-Medium	Frequent
performance					
Insufficient control of work	3.68	0.74	19	High-Medium	Frequent
Quoting bad estimation for	3.68	0.74	20	High-Medium	Frequent
the project					
Weak law compliance &	3.67	0.73	21	High-Medium	Frequent
enforcement					
Delays in material and shop	3.66	0.73	22	High-Medium	Frequent
drawing Approval					
High interest rate	3.64	0.73	23	High-Medium	Frequent
Underestimating the costs of	3.63	0.73	24	High-Medium	Frequent
the project					
Inadequate & ambiguous	3.59	0.72	25	High-Medium	Frequent
specification					
Lack of clients managerial	3.59	0.72	26	High-Medium	Frequent
capability					
Lack of skilled/unskilled	3.59	0.72	27	High-Medium	Frequent
labor					
Poor communication &	3.57	0.71	28	High-Medium	Frequent
coordination among staff					
Difficulty in obtaining	3.56	0.71	29	High-Medium	Frequent
permits and Ordinances					
Delays in approval of	3.55	0.71	30	High-Medium	Frequent
payment certificate by the					
consultant					
Political instability	3.53	0.71	31	High-Medium	Neutral
Extending scope of work	3.52	0.70	32	High-Medium	Neutral
High employee turnover	3.48	0.70	33	High-Medium	Neutral
Defective construction work	3.46	0.69	34	High-Medium	Neutral
Inappropriate change order by client	3.34	0.67	35	High-Medium	Neutral
Recession in the industry	3.33	0.67	36	High-Medium	Neutral
Risk of tender cancellation,	3.33	0.67	37	High-Medium	Neutral

Unforeseen site ground condition	3.31	0.66	38	High-Medium	Neutral
Poorly recognized	3.29	0.66	39	High-Medium	Neutral
competition					
Awarding design to	3.28	0.66	40	High-Medium	Neutral
unqualified design					
Consultant					
Producing defective design	3.27	0.65	41	High-Medium	Neutral
Employees' absence at work	3.19	0.64	42	High-Medium	Neutral
place					
Improper technology	3.18	0.64	43	High-Medium	Neutral
selection					
Improper design team	3.18	0.64	44	High-Medium	Neutral
selection					
Poorly recognized	3.15	0.63	45	High-Medium	Neutral
preferences of the Clients				-	
Accidents and injuries on	3.13	0.63	46	High-Medium	Neutral
project sites				-	
Burglary on site	3.04	0.61	47	High-Medium	Neutral
Changes in legislative	3.03	0.61	48	High-Medium	Neutral
regulations Contrarily				-	
Overestimating the costs of	2.69	0.54	49	Medium	Neutral
the project					
High project complexity	2.64	0.53	50	Medium	Neutral

Note: low (0<RII $\leq$ 0.2), medium-low (0.2<RII $\leq$ 0.4), medium (0.4<RII  $\leq$ 0.6), high-medium (0.6<RII $\leq$ 0.8), & high (0.8<RII<1)

Source: Own Survey (2019)

As indicated in Table 2 the examined risk factors result from the overall insight of respondents displayed that "high inflation rate", "delayed payment by client", "poor resource management", "risk of corruption", "economic instability", "improper cost plan", "design change by the client", "financial failure of contractor", "low labor and equipment productivity" and "unrealistic construction schedule" were the 10 major risk factors identified according to their hierarchy. Nevertheless, in this study those risk factors with high levels of importance and frequent probability of occurrence were discussed. These were the first 5 risk factors associated with financial and economic, tender, and construction work categories. "High inflation rate", with an RII of 0.850, was perceived and ranked overall as the first building construction projects risk factor measured by both consultants and contractors who were active in Addis Ababa (Table 2). However, both ranked it as the second risk factor

independently. The outcomes achieved from the study were in alignment with the findings of Wiguna and Scot 2005) and (Zhi, 1995) whose research studies have determined this factor among the most critical factors affecting both project time and cost in Indonesian building contracts and Chinese project developments respectively. However, with a little difference, Chileshe (2012), and Banaitiene and Banaitis (2012) in their study revealed that inflation was the second most ranked risk factor that had an impact on construction project objectives in the Ghanaian and Lithuanian construction company respectively. Hence, projects' high cost overrun and time overrun might be inevitable. "Delayed payment by a client" with an RII value of 0.836, was observed by participants as the second major critical risk factor among the factors examined (Table 2). This factor was also ranked first by contractors and sixth by the consultants as per their belief. The result was also in agreement with the results by Jarkas & Haupt (2015).but, it is not in line with some previous research (Iqbal et.al, 2015; Wiguna & Sco, 2005). With an overall RRI of 0.822, "poor resource management" was ranked as the third major critical risk factor equally both by consultants and contractors (Table 2). However, the result displayed a difference with Rauzana (2016) who ranked resource management as the most significant risk factor that has an effect on project objectives. The study also ranked "risk of corruption" as the fourth critical risk factor with similar perception of consultants and contractors with an overall RRI value of 0.802 on building construction projects (Table 2). This result is in agreement with (Zhi, 1995) that studied risk management on overseas construction projects in China and found out the risk of corruption ranked in fourth. As risk of corruption was under the category of tender, problems of corruption might be associated with this composite factor.

The potential causes might be being unethical in the profession, preparation of incomplete design and inadequate bill of quantity and specifications before contracting or tendering stage might be among others. This might again lead to excess in quantity and price escalation for the new item of work after the project might have been commenced. As a result, the project quality might be compromised, and the project might not be completed on time and cost more than the planned. The fifth ranked risk variable in this study, perceived by the respondents, with 0.801 RIII overall value was "economic instability" (Table 2). This factor was ranked third by contractors, whereas, consultants contrarily ranked it eleventh. The possible reason for the outcome of this factor might be unstable economic policy, unstable political situation, higher rate of

unemployment, government debt crisis; volatile inflation rate, change in interest rates, global factors like price of oil etc. could be some of them.

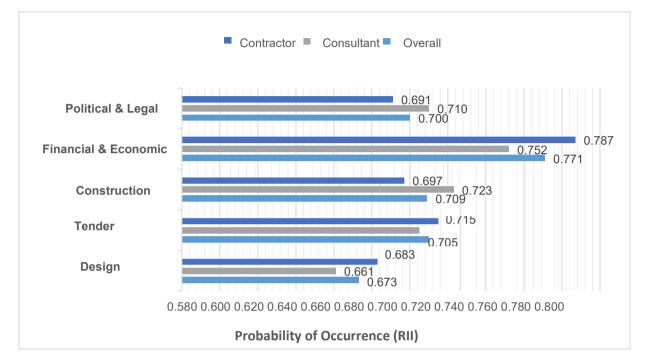


Figure 1: Probability of occurrence (RII) of composite risk factors by participants

The study result indicated in Figure 1 that there was a complete agreement up on their perception between the participants to the financial and economic composite risk factor. Both consultants and contractors ranked it first, with an overall RII value of 0.771. This factor occurred frequently with high-medium importance level. The outcome was in agreement with the findings of Iqbal et.al. (2015), Odeyinka *et al.* (2006) and Altoryman (2014) which revealed that financial issues for projects was the most significant risk factor affecting most of the construction projects in Pakistan, Nigeria, Kuwait and Bahrain respectively. Furthermore, this composite risk factor was also consistent with the results of (Hlaing, 2016) and (Tadayon *et al.*, 2012) that discovered the financial aspect of the project was considered most important by construction contractors in Singapore and Iran respectively. Due to the fact that out of the five major risk factors identified, i.e., "high inflation rate", "delayed payment by the client", and "economic instability" were under financial and economic risk categories ranked first, second, and fifth respectively. The potential cause

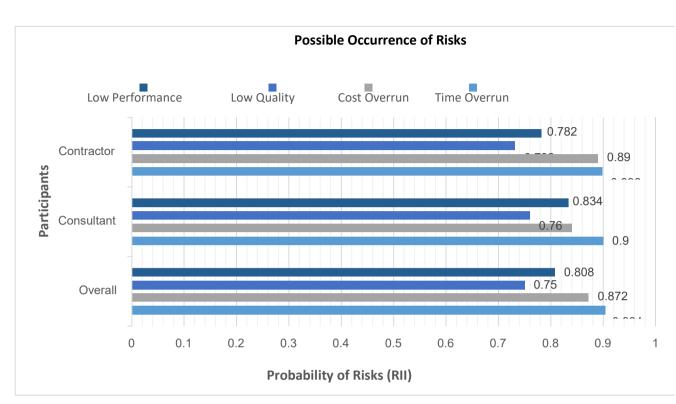
for the outcome could be the accumulation effects of components of this composite risk factor.

The second ranked composite risk factor, as indicated in Figure 1 was tender with an RII value of 0.710. The study exposed frequent probability of occurrence with high-medium level of importance to this factor. Contrary to perception of the financial and economic risk factor, tender was observed differently by consultants and ranked fourth. The possible reason for the result of this risk category might be ethical issues and integrity related to institutions/clients/ in tender preparation, bidders, and other stakeholders participated in the process. In addition, offering a very low price that might not be appropriate and sufficient to execute projects, just for the sake of winning/securing/ and owning works only, could be one of the reasons. Likewise, inappropriate bidding criteria that might be set by the client or consultant that could favor/accommodate/ certain groups of bidders only, might be another reason. Oftentimes, there were tendering committees, particularly in government institutions. They might not have the knowledge and skill to perform the task and sometimes might not be familiar with the public procurement directives. They might consider it as an extra duty and don't give much attention and time. As a result, they could make mistakes in the process and delays and controversies could arise that might take longer time to correct, to the extent of canceling the tender. Therefore, the overall effect of the tendering process at the end might bring huge implications on project cost and schedule. The third category risk factor with a slight difference to tender, with an overall RII value of 0.709, was construction works (Figure 1). However, consultants ranked it fourth. The study uncovered this factor, frequent probability of occurrence with high-medium level of importance as perceived by respondents. The study result was in alignment with Jayasudha & Vidivelli (2016) who ranked construction risk as the third most important factor. The results have shown a difference with (Tadayon et al, 2012) and Odeyinka et al. (2006) findings that construction risk was the second and fourth most critical risk category respectively.

Construction projects by their nature would be unique and risks might have risen from a number of sources. If those risks were not managed properly throughout the life cycle of the project it would have an impact on the project's performance, in terms of quality, time and cost. The fourth was political and legal factors, with an RRI value of 0.700, consultants, though, ranked it third (Figure 1). As observed by participants, the study exposed neutral probability of occurrence with high-medium level of importance to this variable. This result is consistent with the findings of (Tadayon *et al.*, 2012) that discovered the political and legal aspect of the project was ranked the fourth important factor by participants in Iran. However, the result exposed dissimilarity with that of Odeyinka *et al.* (2006) and Jayasudha & Vidivelli (2016) who ranked it as the second and fifth most important risk category respectively.

The expected cause for this factor might be political instability, weak law enforcement, conflict and violence, contract risk, dispute risk, and regulatory risks could be some of the components. In these situations it might not be possible to get the necessary resources in order to implement projects. The inclusive effects of these possible causes of risk factors could create civil unrest and instability among the society. Business relationships and reputation might be damaged, and might cost the construction industry operator much time and valuable resources. The fifth was preliminary & detail design, equally ranked by both consultants and contractors, with a 0.673 RII value (Figure 1). The study exposed neutral probability of occurrence with high- medium level of importance to this risk factor from observant. The findings of the study have showed a difference with the outcome of (Santoso et.al. 2003), (Altoryman, 2014), (Karim, 2012), and Jayasudha & Vidivelli (2016) which displayed risks associated to design factor were the first, second, third, and fourth most important factors respectively both in terms of occurrence and degree of impact.

This study identified, "high inflation rate", "delayed payment by client", "poor resource management", "risk of corruption", and "economic instability", as the major risk factors (Table 2). Similarly, among the category risk factors, in descending order, the financial and economic, tender, construction works, and political and legal factors were the most significant factors identified with an overall RII value  $\geq 0.700$ . All the categorical and sub-categorical risk factors contributed to the possible occurrence of risks that could have an effect on project objectives in terms of time, cost, performance, and quality on building construction projects in Addis Ababa.

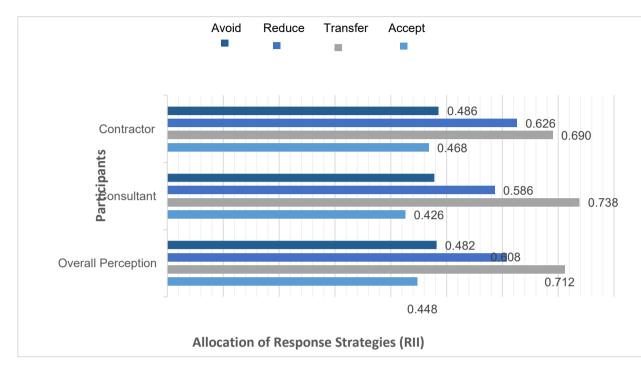


Note: low (0<RII $\leq$ 0.2), medium-low (0.2<RII $\leq$ 0.4), medium (0.4<RII  $\leq$ 0.6), high-medium (0.6<RII $\leq$ 0.8), & high (0.8< RII<1)

Figure 2: Probability of Occurrence of Possible Risks by Participants

As indicated in Figure 2 there was a complete agreement among the participant's perception for the occurrence of all possible risks. The study discovered frequent probability of occurrence for all possible risks, high importance level for the first and second risks, and high- medium level of importance to the third and fourth risks respectively. Time overrun (RII, 0.904), cost overrun (RII, 0.872), low performance (RII, 0.808), and low quality (RII, 0.75) were rated from first to fourth correspondingly. The high level importance risk findings were in alignment with the results of Serpella *et al.* (2014), Hlaing (2016), Wiguna & Scott (2005), Chapman (2001), and Jayasudha and Vidivelli, (2016) etc., that revealed in majority of the situations projects completed beyond schedule and budget. The allocation and preference of appropriate strategies by respondents to the overall risks to attain project success was presented. In this study, similar to occurrence of risks, the overall perception of risk response strategies by respondents were in complete

agreement as indicated on Figure 3. It was preferred in the order of transfer (RII, 0.712), reduce (RII, 0.608), avoid (RII, 0.482), and accept (RII, 0.448).

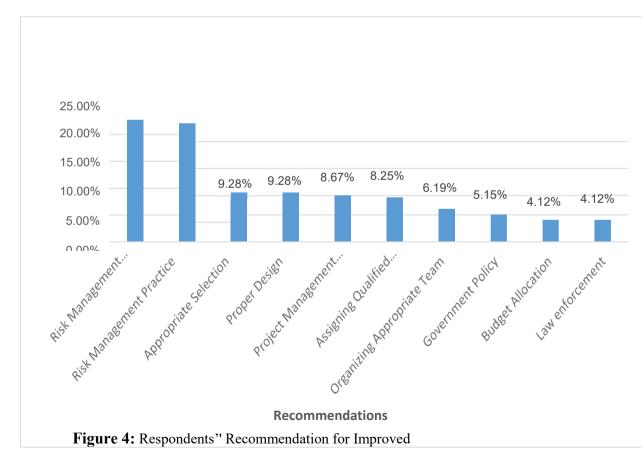


Note: low (0<RII $\leq$ 0.2), medium-low (0.2<RII $\leq$ 0.4), medium (0.4<RII  $\leq$ 0.6), high-medium (0.6<RII $\leq$ 0.8), & high (0.8<RII<1)

Figure 3: Preferences of Risk Response Strategies by Participants

The first and second strategies were rated with high-medium importance level, whereas the third and forth with medium importance level. Their frequency of occurrence was found to be frequent, for the first, neutral for the second; and infrequent, for third and fourth correspondingly. Risk transfer is shifting risk from one party to another through the form of insurance, sub-contracting, or involving other parties and sharing the risk and other methods could be the possible reason for this strategy. The result, risk transfer, both by consultants and contractors being the most significant strategy might be due to the risk averse nature of the respondents could be the other reason. This finding was in alignment with the result of (Haupt, 2015) which indicated that the "transfer" option is the contractors' predominant response to "client" and "consultant "related risks. However, Hlaing (2016) in his study, ranked risk transfer as the second strategy.

The second strategy in this study was risk reduction. Conversely, Hlaing (2016) in his study also ranked it first. Whereas, risk avoidance and acceptance/retention/ were ranked by his study third and fourth which was in alignment with this study. The likely reason for this strategy could be reducing unexpected events, saves time, cost, effort, greater productivity, improved success and guides decision making might be among others. To implement response strategies and procedures risk management should be common knowledge to both consultants and contractors. Other stakeholders should also have this knowledge that played an important role on building construction projects in Addis Ababa. It includes, systematically identifying risks, analyzing and responding to risks to achieve project objectives. Consequently, participants might have got experience and practice for the purpose of planning activities that reduce the probability of occurring risks and mitigate the impacts of risks that might occur throughout all phases of the project. This in return, could enable the project to be successful.



The first question asked was to suggest or compliment respondents' opinions about risk management associated with building construction projects in Addis Ababa. From the total response 22.68% suggested that the major operators in the industry should have knowledge of risk management as indicated on Figure 4. This could be done through workshops, training and continued development of professionals through formal education in order to build the capacity of stakeholders. Hence, from the participants' point of view creating awareness on risk management was the most significant component for the appropriate implementations of projects to achieve objectives. The second almost equivalently ranked recommendation was practicing the knowledge (22.06%) of risk management accordingly. In view of respondents, this was a valuable suggestion given that acquiring risk management knowledge is very important, but without exercising, it doesn't make projects successful alone. Because most of the construction works were performed in the traditional way with very less output consuming much time and cost.

The third most important recommendations given by participants were appropriate selection of implementers and proper design with an equal percentage of 9.28%. There should be a clear guide line or selecting criteria for both contractors and consultants based on their performance, competence, experience, capacity and organizational merits. The bidding process should be appropriate and transparent in order to select qualified contractors and consultants. The other important factor was preparation of proper, complete and detailed design including working drawings and with its respective bill of quantity and specifications. According to participants, project management knowledge and practice (8.67%) in terms of planning, organizing, executing, monitoring and evaluation was the fourth aspect which needs to be considered. Assigning qualified professionals (8.25%), organizing appropriate teams (6.19%) for identifying risk factors, analyzing and allocation of strategies were the fifth and six aspects of recommendation in managing risk respectively. Government policy (5.15%) in reducing the price escalation/inflation/ of construction materials was one of the characteristics given attention by respondents. Respondents also suggested that clients should secure and allocate enough budgets (4.12%) for their projects before commencing. Lastly, regulatory and law enforcement mechanisms (4.12%) should be deployed by the respective implementing body.

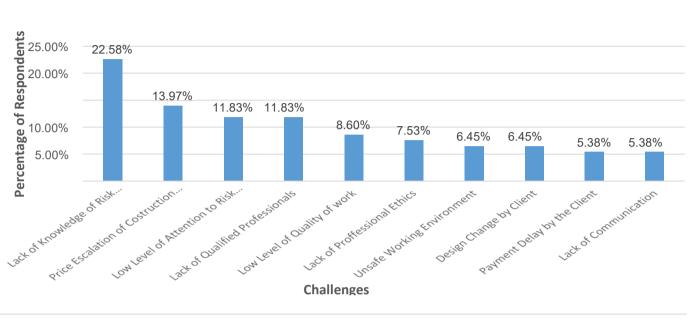


Figure 5: Challenges Encountered by Participants in Managing Risk

The second question asked was respondents' opinion about the challenges they faced in managing risk associated with building construction projects in Addis Ababa. From the total valuable response, as indicated on Figure 5 the most significant challenge faced was lack of knowledge of risk management (22.58%) by consultants and contractors. This could be the reason why in the above discussion the most important recommendation given by the respondents was to create awareness and knowledge of risk management in the building construction projects. This challenge faced by participants was in agreement with the findings of Yimam (2011), Mesfin (2014), and Chemir (2018) who stated that risk is the least matured among project management knowledge areas. This is because risk cannot be identified, assessed, and allocated without the knowledge and understanding of managing it. Participants agreed that the second most important challenge faced was price escalation (13.97%) of construction materials on building construction projects. This result was also in agreement with the findings of the most significant risk factor "high inflation rate" identified by participants. For instance, due to shortage of foreign currency, some construction materials like iron bar prices have escalated, as a result some construction projects were discontinued for a significant period of time. Therefore, projects had difficulty achieving their objective on the planned schedule and cost.

The third most important challenges confronted as viewed by participants were low level of attention given to risk management and lack of qualified professionals in the sector with an equal value of 11.83%. Had there been enough attention given to risk management by the major operators of the sector, there would have not been a shortage of qualified professionals. Either training or educational development might be arranged or practitioners could be engaged with the knowledge and experience acquired. In addition, from the general profile of respondents those who specialized in project management were only 5.1%, the rest were with other fields of specialization engineering being the dominant constituted almost 59%. This might prove the low level of attention that was given by the major operators. Hence, these two challenges were interrelated and this might be the reason why they got similar value by respondents.

# 5. Conclusions and Recommendations

Due to unexpected nature and changes that occur during implementation of building construction projects, risk became a prevalent phenomenon. In this study, with the objective of identifying and ranking the major risk factors on building construction projects, 50 risk factors were identified from review of related literature and considered by consultants and building contractors in Addis Ababa. From the overall perception of participants, the result shows that 5 risk factors are with high levels of importance and frequent probability of occurrence. High inflation rate is the most significant factor that has an effect on building construction projects. For the achievement of project objectives, this factor should draw extraordinary consideration from government bodies and other institutions responsible for preparation of policies and its implementation.

Following inflation, delayed payment by a client was observed by participants as the second most critical risk factor among the factors examined. This factor needs special attention by financial institutions that are in charge of fixing collateral requirements to issue guarantees for project financing. Financial institutions need to require collateral with the reality of the existing situation and with appropriate time in the process of financing projects. As a result, projects could get adequate finance on due time that can facilitate availability of resources on specified schedules. This also increases efficiency of project operation that enables us to achieve objectives. Poor resource management, associated with construction work categories, was rated as the third major critical risk factor by participants that have an effect on project objectives. This factor should get attention by contractors for appropriate resource management who are responsible for executing projects on site. Managers should acquire the required knowledge and give special consideration in managing resources.

The fourth factor which needs to be considered by all stakeholders was risk of corruption, which are involved and have significant roles in the construction industry. It requires professional ethics in preparing design, specification, tendering and implementation of projects. Moreover, the necessary controlling mechanism should be developed by all responsible bodies in order to decrease possibilities of corruption. Hence, projects can be completed with lesser cost, better quality, on schedule and become successful. The fifth dominant risk factor is economic instability as perceived by participants which has a significant effect on project objectives. This factor also requires due attention particularly by the government who is responsible for formulating economic policies and creating a politically stable environment, etc. The government should also promote and expand the construction sector in order to create employment opportunities.

Participant's perception of building construction project risk category, the most significant factor considered, is the financial and economic composite risk, with high frequency of occurrence and high-medium importance level. The results from the study display that risk factors namely, "high inflation rate", "delayed payment by the client", and "economic instability" are under the financial risk category that have effect on project objectives. The policies and strategies that should be employed in the individual risk factors will also have a combined effect on this composite risk category. The study revealed that time overrun and cost overruns are the two most critical possible risks with frequent probability of occurrence and high importance level respectively. Based on the findings of the study it is recommended that consultants, contractors, and other stakeholders consider the following areas of improvement in managing risk on building construction projects.

- Practitioners of both consultants and contractors should have knowledge, skill, and practice of risk management in order to minimize building construction risks early.
- Both consultants and contractors need to give attention to risk management and embrace risk as their essential part of their project

management and meet project objectives.

- Critical risk factors, as revealed in this study, should be properly handled by their respective companies/government/institutions accordingly in managing risk to achieve a successful result of construction projects.
- Consultants and contractors including other stakeholders should work together as a team on projects to systematically identify major risk factors, analyze and respond to risks with appropriate strategy to achieve objectives.
- Well organized construction policy should be formulated by government in order to implement and improve the capacity and competitiveness of local construction enterprises which facilitates the economic stability of the country.
- Identified risk factors can be used as a check list to contribute for risk management process on account of building construction projects in Addis Ababa.

# 6. Limitations and Further Studies

All research – regardless of how well conducted or constructed – encounters certain drawbacks. As a result this research acknowledges some limitations. The primary limitation with the research is related to scope of agents involved as source of data. The research relies on data only from contractors and consultants. However, the study is able to use available data with different treatment techniques to analyze project risk management specific to construction projects. Similar study can be done including clients, suppliers, and sub-contractors besides consultants and contractors to evaluate the associated risk factors reflection. The risk factors identified in this study can be further researched to the allocation of their corresponding risk response strategy.

# References

- A Guide to Project Management Body of Knowledge (PMBOK guide)/Project Management Institute (5th ed.). (2013). Newtown Square, Pennsylvania: Project Management Institute.
- A Guide to Project Management Body of Knowledge (PMBOK guide)/Project Management Institute (6th ed.). (2017). Newton Square, Pennsylvania: Project Management Institute.

- Abdulaziz M. Jarkas Theodore C. Haupt . (2015). Major construction risk factors considered by general contractors in Qatar. *Journal of Engineering, Design and Technology, 13*(1): 165-194.
- AbolfazlAlvand, S. Mohammad Mirhosseini, Mohammad Ehsanifar, EhsanollahZeighami& Amir Mohammadi (2021). Identification and assessment of risk in construction projects using the integrated FMEA-SWARA-WASPAS model under fuzzy environment: a case study of a construction project in Iran. *International Journal of Construction Management*, DOI: 10.1080/15623599.2021.1877875
- AEO, AfDB, OECD, & UNDP. (2017). *African Economic Outlook*. Addis Ababa: AEO. doi:http://dx.doi.org/10.1787/aeo-2017-en
- Akadri, P. O. (2011). Development of a Multi-Criteria Approach for the Selection of Sustainable Materials for Building Projects. Wolver Hampton, UK. Un published PhD Thesis.
- Alfredo Federico Serpellaa Ximena Ferrada, Rodolfo Howarda. (2014). Risk Management in Construction Projects: a Knowledge baded approach. *Social and Behavioral Sciences*, 653-662.
- Ali Ezzeddine, Lynn Shehab, IssamSrour, William Power, Emile Zankoul&ElieFreiha (2021). CCC\_implementing the construction control room on a fast-paced project: the case study of the Beirut port explosion. *International Journal of Construction Management*, DOI: <u>10.1080/15623599.2021.1925395</u>.
- Altoryman, A. (2014). Identification and assessment of risk factors affecting construction projects in the Gulf region: Kuwait and Bahrain.
   Manchester: Unpublished PhD Dissertation. University of Manchester.
- Banaitiene and Banaitis. (2012). Risk Management in Construction Projects. 429-448.
- Chapman, R. J. (2001). The controlling influences on effective risk identification and assessment for construction design management. *International Journal of Project Management, 19*, 147-160.
- Chemir, S. (2018). Project Risk Management Practices of Selected Chinese Building Contractors in Ethiopia. Addis Ababa: Unpublished Master's Thesis.
- Chileshe, N. (2012). An Evolution of Risk Factors Impacting Construction Projects in Ghana. *Journal of Engineering, Design and Technology*, 10(3):306-329.

- Chris Chapman, Stephen Ward. (2003). *Project Risk Management* (2nd ed.). Southampton, UK: John Wiley and Sons Ltd.
- Creswell, J. W. (2002). *Research Design: Qualitative, Quantitative, and Mixed Method Approaches* (2nd ed.).
- CSA, F. N. (2019). Country & Regional Level Consumer Price Incices (CPI). Addis Ababa, Ethiopia: CSA.
- Dale Cooper, Stephen Grey, Geoffrey Raymond, Phil Walker. (2005). Project Risk Management Guideline (Managing Risk in Large Projects and Complex Procurements). Southern Gate, Chichester: Jhon Wiley and Sons Ltd.
- Dawson, C. (2009). Introduction to Research Methods: A Practical Guide for Anyone Undertaking a Research Project (4th ed.). How To Books.
- Dickson Osei-Asibey, Joshua Ayarkwa, Alex Acheampong, Emmanuel Adinyira& Peter Amoah (2021). Impacts of accidents and hazards on the Ghanaian construction industry. *International Journal of Construction Management*, DOI: 10.1080/15623599.2021.1920161.
- Djoen san santoso, Stephen O. Ogunlana, Takayuki Minato. (2003). Assessment of Risk in High Rise Building Construction in Jakarta. *Enginering, Construction and Architectural Management, 10*(1), 43-45.
- Edmundas Kazimieras Zavadskas, ZenonasTurskis&JolantaTamošaitiene. (2010). Risk Assessment of Construction Projects. *Journal of Civil Engineering and Management, 16*(1), 33-46.
- EEA, E. E. (2008). *Report on The Ethiopian Economy, The Current State of The Construction Industry.* Addis Ababa, Ethiopia: EEA.
- Flanagan, R. Norman, G. (1993). *Risk Management and Construction*. Blackwell Scientific Publications, Oxford.
- Group, R. M. (2012). Project Risk Management Handbook: Scalable Approach.
- H.A. Odeyinka, A.A. Oladapo, and O. Akindele. (2006). Assessing Risk Impacts on Construction Cost. In E. Sivyer (Ed.), *The construction and building research conference of the Royal Institution of Chartered Surveyors*. London: RICS.
- Hillson, D. (2009). *Managing Risk in Projects*. England: Gower Publishing Lmtd.
- I PutuArtamaWiguna and Stephen Scott. (2005). Nature of The Critical Risk Factors Affecting Project Performance in Indonesian Building

Contracts. Association of Researchers in Construction Management, 1, 225-235.

- John M. Nicholas, Herman Steyn. (2017). Project Management for Engineering, Business and Technology (5th ed.). New York: Routledge.
- Jayasudha, K. and Vidivelli, B. (2016). Analysis of major risks in construction projects. *ARPN Journal of Engineering and Applied Sciences*, 11(11):6943-6950.
- Kerzner, H. (2009). *Project Management* (10th ed.). New Jersey: John Wiley & Sons.
- Kothari, C. (2004). *Research Methodology Methods and Techniques* (2nd ed.). New Delhi: New Age International (P) Ltd Publishers.
- M. TadesseAyalew, M. ZakariaDakhli. (2016, February). The Future of Lean Construction in Ethiopian Construction Industry. *International Journal of Engineering and Technology*, 5(02), 108-113.
- Mark Saunders, Philip Lewis, Adrian Thornhill. (2016). Research Methods for Business Student
- Mehdi Tadayon, MasturaJaafar, and Ehsan Nasri. (2012). An Assessment of Risk Identification in Large Construction Projects in Iran. Journal of Construction in Developing Countries, Supp. 1, 57–69.
- Mesfin, A. (2014). A Study on Construction Contract Risk Management Practices in Ethiopian Building Construction Projects. Addis Ababa :UnpublidhedMaster"s Thesis, Addis Ababa University.
- MUDC, M.O. (2012). Construction Industry Policy (First Draft). Addis Ababa: MUDC.
- N.N. Hlaing D. Singh R.L.K. Tiong M. Ehrlich. (2008). Perceptions of Singapore Construction Contractors on Construction Risk Identification. *Journal of Financial Management of Property and Construction*, 13(2), 85-95.
- Nigel J. Smith, Tony Merna, Paul Jobling. (2006). *Managing Risk in Construction Projects* (2nd ed.). Blackwell Publishing Ltd.
- NurAlkafAbd Karim, Ismail Abd. Rahman Aftab Hameed Memmon, Nurhidayah Jamil. (2012). Significant Risk Factors in Construction Projects:Contractor's Perception. *IEEE Colloquium on Humanities, Scince and Research (CHUSER)*. Sabah, Malaysia: Un Published Conference Proceedings.

- Oberlender, G. D. (2000). *Project Management for Engineering & Construction* (2nd ed.). USA: Thomas Casson.
- OlcayGenc (2021). Identifying principal risk factors in Turkish construction sector according to their probability of occurrences: a relative importance index (RII) and exploratory factor analysis (EFA) approach. International *Journal of Construction Management*, DOI: <u>10.1080/15623599.2021.1946901</u>
- Patrick X.W. Zou, Guomin Zhang, Jiayuan Wang C. (2007). Understanding the key risks in construction projects in China. *International Journal* of Project Management, 601-614.
- Rauzana, A. (2016). Identification and Assessment of Risk Factors Affecting Construction Projects. *IOSR Journal of Business and Management* (*IOSR-JBM*), 18(9 .Ver. IV), 72-77.
- Rumane, A. R. (2018). *Quality Management in Construction Projects* (2nd ed.). Boca Raton, FL: CRC Press.
- Shahid Iqbal, Rafiq M. Choudhry, Klaus Holschemacher, Ahsan Ali & Jolanta Tamošaitienė. (2015). Risk management in construction projects. *Technological and Economic Development of Economy*, 21(1), 65-78.
- SHOU QING WANG, Mohammed Fadhil Dulaimi, Muhammad Yousuf Aguria. (2004). Risk management framework for construction projects in developing countries. *Construction Management and Economics*, 237-252.
- Szymanski, P. (2017). Risk Management in Construction Projects. International Workshop on flexibility in sustainable construction, ORSDCE, (pp. 174-182). Poznan-Puszczykowo, Poland.
- Verzuh, E. (2016). *The Fast Forward MBA in Project Management* (5th ed.). New Jersey: John wiley and Sons.
- Worku Asratie Wubet, Michael Burrow & GurmelGhataora (2021). Risks affecting the performance of Ethiopian domestic road construction contractors. *International Journal of Construction Management*, DOI: <u>10.1080/15623599.2021.1902732</u>.
- Yimam, A. H. (2011). Project Management Maturity in the Construction Industry of Developing Countries. Unpublished Master's Thesis, University of Maryland.
- Zhi, H. (1995). Risk management for overseas. International Journal of Project Management, 13(4): 231-237.

# Determinant of Micro Enterprise Growth in the Manufacturing Sector: The case of Jimma Town

**Tomas Tadesse Firisa** 

Lecturer at Gage University Collage, Ethiopia. Email: tomastadesse80@gmail.com

# Abstract

The main aim of the study was to examine factors affecting the growth of microenterprises in the manufacturing sector in Jimma town. To this end, the study used descriptive and explanatory research design and data was conducted from 186 respondents. The study found out the effect of working premises, managerial, infrastructure, and financial factors on the growth of micro-enterprises in manufacturing operating in Jimma town, the correlation analysis shows the relationship between working premises, managerial, infrastructure and financial factors and growth of micro-enterprises in manufacturing sector were strong and positive relationship and the results of regression analysis observed that working premises, managerial, infrastructure and financial factors have a significant positive effect on the performance of micro-enterprises in manufacturing sector, the researcher recommends that the government needs to establish training centers for training managerial and technical courses for the micro-enterprises entrepreneurs as well as business information centers and to develop a comfortable source of finance for micro-enterprise, the government should have to organize and support the performance of Micro Finance Institutions and another source of finance and Jimma town micro-enterprise and food security office be supposed to undertake a detailed study on the appropriateness of the working place to be given to each type of enterprises.

*Keywords*: infrastructure, financial, managerial and working premises factors, Micro enterprises

# 1. Introduction

# 1.1 Background of the Study

The growth of the manufacturing sector within industry is essential to build national technological capacity, industrial capability and create broad based job opportunity and improve income. Africa's share of global manufacturing was below 1 percent,

while Asia and other developing economies accounted for 25 percent and 23.7 percent respectively in 2008 (UNCTAD-UNIDO 2011). Africa's manufacturing value added share of GDP was only 14 percent in 2003, with a decrease of 2 percent from 1965, the result of almost four decades of sluggish growth.In 2013 the average share of manufacturing in GDP in sub-Saharan Africa was about 10% the same as in the 1970s. Africa's share of global manufacturing has fallen from about 3% in 1970 to less than 2% in 2013. (Lawrence 2015). Moreover, the sector has been dominated by low-value, labor-intensive, resource-based activities and by small firms and the informal sector (Dinh, Palade, Chandra, and Cossar (2012).

Ethiopian manufacturing sector contribute for export, job creation for accumulating technology and innovative capabilities for enhanced productivity, employment and national output. The share of manufactured exports in total exports remained less than 13 percent while total exports decreased from 12.7 to 7.7 percent of GDP during 2001 and 2016/17. Manufactured exports were characterized by low-value products, which were generated in the leather and leather goods, textiles and apparel, and meat industries, and which generally went to other low/middle-income markets. This may be compared to the traditional coffee and the new cut-flower exports, which accounted for 25 and 7.5 percent of total merchandise exports respectively in 2014–2017, and a greater share of these exports, were destined for higher income markets. The failure to increase manufactured exports as a share of total exports suggests limited structural transformation and the significance of the balance of payments constraint on growth through industrialization (Thirlwall 2013; Cramer, Sender, and Oqubay 2018; Lin and Monga 2019).

The Ethiopian economy remains under pressure by structural problems; the manufacturing sector in Ethiopia is still at its infancy, in comparison with the agriculture and service sectors, the manufacturing sector. Thus, the Ethiopian economy needs a more dynamic growth so that it can reduce its dependence on the fragile, rainfall dependent, and climate change vulnerable agricultural sector (Survey of Ethiopian manufacturing, 2014).

According to Nkonoki (2010) sited from the Global Journal of Management and Business Research (2016), the main factors that limits micro manufacturing firm's growth into two groups; first is the factors that originate from within the firm and the second group is factors that originate from outside the firm. Lack of a proper business plan, poor management, and lack of needed talent are among the internal factors. The external factors limiting micro manufacturing enterprises growth are corruption, competition, and government policy, technological barrier, in access to finances, bureaucratic processes and unfavorable economic factors. The other reason for the fail micro-enterprise in manufacturing sector are input constraints due to high import prices for raw material and inadequate supply of domestic raw materials due to weak agricultural industrial linkages are to be addressed through various input policies. Further reasons are input constraints due to high import prices for raw material and inadequate supply of domestic raw materials due to weak agricultural industrial linkages are to be addressed through various input policies. In response to such weak linkages, the government of Ethiopia plans to establish integrated agro-industrial parks along the major ago-ecological zones of the country.

Further research conducted by Gemechu (2016) finding says, both all internal and external factors are not equally affects the performance of micro and small enterprises. As compared with the other factors, technological factors, lack of infrastructural facilities, shortage of working premises and shortage of finances for start-up and expansion purposes are the top most factors that affect the growth and success of MSEs activities. In spite of the above mentioned data's, the sector has been confronting with many challenges whose severity varies across regions and cities. The International Finance Corporation, (2011) has identified various challenges faced by MSEs Including lack of innovative capacity, lack of managerial training and experience, inadequate education and skills, technological change, poor infrastructure, scanty market information and lack of access to credit.

According to Jimma town administration job creation and urban food security office inventory report (2018), indicated 11,247 MSEs are organized in last Five years (2013-2017) But 8581(76.3%) of MSEs was felled and only 2,666 (23.7%) of MSEs are survived. From total MSEs (11,247) the number of manufacturing sector was 1136 (10.1%), But only 31.1 %( 350) MSEs are survived and 68.9 %( 782) of them are felled in these years.

The researcher was concerned on the manufacturing sector due to its government center of attention area which expects as a bridge to transforming from agricultural lead economy to industry lead, the sector also helps to employee creation, wealthy generation, and expects increasing hard currency through producing import substitute production. Therefore, the researcher focus on some selected factors because of limited time and resources, only on internal factors, (managerial factors) and external factors; (financial, working premises, and infrastructure factors) were researched as a single intervention in the manufacturing sector at the micro level.

# 1.2 Objectives and hypotheses of the study

The main objective of the study was to assess factors that affect the growth of microenterprises in manufacturing sector in Jimma town. H1: there is a significant relationship between managerial factor and growth of microenterprises in manufacturing sector.

H2: there is a significant relationship between work premise factors and growth of micro- enterprises in manufacturing sector

H3: there is a significant relationship between infrastructural factor and growth of micro- enterprises in manufacturing sector

H4: there is a significant relationship between financial factor and growth of microenterprises in manufacturing sector

# 2 Literature review

# 2.1 Definitions and concepts of Micro enterprises

Universally there is no common definition of MSEs and different countries use different words based on the conditions of MSEs and countries' economies. In the case of Ethiopia, there is a lack of uniform definition at the national level to have a common understanding of the Micro and small enterprises sector (Munira, 2012). According to the Ministry of trade and industry: Micro enterprises are those businesses enterprises, in the formal and informal sector with a paid-up capital not exceeding Birr 20,000 and excluding high tech consultancy firms and other high tech establishments, whereas Small enterprises are those business enterprises with a paid up capital of above Birr20, 000 and not exceeding Birr 500,000 and excluding high tech consultancy firms and other high tech establishments. Currently, the revised micro and small enterprises strategy that divided micro and small enterprises in terms of product, service, sectors and capital defined, Micro Enterprises are those enterprises having 5 workers including family members and its total asset not exceeding Birr 100,000 for manufacturing enterprises and Birr50,000 for service providing enterprises. Small enterprises are those enterprises having 6-30 workers and their total capital not exceeding Birr 1.5 million for manufacturing enterprise and Birr 500,000 for service providing enterprises (Munira, 2012).

#### 2.2 The Role of MSEs in Economic Growth

MSEs are long recognized as important vehicles of economic diversification, income generation, and distribution, and accelerating the economy of a country (Munira, 2012). They can also help to achieve a more equitable distribution of the benefits of economic growth and thereby help alleviate some of the problems associated with uneven income distribution, employment creation, industrial development, rural development, poverty alleviation, job creation, to identify and exploit market opportunities, and export growth to provide the basis for medium and large scale enterprises (Zemenu and Mohamed, 2014).

A study conducted by FDRE, (2013), for example, report that micro and small enterprises are major drivers of both employment and economic growth contributing to more than 50 % of GDP and 60 % to employment in developed economies, constitute less than 30% of employment and 17% of GDP in developing countries. MSEs in Ethiopia are the second -largest employment generating sector next to agriculture (Habtamu et al., 2013).

**2.3 The Role of the manufacturing sector in the Ethiopian economy** In Ethiopia the Manufacturing sector employed 4.5 percent of the total workforce in 2013. Employment by the sector grew at an annual rate of 4.8 percent (similar to the 4.7 percent growth for total employment) between 2005 and 2013 (NPC 2018).Jobs in the construction industry tripled from 229,000 to 825,000. This has doubled the construction industry's share of total employment from 0.9 to 1.9 percent. Meanwhile, stimulated by the expansion of public infrastructure and favorable policies, valueadded in the construction industry increased from 11.1 to 27.7 percent between 2010/11 and 2014/15 and then slightly dipped to 22.85 percent in 2015/16–2016/17.7. Manufacturing industries related to the construction sector (such as the cement industry and other building materials) have also shown rapid growth and shifts in industrial structure (Oqubay 2015; CSA 2017). Despite the increase in manufacturing output, there has been no comparable growth in manufactured exports and employment, the share of manufactured exports in total exports remained less than 13 percent while total exports decreased from 12.7 to 7.7 percent of GDP during 2001 and 2016/17.

The Growth and Transformation Plan seeks to transform the economy toward an industrialized economy and to increase the per capita income of its citizens by 2025, to this effect, the Government has adopted policy focused on the development of the manufacturing sector through the use of industrial parks to attract and to support SMEs. Targeting SMEs is important as they are an engine for job creation and a manifest of a thriving and dynamic economy. But, with services and agricultural sectors contributing almost 90 percent of GDP, the GTP has not been able to accelerate structural transformation. At the same time, the share of the manufacturing sector in GDP remained just above 4 percent of GDP for most of the past decade. Furthermore, Ethiopia has not made significant progress in pulling labor out of agriculture into more productive and industrial jobs. The share of employment in the manufacturing sector has changed only slightly and is virtually unchanged since 1999 at below5 percent of total employment. The ratio of imported inputs to total raw materials for the overall manufacturing sector has been 0.50, mostly uniform during the period of 1995/96 to 2015/16, underscoring the weak backward linkages in Ethiopia's manufacturing sector, despite the unevenness across industries. Imported-input dependency ratio increased by 75 percent in the leather and leather goods industry; by 57 percent in the

manufacturing of food products and beverages; and by 38.5 percent in textiles and apparel production, suggesting weak backward linkages with agriculture and the weaknesses of existing industrial policy in developing verticality in these sectors (CSA 1994–2017).

# 2.4 Factors affecting growth of micro enterprise in manufacturing sector

#### 2.4.1 Managerial Factor

Among factors affecting the growth of Small scale and micro enterprises in the manufacturing sector is managerial competencies that have a positive influence on the performance of Small scale and micro enterprises (Hisrich & Drnovsek, 2002). According to Wawire and Nafukho (2010) shows that poor management is the second most cause of MSEs" failure after lack of enough funds, this is because entrepreneurs cannot afford the high cost of training and advisory services while others do not see the need to upgrade their skills due to complacency. Ihua (2009) reported that one of the serious constraints on small business growth is the lack of management skills, which results in poor management actions taken by small business owners. Literature makes it clear that 54% of those who manage the MSEs had no training at all, while 38 % had some limited project management knowledge.

Furthermore, there has been researched that indicates that enterprises who had received training in their areas of business reported that their businesses were doing well. But enterprises that did not receive training in their areas of business perform less. This indicates that relevant training can produce positive results in the running of businesses (Bowen et al 2009). There is a lack of knowledge of entrepreneurial and managerial capacity, and marketing experience (Commission on Legal Empowerment of the Poor, 2006).

#### 2.4.2 Infrastructural Factor

Physical infrastructure such as transportation, land or operating space, and communication facilities such as the internet, telephone, and postal services are vital for the successful operation of entrepreneurial activities and venture start-up and growth (Trulsson, 2002). Accessing physical infrastructure can be seen as one of the inputs that the entrepreneur must pull together in his or her role as an economic "gap-filler" and an "input-completer. Access to physical infrastructure for entrepreneurs can vary widely from country to country and while it may be taken for granted in many high-income countries, in others it can be a major issue (Bitzenis and Nito, 2005).

Good infrastructure facilitates to have a positive effect on reducing the cost of operation. MSEs Owners in Ethiopia indicated that a lack of efficient, reliable, safe,

and affordable infrastructure is affecting the performance of their business. The physical infrastructure facilities are not adequately developed and expanded in Ethiopia to meet the growing demand for MSEs activities. As a result, most MSEs have problems related to business premises such as an increase in house rent, lack of basic services such as telephone lines, electricity supply, sewerage and water services (Eshetu& Mammon, 2009).

# 2.4.3 Financial Factor

Many research demonstrated that small businesses start their business with their own savings supplemented by borrowing from friends and relatives. Furthermost micro and small enterprises are extremely risky ventures involving excessive administrative costs and lack the experience in dealing with financial institutions and do not have a track record of creditworthiness with banks. Since most banking institutions are reluctant to provide small enterprises with loans and credits, most MSEs are unable to secure collateral requirements. As a result of the absence of financing, the creation of new Enterprises, and the growth and survival of existing ones will be impeded (Commission on Legal Empowerment of the Poor, 2006).

Access to finance is a major bottleneck for the rapid growth and development of MSEs mainly due to the targeted mechanism put in place to address the financial needs of small-scale enterprises. The standard of loan appraisal, the long delay the banks take to sanction loans, unfavorable disposition towards small loans, and the limited collateral requirement are the major obstacles that small scale enterprises are facing. Moreover, the interest rate by most microfinance institutes, which is higher than the lending rate of formal banks, inhibits effectiveness in addressing the needs of micro-enterprises (Commission on Legal Empowerment of the Poor, 2006).

# 2.4.4 Working premises

According Mbonyane and Ladzani (2011) found that small businesses select a site without first thoroughly analyzing the suitability of location. The same researcher found that most of the micro-enterprises are failing owing to a lack of space provided by the government and the various shortcomings of the small business owners regarding their businesses and Location is critical factor for sales and income of small scale enterprises and hence entrepreneurs benefit from businesses in formal residential areas.

Olawale and Garwe (2010) also found that poor location has a negative impact on the performance of micro and small enterprises. Working premises with the least leasing price adjustment is the first requirement and taken as mandatory to the government. Most informal operators do not get access to suitable locations where they can get easy access to markets. The issue of acquisition and transaction cost has become very

prohibitive to the emergence of new enterprises and to the growth and survival of existing ones. The issue of land provision and the land lease system has greatly constrained the chances of micro, small, and medium enterprises that aspire to startup businesses (Eshetu and Mammo, 2009).

#### 3 Research Methodology

The study used descriptive and explanatory research design, the descriptive method is of special importance for this particular study to assess several factors and portray how they affect the growth of micro-enterprises in the manufacturing sector. The purpose of explanatory research is to increase the understanding of a researcher on a certain subject and to examine the relationship between independent variables and dependent variables and to determine the effects of each factor on micro-enterprises in the manufacturing sector. The target population of the research was only micro-enterprises in the manufacturing sector in the Jimma town those registered by the ministry of trade and market development they are 350 Micro enterprises, to select sample respondents from the entire population, probability sampling specifically stratified sampling technique was used meanwhile it ensures the presence of the key subgroup within the sample.

Sample size should be optimal in which it accomplishes the requirement of efficiency, representativeness, reliability, and flexibility (Kothari, 2004). The number depends on the accuracy needed, the population size, population heterogeneity and resources available. Consequently, the sample size must be determined by using a statistical formulas, different authors use different formulas to determine the sample size of the study, the sample size of the study were186 respondents. The study used primary and secondary source of data, primary data was collected by using questionnaires, and secondary sources of data were books, publications and the internet that involves; looking into already done materials, document analyses from numerous published and unpublished documents. The validity of instruments was pre-tested by potential experts and advisors. The reliability of the instrument was measured using Cronbach's alpha test. The internal consistency reliability results in the study were 0.891 that is confidential under excellent classes. Analysis of data was completed in order to answer the research questions of the study. Data collected was sorted, classified and coded then tabularized for comfort of examination. The data was summarized and categorized according to mutual themes to analyze the data, different kinds of statistical approaches including descriptive statistics and inferential statistics (correlation and multiple linear regression), were used. Furthermore, descriptive is applied for percentage, standard devotion, and mean value were calculated using SPSS version (23).

#### **Model specification**

According to Gujarati (1995); "Multiple linear regression method is used to study the relation between the independent variables and dependent variable. He defines a regression function as follows:

$$Y = \beta 0 + \beta 1X1 + \beta 2X2 + \beta 3X3 + \beta 4X4 + ui$$

Where Y is growth of micro manufacturing enterprise, Bn is the coefficient of independent variables, X1= managerial X2= work premises X3= infrastructure and X4= finance. Ui is error term.

#### 4 **Results and Discussions**

Questionnaires were organized and disseminated to the respondents and from these, 4 respondents did not return back the questionnaire. Due to this reason, 182 (97.85%) of the distributed questioners are collected. According to Mugenda and Mugenda (2003), a response rate of 70% and over is excellent.

#### 4.1 Demographic data of the respondents

The find of the background of respondents indicated that majority of the respondents are male with a total of 77.8% while the remaining 22.2% were female. Concerning to marital status of the respondents 67.3% was married, with mention to age most of them are in the age range of 18-30 at 68.43% and education majority of the respondent sample group were TVET holders which represents 55% from the total participant, in addition, majority of respondents have working experience from 1-2 years which represent 34.5% from the respondent provider of research, the number of employees working in the business enterprises have 1-3 (76.6%) employees, with regarding the initial capital majority of the enterprises (52.9%) were between birr, 5001-15000, the principal sources of finance for the MSEs mainstream of the respondent confirmed (56.1%) started their business by borrowing money from microfinance institutions, concerning to type of the business they operate most of them (33.9%) are organized under food and beverage product work. Regarding to the source of the workplace (28.1%) of the enterprises acquired from the government, regarding the attraction of working place 66.1% respondents indicate as they do not have an attractive workplace.

#### 4.2 Descriptive Statistics

As per the findings presented in Table 1 deficiency of knowledge of entrepreneurial and managerial capacity, lack of coordination of the production process, absence of formal education and training in proper business management and nonexistence of technical knowledge to lead the business of enterprise at the grand mean score of 4.19, 4.25, 4.31 and 4.12 respectively. This implies that the managerial factors influence the growth of micro enterprise in the manufacturing sector to a great extent. This find is

supported by the finding of Wawire (2010) that shows that poor management is the second most cause of MSEs" failure after lack of enough funds.

# Table 1: Descriptive statistics on managerial and work premise factors in manufacturing sector at Jimma town (n=182)

No	Managerial factors	Mean	St. Dev.
1	Deficiency of knowledge of entrepreneurial and	4.19	0.80
	managerial capacity.		
2	lack of coordination of production process	4.25	0.72
3	Absence of formal education and training in	4.31	0.79
	proper business management		
4	Non-existence of technical knowledge to lead	4.12	1.02
	business of enterprise		
	Work premise factors		
1.	Current working place is not convenient	4.09	0.86
2.	The rent of house is too high.	4.40	0.87
3.	Current work place is insufficient to the business.	4.26	0.96
4.	The work place is not attractive and doesn't have	4.01	0.88
	infrastructure.	4.01	0.00

Source: Own survey (2019)

The additional factor is work premise factors. The current working place is not convenient, the cost of renting house is too high, the current workplace is insufficient to the business and the workplace is not attractive and doesn't have the infrastructure at grand mean score of 4.09, 4.40, 4.26 and 4.01 correspondingly. It indicates that work premises factors affect the growth of microenterprise in the manufacturing sector. The finding is confirmed with the finding of Olawale and Garwe (2010) poor location has a negative impact on the performance of micro and small enterprises.

As per Table 2, the infrastructural factors are power interruption, insufficient and interrupted water supply, lack of telephone and internet service and non-existence of sufficient and quick transportation service at the grand mean score of 3.95, 4.05, 4.24 and 4.31 respectively. This indicates that infrastructural factors affect the growth of

microenterprise in the manufacturing sector. Finally factors are financial factors those are inadequacy of credit institutions, lack of business plan preparation skills, loan application procedures of lending institutions are too complicated and shortage of access to a loan at the mean score of 3.80, 4.46, 4.14 and 4.23 correspondingly. From the finding of the study it's safe to conclude financial factors affect growth of the micro enterprise in the study area. This finding is support by the finding of Mazanai and Fatoki, (2012) one of the major challenges pointed out as hindering the growth and survival of start-up SMEs is finance factor.

Table	2:	Descriptive	statistics	on	infrastructural	and	financial	factors	in
		manufacturing sector at Jimma town (n=182)							

No	Infrastructural factor	Mean	St. Dev.
1	Power interruption	3.95	0.84
2	Insufficient and interrupted water supply	4.05	0.72
3	Lack of telephone and internet service	4.24	0.90
4	Non-existence of sufficient and quick transportation	4.31	0.79
	service.		
	Financial factors		
1.	Inadequacy of credit institutions	4.32	0.71
2.	Lack of business plan preparation skills	4.46	0.58
3.	Loan application procedures of lending institutions are too complicated	4.14	0.89
4.	Shortage of access to loan	4.23	0.92

Source: Own survey 2019

### 4.3 Correlation analysis

In this part of the analysis bivariate Pearson correlation coefficient has been used to examine the relationship between the dependent and independent variable. According to Wajahat (2010), before the start of regression analysis, it is important to check the correlation test between dependent and independent variables. The Pearson correlation scale ranges from -1 to 1, any value greater than zero indicates a positive direct relationship between the two variables, which implies that every increase in the

independent variable will lead to an increase in the dependent variable, while any value less than zero indicate a negative indirect relationship between two variables, this means that every increase in the independent variable will lead to the decrease on the dependent variable.

Variables	Growth of micro enterprise	Infrastructural factors	Financial factor	Managerial factor	Work premises factor
Growth of	1				
micro enterprise	1				
Financial factor	$0.77^{**}$	1			
Managerial	0.75**	0.79**	1		
factor	0.75	0.79	1		
Work premises	0.73**	0.73**	0.83**	1	
factor				1	
Infrastructural	0.72**	0.62**	0.64**	$0.71^{**}$	1
factors					1

 Table 3: Results of Pearson correlations analysis

Note: \*\*. Correlation is significant at the 0.01 level (2-tailed).

Source: Own survey (2019)

Correlation is an effect size and so we can verbally describe the strength of the correlation using the guide that suggests for the absolute value of r: from the above table 3 result, it can be perceived that financial factor is the most correlated variable with the growth of microenterprise in the manufacturing sector (with the r-value of 0.77) and it was followed by managerial factor (with the r-value of 0.75), work premises factor (with the R-value of 0.734) and finally infrastructural factor (with the r-value of 0.72) respectively. From this analysis, it can be noted that financial, managerial, work premise and infrastructural factors have a significant and positive relationship with the growth of microenterprise in the manufacturing sector. Therefore, they have a positively correlated and strong association with each other.

### 4.4 Estimation Results of Determinants of Growth of Micro Enterprises at Jimma Town

The correlation analysis showed that there is a significant relationship and positive relationship between the independent and dependent variables. To what extent the variance in the growth of microenterprise in the manufacturing sector will be explained

by the financial, managerial, work premises, and infrastructural factors are discussed here. The independent variables explained 70.3% of the growth of micro-enterprise in the manufacturing sector as presented by the adjusted  $R^2$  value. It implies that independent variables only contribute to about 70.3% to the growth of microenterprise in the manufacturing sector while the other factors not studied in this research contribute 29.7% to the growth of microenterprise in the manufacturing sector hence there is an essential to extra study the further factors.

Variables	Unstandardized Coefficients		Standardized	Т	Sig.
			Coefficients		
	В	Std.	Beta		
		Error			
	0.83	0.39		4.58	0.01
Financial factor	0.59	0.05	0.59	4.76	0.00
Managerial factor	0.40	0.06	0.33	4.66	0.00
Work premises factor	0.39	0.09	0.31	3.86	0.00
Infrastructural factors	0.37	0.06	0.38	1.21	0.00

### Table 4: Results of Multiple Regression Analysis

Dependent variable: Growth of micro enterprise in manufacturing sector.

According to the results presented in Table 4, financial, managerial, work premises, and infrastructural factors constant at zero, the growth of micro enterprise in manufacturing sector comprehended would be 0.83. The findings studied also shows that taking all other independent variable at zero. A unit increase in financial factor at beta value .587, which implies that a 1% increase in financial factor unit will cause a 58.7% increase in growth of micro enterprise in manufacturing sector. Managerial factor at the beta value of .402 which suggests that a 1% increase in manufacturing sector; work premises factor at the beta value of .389 which indicates that a 1% increase in work premises factor unit will cause a 38.9% increase in growth of micro enterprise in manufacturing sector; work premises factor unit will cause a 38.9% increase in growth of micro enterprise in manufacturing sector. To conclude infrastructural factors at a beta value of .374 which infers that a 1% increase in infrastructural factors unit will cause a 37.4% increase in growth of micro enterprise in manufacturing sector; the statically significance level of

this variable is 0.000; this is at 95 percent confidence interval.as SPSS generated table above equation

$$Y = \beta 0 + \beta 1X1 + \beta 2X2 + \beta 3X3 + \beta 4X4 + u$$

#### Summary of hypothesis

Hypotheses	Results
H1: there is a significant relationship between managerial factor	Accepted
and growth of micro- enterprises in manufacturing sector.	
H2: there is a significant relationship between work premise factors	Accepted
and growth of micro- enterprises in manufacturing sector.	
H3: there is a significant relationship between infrastructural factor	Accepted
and growth of micro- enterprises in manufacturing sector.	
H4: there is a significant relationship between financial factor and	Accepted

growth of micro- enterprises in manufacturing sector.

### 5 Conclusion

The study has attempted to identify the factors affecting the growth of microenterprise in the manufacturing sector at Jimma town, From the finding researcher revealed that financial factors are positively affected the growth of microenterprise in the manufacturing sector in the study are due to this the profitability of the enterprise was restricted and become a cause for the distraction of the enterprise, further managerial, work premises, and infrastructure factors were hinders for the growth of microenterprise in the manufacturing sector. As a reason for all the above factors in Jimma the town the growth of microenterprise in the manufacturing sector becomes a low performance, loss profitability and their growth are stagnant. The correlation analysis result shows the relationship between the finance, work premise, managerial, and infrastructure factors and growth of microenterprise in the manufacturing sector was a strong and positive relationship. The conclusion of regression analysis observed that finance, work premise, managerial, and infrastructure variables have a significant positive effect on the growth of microenterprise in the manufacturing sector.

### 6 Recommendations

The study recommends that the government should have to the establishment information centers and networks to provide information to microenterprises, entrepreneurs, in order to cope with their market, financial, management system problems. The administration would have to create a favorable business environment in collaboration with society, private, and other potential organizations by constructing clusters and shade on eye-catch areas. To develop enough sources of finance for microenterprise the government would have to organize and support the performance of MFIs and another source of finance and create an option for other financial institutions through encouraging NGOs, the private sector, and other civic organizations. Jimma town microenterprise and food security office be supposed to undertake a detailed study on the appropriateness of the working place to be given to each type of enterprises by considering the interest and nature of the individuals to be organized to each type of the enterprises. Microenterprise should enhance their marketing skills through appropriate training and experience sharing with other Microenterprises, a trade organization, civil society, import, and exporters and advertisement agencies, they should form a supply chain management and support each other to minimize their market problem, should also be encouraged to join professional organizations which are run by experienced business owners and trainers, those organizations should offer to mentor and coaching to new startups, they must impart skills training and knowledge especially regarding proper business management, writing and keeping of financial records and writing of sustainable business plans. Micro finances institutions are supposed to minimize their interest rates, service charge, and advance saving of 10% enhanced to give continuous advice, supervision, and counseling the microenterprise at startup, growth, and maturity stage, create trustworthiness between the institution and microenterprises and open satellite branches at the cluster level.

### References

- Adil Yasin (2007). Challenges and Constraints of Micro and Small Enterprises in AA. The *Case of Two Sub-cities' Industrial Zone.MA Thesis.* AAU.
- Bigsten, A. and Söderbom, M. (2005): What we have Learned From a Decade of Manufacturing Enterprise Surveys in Africa, Washington, D.C.: World Bank Policy Research Working Paper 3798.
- Bitzenis, A. & Nito, E. (2005), Obstacles to Entrepreneurship in a Transition Business Environment: The case of Albania. Journal of Small Business and Enterprise Development.
- Bowen, Morara and Mureithi (2009) Repositioning and micro small Enterprises (MSES) in Rumba South L.G.A. of Anambra state Multidisciplinary Journal of Research Development, 12 (3): 1-9.
- Commission on Legal Empowerment of the Poor. (2006). Background issue paper on Legal Empowerment of the Poor, Addis Ababa, Ethiopia.
- Cramer, Chris, Arkebe Oqubay, and John Sender.(2019). African Economic Development: Theory, Policy, and Evidence. Oxford: Oxford University Press.
- Cramer, Christopher, John Sender, and Jonathan Di John (2018). "Poinsettia Assembly and Selling Emotion: High-value Agricultural Exports in Ethiopia." SOAS/EDRI/AFD.Report for the Agence Francais du Développement (AFD), Paris.
- CSA (2014) various issues. Survey on Large and Medium Scale Manufacturing Industries.
- CSA (2017). Manufacturing Survey of Medium and Large Enterprises. Central Statistical Agency (Ethiopia).
- Dinh, Hinh, Vicent Palade, Vandana Chandra, and Francis Cossar (2012)."Light Manufacturing in Africa: Targeted Policies to Enhance Private Investment and Create Jobs." Washington DC: The World Bank.
- EnockNkonoki. (2010). what are the factors limiting the success and/or growth of Small businesses in Tanzania?—An empirical study on small business growth; Arcad University of Applied Sciences, Tanzania.
- Ephrem Setegn (2010). The Role of Micro and Small Enterprises in Poverty Alleviation in Gulele Sub City, Addis Ababa Ethiopia.MA thesis in public admiration, Addis Ababa University.
- Eshetu Bekele & Mammo Muchie. (2009): Promoting micro, small and medium Enterprises for sustainable rural Livelihood; DIIPER Working Paper No.11 Aalborg University Denmark

- FDRE (2013). Federal Democratic Republic of Ethiopia Ministry of urban development and construction, Survey on Micro and Small Enterprises (MSEs) in Selected Major Cities of Ethiopia.
- Gemechu Abdissa & Teklemariam Fitwi (2016). Factors Affecting Performance of Micro and Small Enterprises in South West Ethiopia: The Case of Bench Maji, Sheka, and Kefa Zones. Global journal of management and business research: administration and management. Volume16 issue 10 versions 1.0 year 2016 online ISSN 2249-4588 and print (ISSN):0975-5853.
- Habtamu Tefera, Aregawi Gebremichael and Nigus Abera(2013). Growth Determinants of Micro and Small Enterprises: Evidence from Northern Ethiopia. Journal of Economics and Sustainable Developmen, ISSN 2222-1700 (Paper) Vol.4, No.9
- Hisrich RD, Drnovsek M (2002). Entrepreneurship and Small Business Research. J. Small. Bus. Enterprise. Dev., 9(2): 172-222.
- Ihua, U.B. (2009). SMEs key failure-factors a comparison between the United Kingdom and Nigeria. *J Soc. Sci*, 18(3):199-207.
- International Finance Corporation (IFC) (2011). SMEs: Telling our Story, Geneva, IFC.
- Kothari C. (2004). Research Methodology Methods and Techniques, Second Revised Edition. New Age International Publishers.
- Lawrence, Peter (2015). "Is There an Africa Problem?" In J.Weiss and M. Tribe (eds), Handbook of Industry and Development. London: Routledge.
- Lin, Justin, and Celestin Monga (2019). Oxford Handbook of Structural Transformation.Oxford: University Press.
- Martin, G., & Staines, H. (2008). Managerial Competences in Small Firms. Journal of Management Development, 13(7), 23-34. https://doi.org/10.1108/02621719410063396
- Mazanai, M. &Fatoki, O. (2012). Access to Finance in the SME Sector: A South African Perspective, Asian Journal of Business Management, 4 (1), pp. 58-67.
- Mbonyane&Ladzani, 2011, Olawale&Garwe, 2010Survey of Micro-Enterprise in Urban West Africa: Drivers Shaping the Sector. *Development in Practice*, (16):452-464.
- Ministry of Trade and Industry (2004). Micro and Small Enterprises Development Strategy: Urban Sector Five Years Growth and Transformation Plan (2010/11-2014/15): Addis Ababa.
- Munira Sherefa. (2012). Performance of Micro and Small Enterprises and their Role in Enhancing Local Economic Development: A Case Study

in Gullele Sub- cityof Addis Ababa. MA Thesis in Public Management and Policy, Addis Ababa University.

- Oqubay, Arkebe (2015). Made in Africa: Industrial Policy in Ethiopia. Oxford: Oxford University Press.
- Oqubay A. (2018). The Structure and Performance of the Ethiopian Manufacturing Sector, Working Paper Series N° 299, African Development Bank, Abidjan, Côte d'Ivoire.
- Olawale, Fatoki, & Garwe, David. (2010). Obstacles to the growth of new SMEs in South Africa: A principal component analysis approach. African journal of Business management, 4(5), 729.
- Siyum Menda (2015). The role of micro and Small Scale Business Enterprises in Urban Poverty Alleviation: A Case Study on Cobble Stone Paving Sector in Addis Ababa City. Unpublished
- UNCTAD-UNIDO (2011). "Fostering Industrial Development in Africa in the New Global Environment." Economic Development in Africa Report 2011: Geneva: UNCTAD-UNIDO.
- Thirlwall, Anthony (2013). Economic Growth in an Open Developing Economy: The Role of Structure and Demand. Cheltenham: Edward Elgar.
- Trulsson, P. (2002), Constraints of Growth-Oriented Enterprises in the Southern and Eastern African Region. *Journal of Developmental Entrepreurship*; Norfolk Vol. 7, Iss. 3, (Oct 2002): 331-339.
- Wawire, N.H.W. (2008), "Access to credit by women's groups in Kenya", in Sarkar, S. and Kiriti-Nganga, T. (Eds), Gender Inequality in Developing Countries, Arise Publishers and Distributors, New Delhi.
- Zaidatol, A., (2009). Entrepreneurship as a Career Choice: An Analysis of Entrepreneurial Self Efficacy and Intention of University Students. *European Journal of Social Sciences*. 9(2): 338-349.
- Zemenu Aynadis and Mohammed Nure (2014). Determinants of Growth of Micro and Small Enterprises in Ethiopia: A Case of MSEs in Mekelle City, Tigray. *International Journal of Advance Research in Computer Science and Management Studies*, 2 (6):149-157.

### Applications of Social Exchange, Human Capital and Dynamic

### **Capability Theories in Management Studies: A Review**

**Tesfaye Tilahun<sup>1</sup>** 

Lecturer, St. Mary's University, P.O.Box 1211, Addis Ababa, Ethiopia and a Ph.D. Student at the Department of Management, Faculty of Business and Economics, Bahir Dar University, Ethiopia.

### Abstract

The purpose of this theoretical article is to give insight into the application of social exchange theory, human capital theory, and dynamic capability theory in the discipline of management. The prepositions, purpose, advantages, and critics related to each management-related theory were addressed. The theoretical review result indicated that social exchange theory can contribute more to boosting the productivity level of an organization and the satisfaction level of the employees. However, in the process of socialization, information security and disclosure-related issues have to be strictly followed and methods of supervision are in place. On the other hand, human beings need attention and focus from their respective managers. The focus of managers on the human capital that they have can be determined as capital investment. So, human capital investment can boost the performance of employees and the overall productivity of the organization. Individuals who are assigned in business areas have to know that the current highly competitive working environment needs compatible and situational employees and contemporary management style and approach. In this context, dynamic capability theory plays a significant contribution to the modern highly competitive business environment. Therefore, to win the current competitive market and to increase both the satisfaction level of the customer and the employees, managers have to know the basic concepts and applications of social exchange theory, human capital theory, and dynamic capability theory as a mere factor of success.

Keywords: Application, Dynamic Capability, Human Capital, Social Exchange

### **1. Social Exchange Theory**

### 1.1. Proposition and Critics of Social Exchange Theory

**Concepts:** social exchange theory is one of the most prominent conceptual perspectives in management, as well as related fields like sociology and social

<sup>&</sup>lt;sup>1</sup> The author can be contacted through tesfayetilahun873@gmail.com

psychology (Cropanzano et al., 2017). It emphasizes social behavior in the exchange process. It is based on the premise that human behavior or social interaction is an exchange of activities, tangible and intangible, particularly of reward and costs. Because the theory considered exchange as the basis of human behavior (Nunkoo, 2016). Based on the research conducted by (Yoshikawa et al., 2018), social exchange theory conceptualizes human behaviors as exchanges of resources among actors. Social exchange theory is among the most influential conceptual paradigm in organizational behavior and it is the oldest and the most analyzed theory in the field of social behavior (Holthausen, 2013).

**Purpose:** in the past, there have been numerous people and scientists, who found that humans act and think rationally. Later on, findings have shown that human beings do not always think and act rationally, as there are emotional or effectual values, habitual or traditional values, and human beings also act on different elements of value-oriented thinking (Holthausen, 2013). Research conducted by (Yoshikawa et al., 2018) indicated that social exchange theory aims to support employees among and each other related to their specific task and group tasks to increase productivity. Another purpose of social exchange theory is to practice distributive justice in the organization (Keilany, 1978).

**Critics:** the concept of social exchange theory is not clearly defined in the study of management, specifically, the constructs of the theory have no direct relationship between the basic managerial functions (Yoshikawa et al., 2018). In addition, the theory emphasizes the focus of sharing value, relationship, experience, tangible and intangible assets of the organization for the sake of sharing the same value product or thing to smoothen the relationship of exchange (Bos-nehles & Meijerink, 2018). In social exchange theory, individual power can affect the success of the group and the organization in the general (Rasoolimanesh *et al.*, 2015).

# **1.2.** The Application of Social Exchange Theory in Management Studies

Based on research conducted by (Holthausen, 2013), social exchange theory and management researches has a strong relationship related to solving the managerial problems and for further improvement related to firms performance, the efficiency of the process, and making decision-related to the controversies of the firm in its day to day operation. It is important for organization and behavior-based researches (Chernyak-Hai & Rabenu, 2018). In the discipline of management, social exchange theory can be considered as a base for the ongoing process of the business/firm related to measuring the pros and cons of the relationship that exists in the organization (Rasoolimanesh *et al.*, 2015). In management discipline, the success of the managers at each level is highly dependent on their capacity of using the human resource effectively and wisely (Bos-nehles & Meijerink, 2018). It is also related to management (Yoshikawa *et al.*, 2018).

Qualitative research conducted by King (2016) and Åström (2021) indicated that social exchange theory can help managers and researchers to provide direction on and the harmonized relationship that exists between employees and the organizations at large. The researchers have also indicated that applying the theory can reduce dependency and maximize the idea of mutual benefit and balance. On the other hand, quantitative research conducted by Limão (2016), Bos-nehles & Meijerink (2018) and Yoshikawa et al. (2018) tried to address the impact of social exchange theory on employee development, organizational outcomes and workplace relationships. The researchers addressed that nowadays management at the different levels are focusing on finding and retaining the talents of their employees, which can help them to win the competition. To solve the problems related to finding and retaining talent, the findings of the researchers indicated that organizations have to give training to their subordinates based on their needs and existing gaps. To have an effective training program, there must be harmonized relationship between and among employees, managers and the organization. In addition, the finding also indicated that managers at different level has to know that socialization is a process based activity and each manager and employees, has to give serious attention for social exchange theory.

# **1.3.** Benefits and Challenges of Social Exchange Theory in Management Studies

**Benefits:** applying social exchange theory in management studies contributes more to improving management-related activities of the firm like making a

decision, improving the production process, and measuring performance (Holthausen, 2013). A dissertation conducted by (King, 2016), stated that social exchange theory is important to make the managerial decision over the issues related to the concept of management information system and its relation to the theory. The theory helps the managers to create a smooth relationship with their subordinates and it can also help the subordinates to learn how to behave with others (Åström, 2021). From its nature, social exchange theory is easy to apply and simple to attempt to explain human behavior in management studies (Keilany, 1978).

**Challenges:** the theory from its origin was to solve problems related to social psychology and economics (Holthausen, 2013). Still, this implies, the root of social exchange theory has no direct relationship with the basic issues of management studies. A dissertation conducted by (King, 2016) also dictated that, even if the central focus of social exchange theory is very important to boost productivity and to sustain a harmonized relationship, in most of our cases, it is affected by individual personal power. Some theorists (Limão, 2016; Cropanzano et al., 2017; Yoshikawa et al., 2018) contended that theoretical ambiguities and empirical needs are facing the social exchange theory. The theory has been applied to several social phenomena such as exchange and fairness, exchange and emotion, exchange to commitment relations.

### 2. Human Capital Theory

### 2.1. Proposition and Critics of Human Capital Theory

**Concepts:** the human capital theory is defined as a theory of knowledge, skills, attitudes, aptitude, and other acquired traits contributing to production (Fleischhauer, 2007) through formal schooling, on-the-job training, and off-the-job training. The theory was first introduced in 1960 by Theodore Schultz and it believes that education and training are the most important investment in human capital (Limão, 2016). The human capital theory is the term to indicate the skill, knowledge, and capability of an individual in the world of work and it emphasizes that capabilities that can be developed by individuals desire and exposure to acquire it (Aliu & Aigbavboa, 2019).

**Purpose:** the demand for human capital theory is increasing from time to time due to the following reasons/purpose of operation (Bowles *et al.*, 1975).

According to Kozio *et al.*, (2014), human capital theory aimed to determine the demand and supply of human capital from both the internal and external working environments. It is also important to concentrate on growth accounting, distribution, public policy, and to support the managerial decision related to management practices, the data has to be presented numerically. Research conducted by (Kozio *et al.*, 2014), stated that human capital theory is a very important term for the basic management function called compensation plan and its application. In addition, research conducted by (Tan, 2014) has stated that human capital theory can provide the accessible and palatable intellectual ammunition to policymakers with the economic concern of the theory.

**Critics:** the current model of human capital theory for valuing human capital is audited and insufficient (Bernstein & Singh, 2008). To secure economic growth, organizational activities have to focus on knowledge, intellectual than physical labor, and thus, the concept of human capital has to be related to modern education (Gillies, 2019). Research conducted by (Mihm-herold, 2010), has indicated that in most organizations, managers are providing training for their employees without making a significant decision on the training needs of the employees. The theory lack realism, because, it doesn't be realistic to make a viable prediction and to secure normative effects (Marginson & Marginson, 2017).

# 2.2. The Application of Human Capital Theory in Management Studies

The research conducted by (Kozio *et al.*, 2014), indicated that human capital theory contributes more modern management functions like compensation, development, reward, and it helps the manager to consider their human capital as a source of production and employees can know that their knowledge and capability is the source of wealth and capital for their personal and social life. Managers applying human capital theory can benefit more to shift their minds from labor-oriented theory to human capital theory by motivating their employees to upgrade their products for the competitive advantage of the business (Flamholtz *et al.*, 1999).

The human capital theory is applied in different areas of management functions and areas like training and development (Aliu & Aigbavboa, 2019),

compensation (Kozio *et al.*, 2014), competitive advantage (Mihm-herold, 2010), gaining and retaining talents (Gillies, 2019), program measurement and punishment and reward system (Bowles et al., 1975). Researches in human capital theory are very important to identify the role of education as a source of wealth for an individual and the focus that the theory has towards education as a basic investment with a high rate of return for both the individuals and the organization (Flamholtz *et al.*, 1999).

Researchers (Sec, 2007; Ai-hajry, 2002; Elevae, 2021) gave due attention to human capital theory through survey research design. The findings emphasized the contributions of human capital theory as a research program that fits into the current working environments. Their major finding also stated that applying human capital theory is very important for effective manpower investment and quality measurements. In their study, the researchers indicated that the theory is getting wider acceptance in solving efficiency-related questions of managers and researchers in business areas. In addition, to enter into the international business arena, managers and researchers have to give focus on human development. Because the finding of the researchers indicated that human capital theory can lead to greater company performance particularly in small enterprises. Applying the theory in research-related works can also help managers and their subordinates to provide direction to achieve both organizational and personal objectives. The above-stated researchers are also indicated that lack of attention to applying human capital theory leads to lower productivity and failure of business operation.

# 2.3. Benefits and Challenges of Human Capital Theory in Management Studies

**Benefits:** applying human capital theory is still very important to deal with the basic managerial functions like turnover and unemployment related issues (Sec, 2007), training and development aspects (Aliu & Aigbavboa, 2019), compensation and benefit related functions (Kozio et al., 2014), and investment and economic related functions of a manager (Gillies, 2019). On the other hand, the application of human capital theory implies explaining the difference in income and productivity between human beings and nations (Flamholtz et al., 1999). According to (Marginson & Marginson, 2017) using human capital theory can contribute more for matching the theoretical knowledge that

someone has with their actual expectation in the organization and to apply the authority that an individual has towards changing the conceptual knowledge into practice that can contribute for the success of the organization.

**Challenges:** The challenges of applying human capital theory stars from the controversial issues related to the meaning, concepts and standing points of the theory about the economy, education and performance (Tan, 2014). For instance, for human capital theory labor is no longer limited to specific sites of the factory but rather it is any conduct that promotes the desirable ends/utility and this may lead to similar treatment for both labor (the activity) and capital (the effect of the activity). In addition, a case study type of research conducted by (Sec, 2007) has indicated that the lack of revel theories similar important which can be compared to the human capital theory can be a serious problem to effectively utilize the theory. Managers have to consider the value of human beings in human capital theory, if not, the theory will not be successful (Peers, 2015). The theory also determines education as the marginal productivity of labor and this determines earning (Marginson & Marginson, 2017).

### 3. Dynamic Capability Theory

### 3.1. Proposition and Critics on Dynamic Capability Theory

**Concepts:** due to the existence of change and rapid development in the local, national and international business environment, it is strongly advisable and relevant to be compatible and adaptive to the rapidly changing environment by looking at a very dynamic perspective. In this competitive business environment, firms need to be proactive towards the changing environments (Samsudin & Ismail, 2019). Dynamic Capability Theory, which is proposed by Teece and Piseno in 1994 (Teece, 2018) is the extension of Resource-Based Theory (RBT) of the firm. Because, a resource-based theory confirmed that similar industries will perform differently due to the existence of different kinds of resources and capabilities (Čirjevskis, 2019; Paavola, 2021).

**Purpose:** the purpose of dynamic capability theory for any organization is to adjust its resources (the human, material and financial resources) with the rapidly changing environments (Faizal et al., 2012). The application of dynamic capability in the organization/firm can boost their competitive advantage by boosting their evolutionary fitness (Wali et al., 2020). Dynamic capability can

help the organization include it as a regular activity of creating, extending and modifying the organizational resource base by applying a state of having attributes required to accomplish a given task with the changing environments (Kurtmollaiev, 2020). It also serves as an immediate response to competitive advantage for firms to achieve their organizational objectives like survival (Shuen, 2009).

**Critics:** even if dynamic capability as a theory helps the organization to compete with the rapidly changing environments, it is not free from criticism. Not only by the new advocators of the theory but it is also criticized by the earliest advocators and developers of the theory. For instance, (Shuen, 2009), argued that the existing theories of dynamic capability failed to address the conditions of twenty-first-century competitions, that is they couldn't explain competitive advantage when competitive forces and resource-based advantages were subject to rapid obsolescence. Research conducted by Čirjevskis, (2019) indicated that the following were the area that can be considered as research gaps related to dynamic capability framework as a tool of the business analysis of reinvention of a business model components. Secondly, most of the researchers indicated that the strategic issue of the human resource function is usually affected by dynamic capability.

## **3.2.** The Application of Human Capital Theory in Management Studies

According to Easterby-Smith *et al.*, (2009), the dynamic capability concept is difficult to measure empirically as an underlying operational process and the relationship between dynamic capability and organizational performance. Other researchers of dynamic capabilities including (Rehman et al., 2019; Maijanen & Jantunen, 2016; Rodríguez *et al.*, 2020) indicated that the term is important for both traditional and modern organizations to tackle the internal and external environment challenges. In this context, dynamic capability theory helps to understand how firms can sustain a competitive advantage by responding to and by creating environmental change (Faizal et al., 2012). According to Helfat & Peteraf, (2009), dynamic capability theory is important for management researchers to focus on both the general managerial practices at the top levels of management and to the daily routines, for competitive

interaction and to provide a proactive response to the changing environments of the firm. Research conducted by Saenchaiyathon & Liengjindathaworn, (2019) the theory can be applied for management studies to address concerns related to behavioral theory, including organizational growth, routines and process, organizational learning and managerial decision making.

Studies (Lugo & Londoño, 2020; Porras, 2011; Maklan & Knox, 2009) stated that dynamic capability theory is relevant to apply in innovation and technological areas, strategic human resource relayed issues, and customer relationship management-related areas respectively, in such a way that it is highly flexible and compatible for both qualitative and quantitative types of research. The findings of the above studies indicated that the theory is a base theory to measure employee's progress relayed to appreciating and using both the internal and external challenges. The researchers also suggested that due to the dynamic nature of the theory, it is more valuable for modern managers to maximize efficiency and effectiveness. The current managers at a different level, business owners, stakeholders, customers and other concerned bodies have to give attention to the harmonized relationship that exists between and among them. To do so, it is time for knowing the concept, preposition and basic contributions of dynamic capability theory.

# **3.3.** Benefits and Challenges of Human Capital Theory in Management Studies

**Benefits:** based on research conducted by (Helfat & Martin, 2015), dynamic capability theory is beneficial for management researches on areas of success related to creating, extending, and modifying how firms make a living and help to explain the relationship between the quality of managerial decision, strategic change and organizational performance. All firms need to win in this highly competitive business environment, to win, emphasizing dynamic capability theory can provide energy and passion to the managers (Zott, 2003), to assess and evaluate the internal and external environments and make a decision related to competitive advantages of the firm.

**Challenges:** among the different concepts related to dynamic capability, (Easterby-Smith et al., 2009) there are challenges related to the application of dynamic capability theory in the field of management. Among the challenges related to its application, the debates related to the concept and definition of

dynamic capability theory, its effect and consequence on the current very dynamic and challenging environments. On the other hand, different scholars (Bleady *et al.*, 2018; Rodríguez et al., 2020; Faizal *et al.*, 2012) still are arguing that the term dynamic capability has a variety of essences in its application to the discipline of management to gain competitive advantage and market superiority. Different scholars, who have researched the consequence of dynamic capabilities on a firm's performance, like (Vu, 2020; Bleady *et al.*, 2018) have indicated that the development of institutional market environment influences the ability of firms to benefit from the reconfiguration of resources and businesses.

### 4. Summary of the Arguments

The current highly competitive business environment needs capable employees and managers. The main objective of every business is becoming survive due to different factors and to survive we have to be capable enough to measure both the internal and external environment. The measurement/analysis result can help us to decide the uncertain working environment. The above-stated theories emphasize innovation and creativity (Malmström & Johansson, 2015). Working in this highly changing and variable business environment needs special talent and unique quality in both homogeneous and heterogeneous products/services. When we think about the competitive advantage of the firm, it is impossible to think of it without the core values called creativity and innovation. Social exchange theory, human capital theory and dynamic capability theory are a common focus in the area of managing dynamic business environments (Holthausen, 2013). On the other hand, for human capital theory, the dynamic business environment can be managed by focusing on performance/merit-based compensation (Chernyak-Hai & Rabenu, 2018). Those theories emphasize the collaboration of information and communication technologies in management functions (Malmström & Johansson, 2015). All theories focus on finding and retaining talent from the employees, which is the major objective of human resource management (Limão, 2016). Therefore, managers and their corresponding business organizations can benefit more by using the stated theories.

### References

- Ai-hajry, A. S. (2002). HUMAN CAPITAL THEORY AND THE FINANCING OF HIGHER Amur Sultan AI-hajry. January.
- Aliu, J., & Aigbavboa, C. (2019). Examining the Roles of Human Capital Theory . What next for Construction Industry ? Examining the Roles of Human Capital Theory . What next for Construction Industry ? *Journal of Contemporary* Administration. https://doi.org/10.1088/1742-6596/1378/2/022057
- Åström, L. (2021). The Journalist-NGO Relationship: A Social Exchange Theory Perspective.
- Bernstein, B., & Singh, P. J. (2008). Innovation generation process. European Journal of Innovation Management, 11(3), 366–388. https://doi.org/10.1108/14601060810889017
- Bleady, A., Hafiez, A., Hasaballah, A., & Ibrahim, S. B. (2018). DYNAMIC CAPABILITIES THEORY: PINNING DOWN. *Journal of Business Research, December 2020.*
- Bos-nehles, A. C., & Meijerink, J. G. (2018). HRM implementation by multiple HRM actors : a social exchange perspective exchange perspective. *The International Journal of Human Resource Management*, 5192, 1–25. https://doi.org/10.1080/09585192.2018.1443958
- Bowles, S., Gintis, H., The, S., Economic, A., Bowles, B. S., & Gintis, H. (1975). The Problem with Human Capital Theory A Marxian Critique. *Journal of Contemporary Administration*, 65(2), 74–82.
- Chernyak-Hai, L., & Rabenu, E. (2018). The New Era Workplace Relationships: Is Social Exchange Theory Still Relevant? Industrial and Organizational Psychology, 11(3), 456–481. https://doi.org/10.1017/iop.2018.5
- Čirjevskis, A. (2019). The role of dynamic capabilities as drivers of business model innovation in mergers and acquisitions of technology-advanced firms. Journal of Mnagement StudeisJournal of Open Innovation: Technology, Market, and Complexity, 5(1). https://doi.org/10.3390/joitmc5010012
- Cropanzano, R., Anthony, E. L., Daniels, S. R., & Hall, A. V. (2017). SOCIAL EXCHANGE THEORY: A CRITICAL REVIEW WITH THEORETICAL REMEDIES. 11(1), 479–516.
- Easterby-smith, M., Lyles, M. A., & Peteraf, M. A. (2009). Dynamic

Capabilities : Current Debates and Future Directions. *Journal of Business Research*, 20. https://doi.org/10.1111/j.1467-8551.2008.00609.x

Eleyae, N. C. (2021). Walden University.

- Faizal, M., Zaidi, A., & Othman, S. N. (2012). Understanding the Concept of Dynamic Capabilities by Dismantling Teece, Pisano, and Shuen (1997)'s Definition. *International Journal of Academic Research in Business and Social Sciences*, 2(8), 367–378. www.hrmars.com/journals
- Flamholtz, E. G., Lacey, J., Flamholtz, E. G., & Lacey, J. (1999). The Implications of the Economic Theory of Human Capital for Personnel Management \*.
- Fleischhauer, K. (2007). A Review of Human Capital Theory: Microeconomics. *Journal of Business and Economics*.
- Gillies, D. (2019). State Education as High-Yield Investment : Human Capital Theory in European Policy Discourse. *Journal of Business and Economics*, 2(2), 224–245. https://doi.org/10.2478/v10159-011-0011-3
- Helfat, C. E., & Martin, J. A. (2015). Dynamic Managerial Capabilities: Review and Assessment of Managerial Impact on Strategic Change. Journal of Business Research, 41(5), 1281–1312. https://doi.org/10.1177/0149206314561301
- Helfat, C. E., & Peteraf, M. A. (2009). Understanding dynamic capabilities: Progress along a developmental path. *Strategic Organization*, 7(1), 91– 102. https://doi.org/10.1177/1476127008100133
- Holthausen, J. (2013). Scientific Review Of The Social Exchange Theory And Its Contribution To Solving Purchasers ' Decision Making Issues. *1st IBA Bachelor Thesis Conference*, 12.
- Keilany, Z. (1978). Book Reviews: Book Reviews. *Review of Social Economy*, *36*(2), 228–229. https://doi.org/10.1080/00346767800000037
- King, J. (2016). Privacy, Disclosure, and Social Exchange Theory. 1–23.
- Kozio, L., Kozio, W., Wojtowicz, A., & Pyrek, R. (2014). An Outline of a Compensation System Based on Human Capital Theory. *Procedia - Social* and Behavioral Sciences, 148, 551–558. https://doi.org/10.1016/j.sbspro.2014.07.078
- Kurtmollaiev, S. (2020). Dynamic Capabilities and Where to Find Them. *Journal of Management Inquiry*, 29(1), 3–16. https://doi.org/10.1177/1056492617730126
- Limão, N. (2016). contemporary issues in management studies. Journal of

Mnagement Studeis, 13(May), 31–48.

- Lugo, E. bonilla, & Londoño, J. pineda. (2020). View metadata, citation and similar papers at core.ac.uk. *Pengaruh penggunaan pasta labu kuning (cucurbita moschata) untuk substitusi tepung terigu dengan penambahan tepung angkak dalam pembuatan mie kering, November*, 274–282.
- Maijanen, P., & Jantunen, A. (2016). Dynamics of dynamic capabilities The case of public broadcasting. *International Journal of Business Excellence*, 9(2), 135–155. https://doi.org/10.1504/IJBEX.2016.074850
- Maklan, S., & Knox, S. (2009). Dynamic capabilities: The missing link in CRM investments. *European Journal of Marketing*, 43(11), 1392–1410. https://doi.org/10.1108/03090560910989957
- Malmström, M. M., & Johansson, J. (2015). Social exchange in collaborative innovation: maker or breaker. *Journal of Innovation and Entrepreneurship*, 5(1). https://doi.org/10.1186/s13731-016-0034-z
- Marginson, S., & Marginson, S. (2017). Studies in Higher Education Limitations of human capital theory Limitations of human capital theory
  \*. Studies in Higher Education, 0(0), 1–15. https://doi.org/10.1080/03075079.2017.1359823
- Mihm-herold, W. A. (2010). Considering human capital theory in assessment and training : mapping the gap betweem current skills and the needs of a knowledge-based economy in northeast Iowa. *Journal of International Business and Economics*.
- Nunkoo, R. (2016). Toward a More Comprehensive Use of Social Exchange Theory to Study Residents' Attitudes to Tourism. *Procedia Economics* and *Finance*, 39(November 2015), 588–596. https://doi.org/10.1016/s2212-5671(16)30303-3
- Paavola, L. (2021). The role of (dynamic) capabilities in the transformation of a multi-organizational setting. In *Journal of Evolutionary Economics* (Vol. 31, Issue 2). Springer Berlin Heidelberg. https://doi.org/10.1007/s00191-021-00722-x
- Peers, C. (2015). Open Review of Educational Research What is 'Human 'in Human Capital Theory? Marking a transition from industrial to postindustrial education. *Journal of Business Research, February*, 37–41. https://doi.org/10.1080/23265507.2014.996767
- Porras, P. (2011). The value of Dynamic Capability for Strategic Management. *Mediterranean Journal of Social Sciences, July*, 1–7.

- Rasoolimanesh, S. M., Jaafar, M., Kock, N., & Ramayah, T. (2015). A revised framework of social exchange theory to investigate the factors in fl uencing residents ' perceptions. *TMP*, 16, 335–345. https://doi.org/10.1016/j.tmp.2015.10.001
- Rehman, S., Mohamed, R., & Ayoup, H. (2019). The mediating role of organizational capabilities between organizational performance and its determinants. *Journal of Global Entrepreneurship Research*, 9(1). https://doi.org/10.1186/s40497-019-0155-5
- Rodríguez, A. J. G., Barón, N. J., & Martínez, J. M. G. (2020). Validity of dynamic capabilities in the operation based on new sustainability narratives on nature tourism SMEs and clusters. *Sustainability* (*Switzerland*), 12(3). https://doi.org/10.3390/su12031004
- Saenchaiyathon, K., & Liengjindathaworn, S. (2019). An influence of dynamic capability to corporate performance. *TEM Journal*, 8(3), 848–853. https://doi.org/10.18421/TEM83-22
- Samsudin, Z. binti, & Ismail, M. D. (2019). The Concept of Theory of Dynamic Capabilities in Changing Environment. *International Journal of Academic Research in Business and Social Sciences*, 9(6), 1071–1078. https://doi.org/10.6007/ijarbss/v9-i6/6068
- Sec, C. R. (2007). a new discussion of the human capital theory in the methodology of scientific research programmes \* Bernarda Zamora. *Journal of Health Organization and Management*.
- Shuen, D. J. T. G. P. A. (2009). Dynamic Capabilities and Strategic Management. American Journal of Psychotherapy, 63(1), 13–23. https://doi.org/10.1176/appi.psychotherapy.2009.63.1.13
- Tan, E. (2014). Review of Educational. Journal of International Business and Economics. https://doi.org/10.3102/0034654314532696
- Teece, D. J. (2018). Business models and dynamic capabilities. *Long Range Planning*, *51*(1), 40–49. https://doi.org/10.1016/j.lrp.2017.06.007
- Vu, H. M. (2020). A Review of Dynamic Capabilities, Innovation Capabilities, Entrepreneurial Capabilities and Their Consequences. 7(8), 485–494. https://doi.org/10.13106/jafeb.2020.vol7.no8.485
- Wali, J. Al, Muthuveloo, R., Ping, T. A., & Bataineh, M. (2020). An Overview of Employees' Dynamic Capabilities, Job Performance with Innovative Work Behavior: A Conceptual Paper. *Global Journal of Management and Business Research: A Administration and Management, 20*(14).

- Yoshikawa, K., Wu, C. H., & Lee, H. J. (2018). Generalized Social Exchange and Its Relevance to New Era Workplace Relationships. *Industrial and Organizational Psychology*, 11(3), 486–492. https://doi.org/10.1017/iop.2018.100
- Zott, C. (2003). Dynamic capabilities and the emergence of intraindustry differential firm performance: Insights from a simulation study. *Strategic Management Journal*, 24(2), 97–125. https://doi.org/10.1002/smj.288

### Note to Contributors:

All inquiries and submissions should be delivered to the following address:

The Editor in Chief Journal of Business and Administrative Studies (JBAS) School of Business St. Mary's University P. o. Box 1211 E-mail: maru shete@smuc.edu.et

**Original research** articles that seek to explore issues in business and administrative sciences should be relevant and significant. Not only should an article explicate and expound what is known about a subject, but it should also reflect questions that are unresolved and deemed to be the focus of future research and of paramount importance to Ethiopian socio-economic development.

**Book reviews** are either commissioned by the Editor or solicited reviews from professionals who are knowledgeable in business, economics and administrative sciences. The underlying purpose of book reviews should be to inform a wide readership what the book is all about, thereby inducing readers to decide reading the book.

**Spelling:** the Editor uses both Oxford and Webster's dictionary. Authors are urged to use the former or the latter throughout the text as consistently as possible for their spelling.

**Abbreviations and Acronyms**: acronyms and abbreviations should be given in full when they occur for the first time, with the abbreviation being placed in brackets. Common abbreviations such as USA, UN, UK, NATO and AU need not be written out even if they first occur.

**Hard Copy**: Two copies of the manuscript should be submitted for both research articles and book reviews. Manuscripts should be typed in English and double-spaced on white A4 paper. All pages should sequentially be numbered. The preferred length is between 10 to 15 pages for research articles, and 3 to 5 pages for book reviews, and double-spaced. At times the length requirements may be waived depending on the nature, complexity and depth of the research.

**Disk/E-mail Copy**: Authors can provide copies of their manuscripts on diskette or by e-mail. Authors should ensure that the electronic version must exactly match the hard copy. *JBAS* will not accept an article that has been published in another journal.

**Abstract and Title page**: Articles should be accompanied by a 100-word abstract. The title should also appear on the same page. The author's name and address should appear on the title page by way of footnote.

### References: (see the following examples for listening the references)

### Chapter in an edited book:

Boulding, Kenneth 1987. General systems Theory – The Skeleton of Science. In Shafritz, Jay, and Ott, Steven, (Eds). Classics of Organization Theoty. Chicago: The Dorsey Press.

### Article in a journal:

Thomson, James 1956. On Building Administrative Sciences. Administrative Science Quarterly, vol. 1, no. 1: 102 – 111.

### Book:

Esman, Milton 1991. Management Dimensions of Development: Perspectives and Strategies. Connecticut: Kumarian Press.

If there are more than two authors or editors, use the first author's or editor's name followed by et al.

Example: Green et al (2005) found that the majority...

Or indirectly: Recent research has found that the majority of ... (Green et al 2005)

### Corporate authors

Referring to a publication by an association, company or government department, the work is usually cited under the name of the body that commissioned the work:

### **Ministry of Education (MoE)**

### St. Mary's University College (SMUC)

It is acceptable to use standard abbreviations for these bodies, that is, MoE or SMUC, in the text, provided the name is written out at the first citing within the text, with the abbreviation in brackets. Nevertheless, the full name is the preferred format in the list of references.

Some reports that are written by groups or committees can be listed under the name f the institute that commissions the work.

### **Example:**

St. Mary's University College (SMUC) 2006. *Performance Criteria for Faculty Evaluation at St. Mary's University College*. Center for Research and Quality Assurance: Addis Ababa, Ethiopia.

Federal Democratic Republic of Ethiopia (FDRE) 2002. *Ethiopia:* Sustainable Development and Poverty Reduction Program. Addis Ababa, Ethiopia.

### Internet documents (Name, Title, URL, date accessed):

World Bank Group. 'Administrative and Civil Service Reform'. Available at:

http://www1.worldbank.org/publicsector/civilservice/debate1.htm.23. Accessed on 19 july 2002.

### Legislation:

The standard method of citing legislation or act of parliament is by its short title, which includes the year followed by the official name of the organ in which the legislation is published appearing in brackets.

**Proclamation on Higher Education 2004**. (Negarit Gazeta). Addis Ababa: Ethiopia

### Dissertation/Thesis

Author Relevant year Title of dissertation Academic level University, where the study was carried out Richmond, Julia 2005. Customer expectations in the world of electronic banking: a case study. Unpublished PhD thesis, University of Kansas, Kansas.

Titles of unpublished theses and dissertations appear in roman (not in italics).

Note: Leaving the first line [where the name (s) of the author (s) appear] intact, all other lines should be indented in the bibliography/reference section.

Example:

Boulding, Kenneth 1987. General Systems Theory – The Skeleton of Science. In Shafritz, Jay, and Ott, Steven, (Eds). Classics of Organization Theory. Chicago: The Dorsey Press.

Note: Use endnotes for additional explanation in the text. The former are shown at the end of an article or book review and come before the list of the reference section, and are consecutively placed beginning with no. 1.

### N.B:

According to Ethiopian academic tradition, the first given names of Ethiopian authors appear in the intra-text citations. The list of references section (bibliography) should nevertheless provide first given names followed by the second names. The same shall be maintained in this Journal.

Example:

Dessalegn Rahmeto. 1984. Agrarian Reform in Ethiopia. Uppsala: Scandinavian Institute of African Studies.

Shiferaw W/Michael: 1989. The Law Making Process in Ethiopia. Faculty of Law, Addis Ababa University: Addis Ababa.



St. Mary's University School of Business P.O. Box 1211, Addis Ababa, Ethiopia Tel: +251115580612 www.smuc.edu.et

Drington I has SNIT | Prington o Dress