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Supply Chain & Logistics Synergies in Post-Merger Environment: The Case of Ethiopian Construction Corporation

A Thesis Submitted to AAU College of Business and Economics

School of Commerce

**In Partial Fulfilment of the requirements for the Degree of Master in
Supply Chain & Logistics Management**

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ADDIS ABABA UNIVERSITY
COLLEGE OF BUSINESS & ECONOMICS SCHOOL OF COMMERCE

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DECLARATION

I, the undersigned, declare that, this study “Supply Chain & Logistics Synergies In Post-Merger Environment” is my original work and has not been presented For a degree in any other university, and that all sources of materials used for the Study have been duly acknowledged.

Declared by:

Name: Yemane Atakilty

Sign: -----

Date: - -----

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First of all I pay my whole hearted gratitude to the Almighty God and with His grace and forgiveness that I am able to accomplish my dreams and aspiration and strive in this challenging and illusive world.

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Acronyms

M&A: - Merger & Acquisitions

RS: - Realized Synergies

BCB: - Business Combination Benefits

SF: - Strategic Fit

ECWC: - Ethiopian Construction Works Corporation

Abstract

Mergers and acquisitions represent a major source of organizational change and are closely related to the strategic focus. Synergies or rather the absence of synergies has been blamed for many failures in regards to mergers and acquisitions. In this context, mergers and acquisitions are likely to become an even more important consideration in strategic planning and implementation.

The data for the study was collected from 32 employees of ECWC. The relationships proposed in the framework were tested using Pearson correlation, and the causal relations were analyzed using regression analysis. From the result of the analysis it is concluded that there is strong relationship between realized synergies, strategic combination benefits and organizational integration. Besides, pre-merger strategic decision making of strategic combination benefits and strategic fit & post-merger integration has also an influence on post-merger synergy realization.

Therefore, in order to realize merger synergies executives needs to carefully articulate combination potential & fit to maximize maximum business potential and most importantly organizational integration is a critical accelerator in capturing M&A synergies

Key word: Realized Synergies, Business Combination Benefits, Strategic Fit, Organizational Integration

Chapter One

Introduction

1.1 Background of the study

Over the last few decades, mergers and acquisitions (M&A) have become a popular strategic choice for companies around the world wanting to grow and expand through synergy realization (Bauer and Matzler, 2014). Synergies in regards to mergers and acquisitions are supposed to create an added value. By combining two entities the result should sum up to an outcome larger than the stand alone entities, i.e. one plus one should equal three.

With $1 + 1 = 3$ as standpoint, the thesis investigated how this statement holds for a merger of three state owned construction companies in particular reference to the newly merged Ethiopian Construction Works Corporation (ECWC). Due to the large number of failed mergers and acquisitions in the business world and the associative criticisms, some researchers have started to question if synergies exist at all, claiming that mergers and acquisitions often destroy value rather than create it. Still, it is fascinating to see that mergers and acquisitions are conducted on a daily basis for example the year 2015 was the biggest year on record for M&A deal global M&A volume surpassed \$5 trillion for the first time ever, standing at \$5.03 trillion at the end of 2015 (Forbes, 2016). 1

It becomes even more interesting when considering that in the Ethiopian context, state owned enterprises have embarked restructuring effort through mergers as a natural part of the government growth strategy, for example a consolidation of commercial bank of Ethiopia and construction and business bank, the creation of a mega enterprise of Ethiopian shipping and logistics enterprise through merger of five independent SOEs within the logistics and transportation sector and a merger of the largest construction enterprises of the former Ethiopian roads construction corporation and water works construction enterprise which this research proposal selected as a case study could be mentioned. Furthermore, some from the private sector acquainted the trend of consolidating their separate businesses into a corporate group of businesses notably the recent restructuring of Tekelhebrhan Ambaye construction into a TAF corporate group could be cited.

Unless it was not for synergy realization gains and company profitability, these mergers had presumably not taken place to such a large extent. How do these merged corporate groups create synergies? What was their integration strategy? How did their supply chain and logistics capabilities integrated to support their core corporate strategy? And did the mergers actually bring the anticipated synergetic gains within a short period of time?

To be able to put the '1 + 1 = 3' acronym into a context, the study concentrated on a single case study of the recently merged construction SOEs into Ethiopian construction works corporation (ECWC) within the construction industry and also the relevance of merger and acquisitions in the Ethiopian context is highlighted.

The research investigated supply chain and logistics synergy realization in post-merger environment of merged construction SOEs with particular reference to Ethiopian Construction Works Corporation (ECWC) and provides with a framework of requirements for a successful post-merger supply chain.

1.2 Statement of the Problem

Merger and acquisition play a crucial role in a firm's short-and long-term success and failure (Lodorfos and Boateng, 2006; Bauer and Matzler, 2014). For that reason, M&A is a very important managerial activity. The topic of M&A has been an area of interest to researchers for a long time, especially when contradictory results are reported by some researchers regarding the elements that affect the merger performance and the effects of these elements with each other (Weber et al., 2014).

Mention the words mergers and acquisition (from here on referred to as 'M&A') and many people will think of synergies and the benefits of added value the synergies are supposed to bring as a result of M&As. For example, functions such as human resources, finance and logistics can easily be shared across internal borders, carry cost savings and thus add more value to the organization. The logic is that reasons for M&As should always be to improve the organization's performance, although several cases show this is not as simple as it seems (Zhou, 2011).

A recent study targeting the U.S. manufacturing industry has investigated the effects of synergy costs and administration costs on organizations' M&A choices. The outcome is showing that the more inputs that can be shared within the new cooperation, the larger the likelihood for a M&A is. On the other hand, complex interdependencies between business units in the new organizations arises administration costs increasing the barriers for M&As. The study points at how bureaucracy costs counterbalance synergies and limit the organizations M&A choices (Zhou, 2011).

Further limits to M&As have been found in another study, pointing out that realized M&As aiming for synergies are facing two major problems. The first problem, called the contagion effect, occurs when the organizations initiates resource sharing at separate business units and not only positive effects of the sharing emerges – also the negative out-comes become visible and contaminates the intended gains. Secondly, the M&As are likely to result in extended use of existing resources, resources whose capacities are limited and not adjusted to such a substantial use; the capacity effect appear (Shaver, 2006).

Additional reports point at similar problems. An analysis of 168 mergers between large companies showed little or no support for the creation of synergies. Instead, the study found support for management's hubris and growth desires related to the M&As (Mueller & Sirower, 2003).

However, examples of successful M&As exist a global analysis of deals spanning a 10-year period found that as a group, companies that engaged in any M&A activity averaged 4.8% total shareholder return compared with 3.3% for those that were inactive. (Jason Heinrich and Laura Miles, Bain Insights, 2016)

Despite all obstacles and examples of unsuccessful M&As and unrealized synergies, M&A are considered a key element of corporate strategy as they allow firms to achieve both scale and scope advantages (Gaughan, 2011). However, M&A have also been established as being one of the greatest paradoxes in strategic management. With the lack of evidence

suggesting that mergers and acquisitions create shareholder value for the acquiring firm (Grant, 2010).

Regardless of the paradoxical outcome of mergers and acquisitions, synergies related to Supply Chain are vital to achieving deal goals and delivering the committed value to shareholders. (Ernest & Young, 2015)

The ultimate goal of realizing Supply Chain synergies is to improve shareholder value and achieve integration objectives without jeopardizing supply or order fulfilment continuity. Quick integration remains critical to overall acquisition success, and a focus on the right activities at the right times is imperative. In fact, synergy targets identified during the due diligence process are often high level and directional only, given the limited information available during diligence. It is important to rapidly convert those directional elements to bottom up measurable, specific levers that will drive cost synergies. (kurtsalmon, 2012)

Common Supply Chain synergies revolve around direct and indirect procurement leverage, supply base consolidation, manufacturing and distribution footprint rationalization, duplicate function consolidation, products and service offerings rationalization, Supply Chain strategy alignment, and investment prioritization. (Price Waterhouse Coopers PWC, 2015)

Despite extensive literature upon M&As and potential synergy benefits, one aspect that has been given little attention is synergy realization associated with supply chain & logistics processes and resources. In addition, the integration of supply chain & logistics are areas often disregarded from M&A proceedings. Instead, the focus has been on strategic, financial and organizational issues in terms of synergy benefits. (Häkkinen et al. 2004)

Nevertheless, supply chain & logistics is an area that might have a major impact on how a merger performs, especially when it comes to costs but also in terms of revenues, operating expenses, capital expenditure and working capital consequently, this area is often the largest potential source of cost savings (Herd et. al 2005) and changes to the supply chain provide great opportunities for deriving significant business advantages (Benitez and Gordon 2000). In fact, research conducted by Langabeer and Seifert points out a direct correlation between how effectively supply chains of merged firms are integrated and how successful a merger is. In

addition, they conclude that improved logistic integration is essential in improving the probability of post-merger success. (Langabeer and Seifert 2003)

Hence, understanding logistics synergies is both important for pre-merger, providing useful information in decision making for corporate management, as well as post- merger, for logistic & supply chain management in the implementation and realization of synergies . (Häkkinen et. al 2004). Hence, contributing to increased knowledge on the subject by investigating potential synergy benefits within supply chain & logistics and the realization of potential synergy benefits can increase, enabling an increase in the success rate of merging companies.

1.3 Research Hypotheses

Prior studies have indicated that strategic combination benefits describe how much strategic benefit will potentially be gained through completing M&A it represents predicted potential benefits that have not been realized, which do not impact by how good integration will be conducted. (Larsson and Finkelstein, 1999)

Those benefits are normally described as various synergies, which are kinds of potential benefits from interaction between joint parties. Larsson and Finkelstein,(1999). The more strategic combination benefits of joining firms' operations; the more the overall realized synergies. Based on these arguments it is hypothesized that:

Hypothesis1: There is relationship between strategic combination benefits and realized synergies.

Whereas, strategic fit deals with the similarity and complementary of joining parties' market and productions are normally measured the less geographical/ physical distance between the joining parties, the more strategic similarity and complementarity of joining firms' operations; the more consolidated the other functions. (Zhou, 2014) Based on this arguments it is hypothesized that:

Hypothesis 2: There is relationship between Strategic Fit and Realized Synergies.

Organizational integration is the way of 'technically' and 'functionally' implementing a series of operational activities to combine the joining parties after M&A deals close. It is also described as a way of 'rationally' realizing various potentials set in pre-merger decision making process,

and achieving strategic potentials economically. Normally, the degree of organizational integration is measured by the operational interaction between joining firms and coordinative effort which adjust the operational interaction to achieve synergies (Larsson & Finkelstein 1999). Based on this it is hypothesized that:

Hypothesis 3: There is relationship between Organizational Integration and Realized Synergies.

1.4 Research Objectives

1.4.1 General Objective

The purpose of this study is to assess the underlying determinates of synergy realization in post-merger environment and to empirically test a framework identifying the relationships among pre-merger decision making, post-merger integration and synergy realization in particular reference to Ethiopian Construction Works Corporation (ECWC).

1.4.2 Specific Objectives

The specific objectives of the study are:-

1. To assess the relationship between pre-merger decision making of strategic combination benefits and realized synergies.
2. To assess the relationship between pre-merger decision making of strategic fit and realized synergies
3. To assess the relationship between post-merger integration and realized synergies.
4. Define the important features of the motives or initial expectations regarding synergy value creation from the merger

1.5 Significance of the Study

The significance of this research is to identify the lessons that can be learnt from M&A from the supply chain & logistics perspective using an empirical case. The research compared the various strategies employed during the different phases of M&A so as to gain deeper understanding of M&A and the research also proposed new insights for future M&A activities in the Ethiopian enterprise landscape for both public and private companies.

1.6 Scope of the Study

The research evaluated the operational effectiveness of mergers and acquisitions (M&A) from the supply and logistics perspective in particular reference to Ethiopia Construction Works Corporation (ECWC) compared the results with the relevant literature done on this subject matter. This analysis is primarily based on ECWC historical data and insights from the employees who witnessed the merger.

1.7 Limitation of the Study

This study relied on the data provided by the merging firms, from their archived and collective historical data and key officers who involved in pre and post-merger integration process of the merged corporation, therefore the study may not be representative of the whole population in the Ethiopian macro level business environment of similar current and future M&A undertaking in both the public and private sector. Any results and conclusions reached can only be related to this case as single cases result in researcher bias and less emphasize on the generalizability of results. On the other hand constructs of M&A are not only limited to Strategic combination benefits, strategic fit and organizational integration selected in this study. Therefore it is not representing all constructs that could explain Realized synergies.

1.8 Definition of Terms

Mergers and acquisitions (M&A) is a general term that refers to the consolidation of companies or assets. While there are several types of transactions classified under the notion of M&A, a merger means a combination of two companies to form a new company, while an acquisition is the purchase of one company by another in which no new company is formed.

Synergy is an effect arising between two or more agents, entities, factors, or substances that produce an effect greater than the sum of their individual effects.

Post-merger integration (PMI) – the integration required after two formerly independent entities come together to form a completely new organization.

SOEs: - Enterprises where the state has significant control through full, majority, or significant minority ownership. The definition includes SOEs which are owned by the central or federal government, as well as SOEs owned by regional and local governments

1.9 Organization of the Study

Chapter 1 – Introduction

Chapter 2 – Literature Review- This chapter provides definitions of the research topic and theoretical background of the motives for this activity. Further it describes the industry specific information and historical development of the research area

Chapter 3 – Research Methodology – it describe the methodology and data collection used in this paper. It also outlines the rationale for particular selection after an in-depth analysis of various research methodologies.

Chapter 4 – Findings and Analysis- this chapter present results of the research. The results are analysed and interpreted and compared to prior research.

Chapter 5 – The Conclusion- The paper concluded by outlining implications of the findings and also proposes suggestions for future research in the field.

CHAPTER TWO

LITERATURE REVIEW

2.1 Merger & Acquisitions (M&A) definition

A merger or an acquisition in a company sense can be defined as the combination of two or more companies into one new company or corporation. The main difference between a merger and an acquisition lies in the way in which the combination of the two companies is brought about. In a merger there is usually a process of negotiation involved between the two companies prior to the combination taking place. In an acquisition, the negotiation process does not necessarily take place.

In most cases the acquirer acquires the target by buying its shares. The acquirer buys shares from the target's shareholders up to a point where it becomes the owner. Achieving ownership may require purchase of all of the target shares or a majority of them. Different countries have different laws and regulations on what defines target ownership.

Acquisitions can be friendly or hostile. In the case of a friendly acquisition the target is willing to be acquired. The target may view the acquisition as an opportunity to develop into new areas and use the resources offered by the acquirer. In the case of a hostile acquisition, the target is opposed to the acquisition. Hostile acquisitions are sometimes referred to as hostile takeovers.

2.2 M&A Types and Key Concepts

Ross et al. (2013) categorize acquisitions into four different forms 1) merger or consolidation, 2) acquisition of stock, 3) tender offer, and 4) acquisition of assets. A merger refers to absorption of one firm by another. After a merger the acquired firm ceases to exist as a separate business entity. In a merger companies need stockholder approval from both firms. A consolidation is the same as a merger except that an entirely new firm is created. In a consolidation, both the acquiring firm and the acquired firm terminate their previous legal existence and become part of the new firm. Both mergers and consolidations are often referred just as mergers.

The second form is acquisition of stock where one company purchases the target's voting stock in exchange for cash, shares of stock, or other securities. The process may start as a private offer to management of the target company and at some point the offer is taken directly to target's stockholders by a tender offer. In the tender offer the target company continues to exist as long as there are dissident stockholders holding out. Successful tender offers become mergers and no shareholder approval is needed. If a firm acquires another by buying all of its assets it is called acquisition of assets. The target firm does not necessarily vanish because its share can be retained. A formal vote is required in an acquisition of assets. In this procedure minority shareholders do not present problems.

A company's own management can also do acquisition. This kind of action is called buyout. In a buyout target company continues to exist but as a private enterprise. Buyout is usually accomplished with a tender offer.

According to Ross et al. (2013) financial analysts classify acquisitions into three types depending on where the target company operates. In Horizontal acquisitions, both the acquirer and the target are in the same industry and are therefore direct competitors. Vertical acquisition occurs if two companies in a same industry but in different steps of the production process combine their operations. One of the prime motivations for a vertical M&A is the prevention or elimination of potential hold-up problems, which might diminish the efficiency and effectiveness of operations (Ross, Westerfield & Jaffe 2013).

The third type is the conglomerate acquisition. (Ross et al. (2013) In this type of M&A the acquirer and the target are not related to each other. Conglomerate acquisitions are popular especially in the technology area. Conglomerate acquisitions target for establishment of an internal capital market and risk reduction through diversification, and the establishment of management counselling to different segments.

2.3 The motives of mergers & Acquisitions

The primary reason for M&A is to achieve synergy by integrating two or more business units in a combination with an increased competitive advantage (Porter, 1985). The other two M&A motives, according to Wang and Hoini (2012) and Seth et al., (2000), are managerial self-interest (or materialism) and hubris.

In light of the increasing significance of mergers and acquisitions phenomenon, scholars in the field of international business and strategy had begun to examine various aspects of mergers and acquisitions (Seth et al., 2000). The existing body of research is still searching answers to a fundamental question: Why do these mergers & acquisitions occur? Even though the question sounds simple, the theoretical answer is very complex. There is not one grounded theory for mergers & acquisitions, because this phenomenon covers all aspects of the firm such as cost, sales, risk, revenues, salaries, capabilities and relations to the environment (Glaister and Ahammad, 2010).

Theoretical research and studies over the years provided several explanations for the M&A strategy by examining various motives for mergers and acquisitions. Therefore, there have been a lot of possible reasons which were suggested as an explanation for why a company chooses M&A as a way of growth. In general, the most common cited motive is to achieve synergy. However, there are several other motives such as diversification, market power, improved management or tax motives (Depamphilis, 2010).

Consequently, there are numerous theories that explain the reasons why mergers and acquisitions take place. In theory, three motives of merger and acquisition have been documented in existing literature. These motives include the synergy motive, hubris motive and agency motive (Ebimobowei and Sophia, 2011).

The Synergy motives

The key principle of a synergy is that the whole will be greater than the sum of its parts (Sherman, 2010). The term synergy refers to “the reactions that occur when two substances or factors combine to produce a greater effect than that which the sum of the two operating independently could account for” (Gaughan, 2010). Simply stated, synergy refers to the

phenomenon of $2+2=5$. In mergers this translates into the ability for a corporate combination to be more profitable than the individual parts of the combined companies. The synergy hypothesis has been widely documented in the existing literature in an attempt to explain the motive of mergers and acquisitions (Calipha et al., 2010). The synergy motive suggests that mergers occur when the combination of the two firms results in economic gains.

Managerial motives

Unlike the hubris hypothesis, which proposes that managers inadvertently overpay for target firms, the managerial hypothesis suggests that managers will knowingly overpay in takeovers; managers embark on M&A to maximize their own utility at the expense of their firm's shareholders (Seth et al., 2000). Managers can have private or personal reasons for their behavior and make investments which from an economic point of view may seem irrational, but for the individual can be of high value. Motives like power and prestige are also essential (Ravenscraft and Scherer, 2011).

Diversification

Another motive for acquisition within the same industry is to reduce some of the uncertainty that derives from competition (Pfeffer and Salancik, 2003). In the theory of diversification the risk-adverse firm has an opportunity to minimize risk by expanding activities to different lines of business and thereby equalize the fluctuations in revenues. When the firm reaches a satisfactory position within the area of specialization and the firm has the resources needed for expansion, they might find the opportunities for expanding into new areas more promising than further expansion in its existing areas (Nair et al., 2008).

To Achieve (or Increase) Growth

Mergers and acquisitions are external alternatives, and sometimes cheaper, than internal organic growth (Gaughan, 2011). Firms seeking to expand their business have a choice between internal growth and growth through mergers and acquisitions. Focarelli et al. (2002) cited, internal growth may be a slow process, while growth through mergers may be a more rapid process. Mergers and acquisitions may be the best way to facilitate the growth in another geographical

region especially in the international markets where it may be less risky to expand geographically through acquisitions than through internal development.

Increasing Market Share/ Market Power

A firm may use M&A to reach a market power. This occurs when the merged firms are able to influence price, quantity, and the nature of the product in the market place (Hitt et al., 2000). In turn, market power may lead to excess return or the same return but for a longer period of time.

2.4 Merger drivers

Under specific circumstances, M&As is able to bring significant benefits for organizations by improving their operations, financial performance or/and market position. Apparently, there are a variety of reasons why companies decide to merge or acquire another one. For instance, M&As is considered to be strategic options for those companies that aim to “acquire new resources” (Swaminathan, Murshed & Hulland 2008) and/or “create growth and diversity” (Pervaiz and Zafar 2014). In consistency with Nguyen, Yung and Sun (2013) about 80% of the companies have multiple motives for M&As.

Merger drivers are underlying events or characteristics that act to drive companies towards mergers or acquisitions. Typical examples include:

- A requirement for a specific skill or resource; the stock market;
- Globalization;
- Geographical consolidation;
- Diversification;
- Sector pressures;
- Capacity reduction;
- Vertical integration;
- Increased management efficiency;

- A desire to acquire a new market or customer base;
- The need to buy into a growth sector or market.

2.5 The Merger and Acquisition Process

Immonen (2008) categorizes the M&A process into three steps 1) Planning phase, 2) Execution phase, and 3) Adaption phase. The planning phase starts from screening the targets where the aim is find out the strategic fit of the potential target (Katramo et al., 2011). In order to do the screening efficiently, acquirer must determine what the ultimate goals of the transaction are. Based on the acquisition strategy, screening criteria could be for example industry, target's market share, market-area, growth potential and size. By identifying market potential and financial status of the target, we can value synergies and the target. (Immonen, 2008)

In the execution phase the terms and contracts are negotiated. According to Immonen (2008) the most important negotiation items are how the transaction is financed and what the method of payment is. In order to find out what is the fair value of the transaction a valuation must be done. Valuation could be based on free cash flow or market multiples. Usually several different valuation methods are used and the different outcomes are evaluated. Synergies and negotiation tactics play major role in determining the final transaction price. A crucial part of the execution phase is Due Diligence (DD), which is done by a third party. The purpose of due diligence is to ensure that the acquirer will have what is promised and no "red flags" are raised.

The after-care and final integration of the target company smoothen the adaption phase. Waldman & Javidan (2009) point out that organizational factors like management and leadership have high importance in successful integration. Many transactions fail because the adaption phase is not done properly and the planned synergies cannot take place (Gates & Very, 2003). Adams & Neely (2000) argue that M&As may fail due to number of issues like weak strategy concept, poor social authority by the bidding firm, cultural differences or weak working moral. However, if the M&A process is done properly and acquiring company has strong management, the success rate is likely to be much higher.

2.6 M&A Synergetic effect

Devos, Kadapakkam & Krishnamurthy (2009) emphasize synergies effect as the main driver for mergers and divides them in two categories: operating and financial synergies. Consequently, authors define total synergies as “the sum of two components: operating synergies arising from changes in cash flow related to operations and financial synergies generated by increased interest tax shields”. They also suggest that in case of operational synergies, the main gains normally come “from cutbacks in investment rather than increased operating profits.”

The impact of synergies strongly depends on whether the capabilities of two companies are complementary or similar to each other. If two merging companies have complementary assets, synergies created by such combination are able to enrich novel knowledge (Hitt, King, Krishnan, Makri, Schijven, Shimizu, Zhu 2009) and facilitate new product creation (Hoberg, Phillips 2010). According to Swaminathan, Murshed & Hullah (2008) both similarity and complementarily are able to create value. However, it is possible under different kind of merger objectives, such as consolidation and diversification respectively.

2.6.1 Different Types of Synergies

The concept of synergies states that the sum should be larger than its parts; $1 + 1 = 3$. In other words, the two organizations together should be more worth than the two entities' standalone values. The word synergy originates from the Greek word 'sunergos', meaning that “separate parts works together”.

Synergy is the quite simplistic idea that the mixture of two businesses can make better shareholder value than if they are worked separately (Donald, 2008) The concept of synergies is all about creating added value by sharing resources and acquire benefits that otherwise would not have been possible to achieve, or possible to achieve but at a higher cost. As synergies can be found and used all over the organizations, synergies do take many different forms depending on the type of M&A and the organizations' businesses.

In general, the sources of value from synergy could be classified into three types, which are: operational synergy, managerial synergy and financial synergy. The operational synergy can arise from the economies of scale and scope or through the increased monopoly power.

Operating synergy

The synergy theory proposes that merger and acquisition take place when the value of the combined firm is greater than the sum of the values of the individual firms. The additional value, or synergistic gain, is derived from an increase in operational efficiency or an increase in market power. One of the main sources of operating synergy is the cost reductions that occur as a result of a corporate combination. These cost reductions may come as economies of scale – decrease in per unit costs that result from an increase in the size or scale of a company's operations. Firms would be able to provide stockholders a higher rate of return if they were a smaller, more efficient company (Gaughan, 2010).

Financial synergy

The second type of synergy is financial synergy. “Financial synergy” refers to the impact of a corporate merger or acquisition on the costs of capital to the acquiring firm or the merging partners. If financial synergy exists in a corporate combination, the costs of capital should be lowered. (Depamphilis, 2009).

In order to obtain a better understanding of what synergies are and which different forms they can take, some common examples are presented below.

- Efficiency gains – economies of scale and economies of scope can be seen as overall advantages where the purposes are to increase efficiencies (Johnson et al., 2004).
- Entry speed gains – in growing markets where the pace is high, organizations find it hard to attain the resources and knowledge in the same speed as the market demands; resources must be acquired, people needs education and required end products take several years to develop. By acquiring other firms these essentials can be obtained faster by the usage of short cuts such as M&As (Johnson et al., 2004).
- Competitive gains – in slow, static and mature markets where competition is established the cost of expansion and building from the scratch is not always worth its money. Especially it is hard for the organization to strengthen the current position by simply adding additional resources. If the extra cost of adding more re-sources cannot be counter balanced by the benefits it will bring, needs to go beyond usual methods occur. To acquire these resources through M&As

are in many cases seen as the only option to get away from this stuck-in-the-middle position (Johnson et al., 2004)

- Consolidation gains – especially in fragmented industries where there exists an absence of specialization and ‘all does everything’, competitive advantages can be gained or strengthened through increased focused on core capabilities and niche areas (Johnson et al., 2004).
- Resource gains – resources that cannot be attained at all, or acquired at a higher cost, can be accessed through M&As. A typical example of this is research and development, where it normally takes several years to access knowledge by building up needed expertise and educate employees (Johnson et al., 2004).
- Knowledge and learning curve gains – transformation of knowledge such as routines, information flows and best practices are more specified resource gains (Johnson et al., 2004). The exchange of knowledge contributes with opportunities to learn more and to learn faster, owing to increased cooperation possibilities or improved transformation (De Wit & Meyer, 2005).
- Gains of stretched corporate parenting capabilities – in situations where M&As are not motivated by business similarities between organizations, the motivations involve existing competences or capabilities possible to use in new areas although no common operative resources exist. In such cases, it is rather the skills at the corporate level creating synergies between diverse business units (Johnson et al., 2004).
- Gains of increased market size and succeeded market share – by forwarding the organization’s market position not only customers can be won from competitors, the synergies can also expand the whole market pie. In addition, an alignment of business units creates increased possibilities to offer the customers a broader product base in the same or similar market, thus contributing with a more complete market offer (Johnson et al., 2004).
- Gains of resource sharing – by sharing resources, for example by using one machine instead of using two machines, cost savings are done. Resources used by several business units at the same time, reused or shifted back and forward also create cost savings (Johnson et al., 2004).

- Price pressure gains – competitive advantages are gained through price pressures enabled through different forms of economies of scope decreasing the average costs (Johnson et al., 2004).
- Transaction cost gains – costs associated with transactions in relation to customers, suppliers and other closely related stakeholders can be avoided or decreased through the internalization and the shortened distance of these (De Wit & Meyer, 2005).
- Bargaining power gains – the gains of bargaining power increases with size since larger volumes are used. The bargaining power is mainly applicable in negotiations with external stakeholders (De Wit & Meyer, 2005).

Whereas few organizations see possible gains in all of the above mentioned areas, several of the mentioned synergies as well as combinations and overlaps of these are used as motivations for M&As (De Wit & Meyer, 2005).

2.6.2 Supply chain & logistics synergies

Häkkinen et al (2004) has written an extensive article regarding logistical synergies in horizontal M&As and has developed a framework for logistic synergy realization in M&As. The framework takes into account sourcing, manufacturing and distribution and investigates synergies within structure/resource and process. These synergies are divided into three steps: combination fit and potential, level of integration and realized synergies. The last step is complemented with difficulties of synergy realization in order to enhance knowledge growth and experience. Based on their research, six factors are identified that impact these steps: similarities, complementarities, geographical overlaps, relative size, pre M&A quality and M&A experience. These factors in turn affect the synergies in different steps.

According to Häkkinen et al., similarities, complementarities, geographical overlaps and relative size all directly affect combination fit and potential. Geographical overlaps, relative size and pre M&A quality directly affects the level of integration and pre M&A quality and M&A experience directly affects the realized synergies. Combination fit and potential affects level of integration and level of integration affects realized synergies. The framework can be used to examine the combination fit and potential, level of integration and realized synergies in different functions

and different phases during the M&A process, which in turn can contribute to a better understanding of the overall integration process.

Similarly, according to Gene Tyndall (2010) there are five critical supply chain objectives that are typically specified in an integration driven by a business combination, and these depend greatly on the processes that will execute the operations strategies. These are:

1) The synergies of supply chain cost reduction. Cost savings can accrue within each process – whether it is in buying, producing, assembling, moving, storing, or selling goods and related services. Costs of goods sold, costs to serve customers, freight expense, facilities costs the list is long and powerful. The critical success factor is to find these, ensure they are not necessary for customer satisfaction or growth, and execute them correctly.

2) The optimization of inventories. Most companies continue to be challenged by forecasting, demand and supply management, and uncertainty. Despite consistent attempts to improve the process of Sales, Inventory and Operations Planning (SIOP), the optimal balancing of supply and demand remains elusive. There is some evidence that the supply chain integrations of merged companies have even created more inventories than was the sum of the two. The inability to get the SIOP process functioning effectively can result in excess inventories being created and then being deployed to the wrong locations.

3) The value creation. The effective integration of the supply chains involved in a business combination should lead to new values being created – not just for cost savings, but also for growth contributions. Depending on the business and operations strategies, the new supply chains should, for example, enable efficient entries to new emerging markets. In addition, the new supply chains should improve the supply base, enhance customer satisfaction, and improve operating performance when benchmarked against the competition.

4) The rationalization of facilities. This objective is often specified as a cornerstone of the integration, along with the common requirement to reduce full-time resources in a new organization. Here again, initiating this work too early, without full consideration of the business and operations strategies, can lead to operational issues. For example, the strategic goal “to reduce the number of distribution centers (DCs)” may, by itself, lead to wrong locations,

inability to satisfy customer needs, or longer lead times. The best practice for this rationalization is to conduct a comprehensive review of current facilities, strategic needs, logistics flows, inventory policies, and alternative networks. And then after the review, apply modern optimization modelling tools to help find the best solutions.

5) Facilitate supply chain innovation. It is not enough in today's highly competitive markets to be efficient; we must also be innovative in continuous improvement and in new services that are tailored to customers' unmet needs. (Gene Tyndall, 2010)

2.6.3 Negative Synergies

Whereas a positive synergy leads to that one plus one adds to a sum that is greater than two, a negative synergy creates outcomes where one plus one equals less than two. The concepts of diseconomies of scale and diseconomies of scope are examples used to de-scribe the undesired results brought with negative synergies (Harding & Rovert, 2004).

Other examples of negative synergies are that of lost accounts due to duplication, employees who leave the organization (and take the accounts with them), increased IT costs, and managers who lose focus on the on-going business due to integration and cost cutting focus with lost revenues as a consequence (Harding & Rovert, 2004). Yet another negative synergy is that of increased bureaucracy, the coordinative activities automatically increase with the M&A, leading to prolonged lead times and increased administrative work. Increased managerial costs, arising as a direct consequence of M&As, and increased complexities also need to be considered (Johnson et al., 2004). Not to be forgotten is the increased workload likely to arise due to need for extensive integration efforts (Schriber, 2009). Negative synergies can have a large impact on totality, hence it is important to not only consider the up-sides of synergies but also be aware of the disadvantages (Harding & Rovert, 2004).

Shaver (2004) argues that mainly two negative effects arise in the integration phase due to the implementation of synergies; the contagion effect and the capacity effect. When explaining these two effects, they should be set in relation to if the two organizations did not merge. The contagion effect refers to the interdependency created between the firms, and the negative effect occurring as a consequence of these changes. For example; a M&A typically lead to some

managerial turnover, causing less suitable managers to step up and apply their skills all over the organization, thus bringing aspects affecting the organization negatively. The capacity effect on the other hand, refers to the increase in capacity utilization of underlying resources. Capacity constraints occur as a result of extended use of slack resources which further restricts possibilities for enhancements in the organization. For example, when workload becomes heavier than what employees is able to handle capacity constraints occur. Hence, the company cannot take advantage of an opportunity, such as an temporarily excess in demand. The final outcome shows that the more activities the two organizations integrate, the larger is the negative implications of these two effects. Even if well planned integration activities and properly assessed M&As can prevent these negatives to some extent, they will still lead to failures of met expectations.

2.7 Porter's Value Chain

Once clarified what synergies are and why they are sought, the next step is to clarify where and how synergies arise. The value chain is equal to the different value adding activities and processes linking together and seeking to develop organizations' main functions, leading to the actual end products and customer offers. Every organization's value chain is unique and contributes to the creation of competitive advantages distinguishing it from other companies. The value chain consists of different activities further divided into primary activities (from creation of products to after sales support) and secondary activities (activities facilitating the primary activities).

The primary activities are:

- Inbound logistics – activities related to handling and monitoring of supply
- Operations – activities associated with production
- Outbound logistics – distribution of products to the final customer
- Marketing and sales – customer focused activities linked to attracting and gaining sales
- Service – activities intended to improve or maintain customer experiences, such as installation or after sales services

The support activities are:

- Procurement – activities related to purchasing and maintenance
- Technology development – research and development improving and generating current and new products
- Firm infrastructure – activities connected to administration, planning and control (De Wit & Meyer, 2005)

The value chain's broadened base, called the value system, also includes the value chains of the organizations' suppliers, distributors and customers, thus consisting of several value chains linked together making up a whole network of relations and interdependencies. Any problem along the organizations' value chain can cause severe difficulties affecting either input or output of products, and for that reason it is of large interest for organizations to streamline and optimize these processes.

An analysis of the organization's value chain and value system will provide information on existing gaps and potential synergies. It is either in direct relation to different activities or in linkages between these activities that synergies can be unhidden (Lynch, 2006). People involved in the actual M&A processes might not have sufficient knowledge needed to discover and evaluate all potential synergies, and for that reason it is invaluable to obtain advice from people working in the organization, both because they have the most knowledge concerning processes and because they will realize the found synergies in the end (Early, 2004).

2.8 M&A Challenges

M&As is a complex activity, which involves a big number of matters and affects a broad variety of stakeholders. Countless number of authors dedicated their attention to the topic of M&A by analysing the issue from different perspectives. However, it is important to have in mind that independently of the angle from which this subject is approached, the main idea of M&A is to build "a new entity the value of which will exceed in terms of potential wealth creation, the sum of the respective value of two separate groups". Nevertheless, Hitt, King, Krishnan, Makri, Schijvene, Shimizu & Zhu (2009) suggest that one of the main reasons for merger and

acquisition failures is a wrongly selected company to merger or to acquire. In case the premium paid for the acquired company is too high the probability to fail is also high (Hitt, King, Krishnan, Makri, Schijvene, Shimizu & Zhu 2009). Wrong process of post-merger integration is another factor that might lead to poor results A study by Ernest Young confirmed that 66% of all merger failures in ASEAN countries merged companies was attributed to failure in integration, 20% accounted for lack of deal strategy or low strategic fit and 14% of merger failure attributed to failure in a M&A deal resulted in synergies not achieved (Ernest & Young, 2015)

2.9 Conceptual Framework

Based on overall review of related literature, and particularly the work of Larsson & Finkelstein (1999), Zhou, (2014), the following conceptual framework in which this specific study governed was developed as follows:

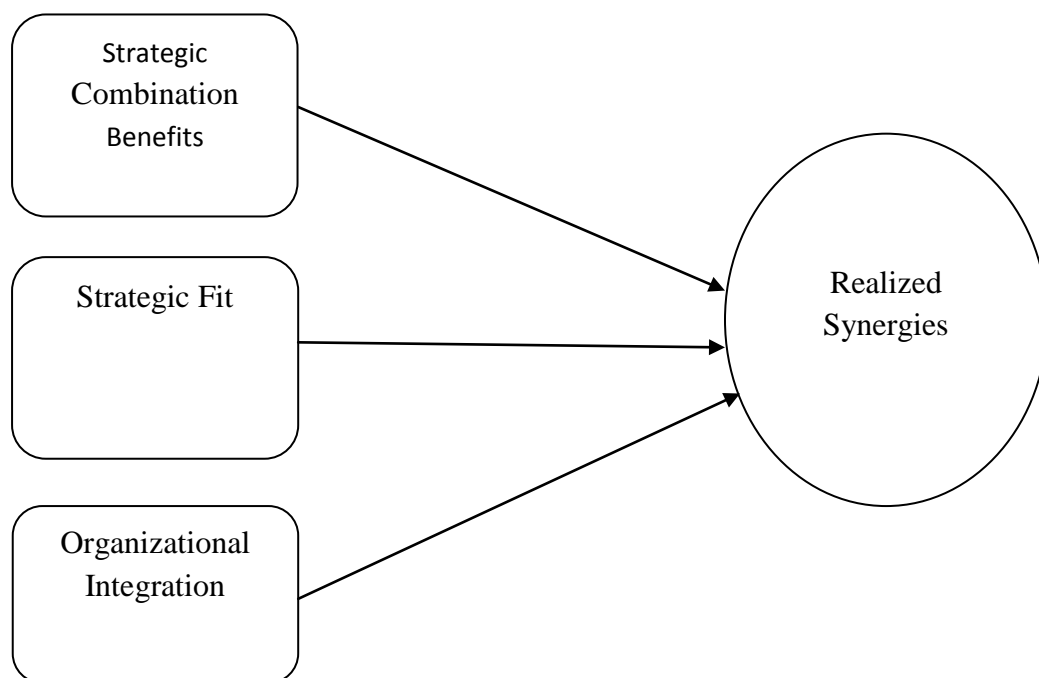


Fig 2.1 Conceptual framework for the study

Source: adapted from Larsson & Finkelstein (1999), Zhou, (2014) with minor modification by the researcher

CHAPTER THREE

RESEARCH METHODOLOGY

This part describes the methodologies that were used in this study: the choice of particular research designs, data type and source of data, research approach, data gathering technique and instruments, sampling and sampling techniques and data analysis techniques along with an appropriate justification associated with each approach.

3.1 Description of the Study Area

Ethiopian construction Works Corporation is the result of the merger which is horizontal integration of three state owned enterprises namely Ethiopian road Construction Corporation, Water works construction enterprise and The prefabricated building parts Production enterprise. with Council of Ministers Proclamation Number 366/2008 December 18, 2015 with the aim of becoming a leading, preferred and competitive construction contractor.

As per of the proclamation of its establishment, Ethiopian Construction Works Corporation has an authorized capital of Ethiopian Birr 20,313,608,143.90. This shows that the corporation is the biggest construction company in the country. In addition to this, the corporation has currently more than 15,000 workers. This also makes it the largest construction company in terms of job opportunity creation. The corporation owns hundreds of modern construction machinery and equipment units, and different kinds of freight as well as transport vehicles.

Although it is a new corporation in its current form, the Ethiopian Construction Works Corporation has accumulated experience in the construction industry. Currently, the corporation has two operational sectors: the water infrastructure construction sector, and the transport infrastructure construction sector. The two sectors in turn have different projects located in different parts of the country. The headquarters of the corporation is located in the city of Addis Ababa, and situated in the building of the former Ethiopian Water Works Construction Enterprise, around Gured Shola. Currently the corporation has three operational sectors, namely transport infrastructure construction, water infrastructure construction, and construction machinery and equipment management business units the two most important competitive advantages of the corporation are:

Its geographical presence: The Corporation has different projects located strategically throughout the country. This makes the Ethiopian Construction Works Corporation the most accessible construction contractor in the country. This geographical presence can be an advantage even to indulge in different construction projects found in neighbouring countries.

Its human and material resources: The Ethiopian Construction Works Corporation currently has more than 15,000 workers believed to be the biggest construction company in the country in terms of job creation

Furthermore, the Corporation has taken its first overseas project outside of Ethiopia. The project is for the construction of irrigation infrastructure development project in Rwanda and it is for the remuneration of \$4.7 million.

3.2 Research Approach

As per Creswell (2003) there are three approaches that are used in conducting a given research. These are quantitative, qualitative and mixed research approach. Quantitative research approach focuses primarily on the construction of quantitative data, and quantitative data is a systematic record that consists of numbers constructed by researcher utilizing the process of measurement and imposing structure (Kent, 2007). The quantitative research approach employ measurement that can be quantifiable while qualitative cannot be measured (Bryman & Bell, 2007). In mixed research approach inquirers draw liberally from both qualitative and quantitative assumptions (Creswell, 2009).

In this paper the researcher used mixed research approach; the rationale for combining both quantitative and qualitative data is to better understand a research problem by combining both numeric values from quantitative research and the detail of qualitative research and to neutralize limitations of applying any of a single approach. According to Creswell (2009) the mixed research approach uses separate quantitative and qualitative methods as a means to offset the weaknesses inherent within one method with the strengths of the other method.

To assess synergy realization in post-merger environment the concurrent mixed method design is used. The concurrent triangulation approach is probably the most familiar of the major mixed method models. It is selected as the model, when a research uses two different methods in an

attempt to confirm, cross-validate, or corroborate findings within a single study (Creswell, 2009). In this case, the quantitative and qualitative data collection is concurrent, happening in one phase of the research.

3.3 Research Design

The data collection techniques employed which include, self-administered questionnaire, semi structured in depth and non-standardized interviews, and documentary analysis was employed in combination.

According to Yin's (2009) classification of research designs, the proposed study represents a single case study embedded, where the unit of analysis is supply chain and logistics synergies in post-merger environment and its aspects. Consequently, the research used a case study strategy by triangulating multiple sources of data.

3.4 Population and sample

According to Hair et al. (2010), target population is said to be a specified group of people or object for which questions can be asked or observed made to develop required data structures and information. Therefore, for this study, the target populations are employees of ECWC, particularly those who served in the transition team of the merger process constituting senior, middle level and senior experts of the corporation.

A purposive technique was used in this study for the research questions. This is because the study is mainly concerned with the views of executives and experts on the issue of the post-merger integration of the merging firms from the perspective of supply and logistics perspective as the author will be working with a small group of samples, this will be particularly informative.

A total of 40 questionnaires were distributed to those who actively participated on the integration of the merging parties and senior managers with considerable understanding of the operations of the firms and their integration process and 32 (80%) questionnaire were returned.

Semi structured interview with top executives of the corporation were conducted. It allowed the investigator some degree of flexibility at the time of interviewing for the pursuit of unexpected

line of inquiry which was arising at the study progresses. Questions in the interview checklist were constructed based on the review of literature.

3.5 Data sources & types

There are two ways the data can be obtained: primary and secondary sources. The validation of data is assumed to be dependent on the way that specific data is collected. The research utilized documentation and archival records, interviews, and questionnaire as sources of data in order to gain greater understanding of the merger.

3.5.1 Secondary Data

The review of documents helped the researcher to understand the key facts of the organizations. The documents were reviewed by referring most recent information from authorized documents and different reports. Annual reports, legislations, directives and other documents related to M&A were used. The document reviews were used to triangulate the data collected by the questionnaires and interviews.

3.5.2 Primary Data

The importance of primary research depends on obtaining up to date information related to the research topic. According to Sekaran and Boungie(2010), primary data refers to information obtained first hand by the research basically it is raw data that has not been analysed yet and therefore it is original in nature. It is the opposite of secondary data. Primary research takes longer and may be expensive.

The primary data was gathered particularly using survey questionnaire. The researcher distributed the questionnaire to sampled respondents. For the purpose of this study a quantitative methodology involving a close-ended questionnaire was used as the measuring instrument. The close-ended questionnaires can be administered to groups of people simultaneously, since they are less costly and less time consuming than other measuring instruments.

The standard questionnaire used to collect the necessary information regarding the study was adopted from the work of Larsson & Finkelstein (1999), Zhou, (2014). The Likert-type scale method used a range of responses: developed in five scales ranging from five to one; where 5

represents Very high, 4 High, 3 Medium, 2 Low, and 1 Very low for categorized question for strategic business potential, strategic fit and organizational integration and for questions under realized synergies scaled ranging from five to one; where 5 represents Strong increase, 4 Increase, 3 About the same before, 2 Decrease, and 1 Strong decrease. In order to assess the relationship between M&A decision making and implementation with merger performance respectively. The usage of this particular scaling method ensured that the research study illustrated the ability to assess the responses and measure the responses quantifiably so that a pattern or trend may be produced in order to assess research hypotheses. As Neuman (2003) hypothesize, it is a process of asking many people the same questions and examining their answers. Similarly, for interview questions the research used semi- structured interviews in order to gain qualitative information.

3.6 Data collection procedures

In the process of preparing, testing and using the instruments, the following procedures have been followed.

- ❖ The questionnaires and the interview guides were developed based on literature review relevant to the issue and the specific objective.
- ❖ Both tools were judged for their validity using professionals in the area.
- ❖ In the final study, the questionnaires and interview were administered by the researcher.
- ❖ Ethical concerns that emerged during every stage of research was carefully examined and addressed by the researcher. The research will carefully take into account key ethical issues that the research can face during the study:

3.7 Method of Data Analysis and Interpretation

Data analysis consists of schematic evaluation, organization and interpretation of the acquired data for the purpose of establishing conclusions and there can be multiple data analysis techniques among which SPSS for quantitative and Thematic Analysis for qualitative analyses is the most common data analysis plan.

The research study utilized the thematic data analysis plan where raw information from the interview analysis were data gathered was bifurcated into relevant themes and each theme was analysed in contention with secondary information obtained and incorporated in the literature review chapter. The data collected through pre-tested structured questionnaire is analysed using SPSS version 20. The statistical tools were aligned with the objectives of the research. Inferential statistics is particularly the Pearson's correlation was used to show the relationship and the strength/degree as well as direction of associations between variables. The other inferential statistics used is regression analysis so that to show interdependence of independent variables and dependent variable. Thus, both the strength of the relationship between variables and the influence of independent on dependent variable and statistical significance were assessed.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.1 Introduction

As discussed in previous chapter, this study attempted to examine the Relationship between merger synergy realization and pre-merger strategic decision making and post-merger strategic implementation of organizational integration in case of Ethiopian Construction Works Corporation (ECWC). Therefore, the findings of the study are presented and discussed in this chapter.

The questionnaire were developed in five scales ranging from five to one; where 5 represents Very high, 4 High, 3 Medium, 2 Low, and 1 Very low for categorized question for strategic business potential, strategic fit and organizational integration and for questions under realized synergies scaled ranging from five to one; where 5 represents Strong increase, 4 Increase, 3 About the same before, 2 Decrease, and 1 Strong decrease. In order to assess the relationship between M&A decision making and implementation with merger performance, Correlation and regression analysis were conducted for scale typed questionnaire.

A total of 40 questionnaires were distributed to those who actively participated on the integration of the merging parties and senior managers with considerable understanding of the operations of the firms and their integration process and 32 (80%) questionnaire were obtained valid and used for analysis. The collected data were presented and analysed using SPSS (version 20) statistical software.

The analysis is presented in the following sequence, first the description of the merger process of merging parties and mainly correlation analysis was used, specifically Pearson correlation to measure the degree of association between different variables under consideration. Regression Analysis was also used to test the effect of independent variable on dependent variable.

4.2 Demographic Information of the Respondents

The demographic information of respondents were summarized and described below.

Table 1: Sex

SEX				
		Frequency	Percent	Cumulative Percent
Valid	MALE	28	87.5	87.5
	FEMALE	4	12.5	100.0
	Total	32	100.0	

Source: Research data, 2017.

Table 2: Academic Background

ACADEMIC LEVEL					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	BACHELOR'S DEGREE	10	31.3	31.3	31.3
	MASTER'S DEGREE	22	68.8	68.8	100
	Total	32	100	100	

Source: Research data, 2017

Table: 3 Work experience

WORKING EXPERIENCE					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	6 TO 10 YEARS	3	9.4	9.4	9.4
	11 TO 15 YEARS	9	28.1	28.1	37.5
	16 TO 20 YEARS	13	40.6	40.6	78.1
	OVER 20 YEARS	7	21.9	21.9	100.0
	Total	32	100.0	100.0	

Source: Research data, 2017

Table: 4 Job Category

JOB CATEGORY					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	SENIOR MANAGERS	6	18.8	18.8	18.8
	MIDDLE LEVEL MANAGERS	21	65.6	65.6	84.4
	SENIOR EXPERTS	5	15.6	15.6	100.0
	Total	32	100.0	100.0	

As indicated from the above tables 32 respondents 87.5% were male while 12.5% were female. In terms of the highest qualifications of the study respondents, the survey established that the majority 68.8% of the respondents had a master's degree, 31.3% had bachelor's. This suggests that all study respondents had adequate educational qualifications to enable them to answer the survey instrument. The survey also established 9.4% have 6 to 10 years of experience, 28.1% have of experience 11 to 15 years, 40.6% have 16 to 20 years of experience and 21.9% have over 20 years of experience. Finally, the data indicate that 18.8% of respondents are senior managers, 65.6% and 15.6% are middle level managers and senior experts respectively. These points to the fact that most of the respondents were experienced since they had worked long enough and serve at managerial level to be conversant with the issues of the merger process of the corporation.

4.3 Summary of Interview Results

The interview result with the executives of Indicated that, the rationale and objective of the merger were initiated in line with the governments intervention to meet the demands of the development process which the private sector failed to achieve in certain economic activities such as construction of highways and large scale construction projects. As a result the government decided to merge the companies since they are engaged in similar activities to realize untapped potential and capabilities of the joining firms.

The construction sector plays a pivotal role in accelerating economic growth. Its roles in the expansion of infrastructural facilities such as roads, schools, hospitals, residential houses, among others, can be mentioned. The growth of infrastructural facilitate by itself is part of development. As a stimulant for growth, it creates an up and downward linkage so as to create value chains.

Despite its prominent role, the construction industry in Ethiopia, like in other developing countries, faces many challenges in its practice. Some of these challenges are project overruns, poor quality, inappropriate procurement systems, and a failure to cope with project requirements and the inability to adopt best practices.

Public enterprises have the objective of fostering the socio-economic development of the country. On the other hand, they are intended to fill the market gap in the development of these types of infrastructure. To meet their purpose of establishment, these enterprises need to be

competent. With a growing number of domestic contractors and competitiveness in the industry, it has become difficult for many public enterprises to deliver what they were intended for.

Thus it is necessary as well as compulsory to strengthen and enhance the competitiveness of some of the strategic developmental enterprises through different means. The merger rationale emanates from the perspective of meeting the strategic objective of the government development strategy Ethiopian construction Works Corporation is the result of the merger which is horizontal integration of three state owned enterprises namely Ethiopian road Construction Corporation, Water works construction enterprise and The prefabricated building parts Production enterprise.

The merger process started after analysing the similarities and sameness of activities of the three organizations to utilize the capabilities and competencies to successfully navigate operational challenges.

4.4 Correlation Analysis

Correlations are the measure of the linear relationship between two variables. A correlation coefficient has a value ranging from -1 to 1. Values that are closer to the absolute value of 1 indicate that there is a strong relationship between the variables being correlated whereas values closer to 0 indicates that there is little or no linear relationship. As described by Andy (2006), the correlation is a commonly used measure of the size of an effect: values of ± 0.1 represent a small effect, ± 0.3 is a medium effect and ± 0.5 is a large effect.

In this section, correlation analysis conducted in the light of each research objectives and hypotheses developed. The relationship between M&A strategic decision making and post-merger integration on post-merger environment synergy realization was investigated using correlation analysis. This provided correlation Coefficients which indicated the strength and direction of relationship. The p-value also indicated the probability of this relationship's significance.

4.4.1 Correlation between Strategic Combination Benefits and Realized Synergies

Pearson correlation test was conducted between strategic combination benefits and merger realized synergies the results are shown in table 4.1. As it is shown in the table, there is significantly strong correlation between Strategic combination benefits and realized Synergies with correlation coefficient of 0.799 ($r=0.799$) and significance value less than 0.01.

Table 4.1: Correlation between Strategic Combination Benefits and Realized Synergies

		SCB	RS
SCB	Pearson Correlation	1	.799**
	Sig. (2-tailed)		.000
	N	32	32
RS	Pearson Correlation	.799**	1
	Sig. (2-tailed)	.000	
	N	32	32
**. Correlation is significant at the 0.01 level (2-tailed).			

4.4.2 Correlation between Strategic Fit and Realized Synergies

Pearson correlation test was conducted between strategic fit and merger realized synergies the results are shown in table 4.2. As it is shown in the table, there is significantly strong correlation between Strategic combination benefits and realized Synergies with correlation coefficient of 0.815 ($r=0.815$) and significance value less than 0.01.

Table 4.2.: Correlation between Strategic Fit and Realized Synergies

		SF	RS
SF	Pearson Correlation	1	.815**
	Sig. (2-tailed)		.000
	N	32	32
RS	Pearson Correlation	.815**	1
	Sig. (2-tailed)	.000	
	N	32	32
**. Correlation is significant at the 0.01 level (2-tailed).			

4.4.3 Correlation between Organizational Integration and Realized Synergies

As it is shown in the table 4.3 below there is strong positive relationship between organizational integration and realized synergies with a Pearson correlation coefficient of 0.726 ($r=0.726$) significance value is less than 0.001. This significance tells that there is genuine relationship between organizational integration and realized synergies.

Table 4.3: Correlation between Organizational Integration and Realized Synergies

		OI	RS
OI	Pearson Correlation	1	.726**
	Sig. (2-tailed)		.000
	N	32	32
RS	Pearson Correlation	.726**	1
	Sig. (2-tailed)	.000	
	N	32	32
**. Correlation is significant at the 0.01 level (2-tailed).			

4.4 Regression Analysis

This regression analysis is conducted to know by how much the independent variable explains the dependent variable. The regression was conducted between strategic combination benefits (independent variable) and realized synergies (dependent variable) in the first regression. The second regression was made between strategic fit (independent variable) and realized synergies (dependent variable). Finally, the third regression was made between organizational integration (independent variable) and organizational performance (dependent variable). The results of the regression analysis are presented as follows.

4.5.1 Regression Analysis between Strategic Combination Benefits and Realized Synergies

Table 4.4.: Regression Analysis between Strategic Combination Benefits and Realized Synergies

Model	B	Std. Error	t-stat	p-value	Adjusted R Square
1	0.862	0.119	7.266	0.000	0.626

a. Dependent Variable: RS

b. Predictors: (Constant), SCB

Source: SPSS regression result

As shown in the table 4.4., there is causal relationship between strategic combination benefits and realized synergies. There might be many factors that can explain this variable, but the model, which includes strategic combination benefits, can explain approximately 62.6% of it. This suggests that the remaining 37.7% of the variation in realized synergies cannot be explained by those dimensions of strategic combination benefits. The significant and positive β coefficient also implies that strategic combination benefits have a positive influence on realized synergies.

4.5.2 Regression Analysis between Strategic Fit and Realized Synergies

Table 4.6 Regression Analysis between Strategic Fit & Realized Synergies

Model	B	Std. Error	t-stat	p-value	Adjusted R Square
2	0.736	0.096	7.703	0.000	0.653

a. Dependent Variable: RS

b. Predictors: (Constant), SF

Source: SPSS regression result

As shown in the table 4.5, there is causal relationship between strategic fit and realize synergies. The value of adjusted R Square in this model is .653, which implies that strategic fit can account for 65.5% of the variation in realized synergies. Although there might be many factors that can explain the variable on realized synergies, approximately 65.3% of it is explained by strategic fit. This indicates that the remaining 34.7% of the variation in realized synergies cannot be explained by strategic fit. The P value and positive β coefficient also implies that strategic fit have a positive and significant influence on organizational performance

4.5.3 Regression Analysis between Organizational Integration Benefits & Realized Synergies

Table 4.6 Regression Analysis between Organizational Integration Benefits & Realized Synergies

Model	B	Std. Error	t-stat	p-value	Adjusted R Square
1	0.674	0.116	5.785	0.000	0.512

a. Dependent Variable: RS

b. Predictors: (Constant), OI

Source: SPSS regression result

As shown from table 4.6, the value of adjusted R square is 0.512, indicating that the independent variable in the model are explaining 51.2 % variation on the dependent variable. Thus, we can understand that the model of the study is providing a good fit to the data.

4.6 Discussion of the Results

The objective of this study is to determine the underlying antecedents of merger synergy realization in post-merger environment with particular reference on Ethiopian construction Works Corporation.

Three major antecedents, strategic combination benefits, strategic fit an organizational are all importantly related to M&A synergy realization. The strategic fit is often marked as an important antecedent of M&A performance as it captures the synergistic potentials that could be realized in the post- transaction integration stage (Larsson & Lubatkin 2001).

Theoretically, the strategic fit captures the joining firms' strategic similarity and complementarity in operations. This case study has taken all of the important determinants of strategic fit variables into account, which were adopted by Zhou (2014) previous research. The result confirmed that strategic fit is a strong predictor and important antecedent of merger synergy realization.

In this study strategic fit have strong positive relationship with synergy realization with a Pearson correlation coefficient of 0.815 ($r=0.653$) significance value is less than 0.001. It also

explains 65.3% realized synergies. This finding is consistent with those studies on M&A, (Larsson & Lubatkin 2001; Stahl, Kremershof & Larsson 2004).

Similarly, strategic combination benefits have positive relationship with synergy realization with a Pearson correlation coefficient of 0.799 ($r=0.626$) significance value is less than 0.001. It also explains 65.3% realized synergies. The combination potential, usually conceptualized in terms of various sources of synergy and to what extent these can be achieved, and has the potential to affect the degree of synergy realization in an M&A. Therefore a high combination potential is likely to create greater synergies. This finding is supported with study conducted on M&A (Stahl et al. 2011)

In conjunction, organizational integration have positive relationship with synergy realization predictor with a Pearson correlation coefficient of 0.726 ($r=0.512$) significance value is less than 0.001. In previous research, integration has been cited as the most important factor in M&A success (Graebner 2004; Grube & Töpfer 2002; Hopkins 2008). Specifically, in the process of realizing different synergies, the operational interactions and internal dynamics in the post-transaction stage of the merging firms are the keys to M&A success.

In conclusion, this case-survey study confirmed the application of conventional theories developed from Western economics (Larsson & Finkelstein 1999; Larsson & Lubatkin 2001; Zhou, S & Huang 2012) into the Ethiopian context specifically in the case of Ethiopian construction Works Corporation.

The empirical findings of case-survey study strongly supported and confirmed the three major predictions M&A synergy realization: the greater strategic combination benefits, strategic fit and organizational integration the greater overall realized synergies.

CHAPTER FIVE

SUMMARY OF MAJOR FINDINGS, CONCLUSION AND RECOMMENDATION

5.1 Summary of Major Findings

This study is intended to test if there is a relationship between strategic combination benefits, strategic fit and realized synergies. Based on the results of the study the summary of major findings are as follows.

Strategic fit have strong positive relationship with synergy realization with a Pearson correlation coefficient of 0.815 ($r=0.653$) significance value is less than 0.001. It also explains 65.3% realized synergies. Similarly, strategic combination benefits have positive relationship with synergy realization with a Pearson correlation coefficient of 0.799 ($r=0.626$) significance value is less than 0.001. It also explains 65.3% realized synergies.

Finally, organizational integration have positive relationship with synergy realization predictor with a Pearson correlation coefficient of 0.726 ($r=0.512$) significance value is less than 0.001.

5.2 Conclusion

Based on the results of the study and the summary of findings the following conclusions are given. This case-survey study confirmed the application of conventional theories developed from Western economics (Larsson & Finkelstein 1999; Larsson & Lubatkin 2001; Zhou, S & Huang 2012) into the Ethiopian context specifically in the case of Ethiopian construction Works Corporation.

The empirical findings of case-survey study strongly supported and confirmed the three major predictions M&A synergy realization: the greater strategic combination benefits, strategic fit and organizational integration the greater overall realized synergies.

Managing M&A is a dynamic and complex process because it involves significant functional integrations in the post- transaction stage. Compared with Western M&A, the various activities, such as consolidating procurement, sharing of distribution network and optimizing inventory, competence transferring and sharing of existing & new know how and human resources

integration, coordination and cooperation, produced more complexity M&A. Specifically, it confirms the effect of how many synergies or synergistic potentials of M&A could potentially bring to the joining parties to significantly predict ECWC's merger performance.

This confirmed that the organizational integration captures the effectiveness of functional integration and operational coordination and interaction between the joining firms. Thus, it positively contributed to M&A's realized synergies as an important process of functionally, technically and rationally realized synergistic potentials in the post-transaction integration stage. The case study outcomes also supported the importance of organizational integration in determining M&A performance and suggest that effectively managing organizational integration is a challengeable task. Indeed, it not only requires the effective coordination and cooperation between the joining firms, but also needs a high level of competence in managing the whole integration process, including deep resource sharing and competence transfer as well as other functional integrations.

5.3 Recommendation

The thesis findings enhance current understanding of what crucial factors determine and influence synergy realization and highlight some key issues of ECWC in managing their post-merger integration. Though M&A could offer competitive advantage and create value such as surpassing local competitors, capturing M&A synergies is still a challenge to executives in deciding how to efficiently capture combination potential and strategic fit advantages to effectively manage M&A in the post- merger integration stage, integrate the acquired resources and assets, transfer competences and achieve superior business performance.

Therefore, this thesis offers significant practical guidance and important messages to Ethiopian companies both in the private and public sector executives and policy- makers in comprehensively understanding, strategically analysing and implementing M&A, avoiding potential pitfalls and taking appropriate actions towards the merger success.

The following recommendations can be suggested based on the conclusions drawn in the previous section:-

- ❖ Corporate managers should conduct detailed analysis about the combination potentials and strategic fit synergistic benefits M&A can bring to different levels of organizational and divisional capability advantages.
- ❖ Managers should explicitly acknowledge what kind of competences, such as skills, technologies and knowledge, can be transferred to improve M&A performance.
- ❖ The findings of this thesis suggest that managers and executives should be aware of the importance of organisational integration and develop the appropriate integration approach to deal with organisational integration issues.

5.4 Research Limitation and Areas of Future Research

This thesis aims to provide generalizable theoretical findings and shed substantial insights into important factors influencing Chinese CBMA performance. Since this thesis is one of the very first studies by using a mixed method approach to studying Chinese CBMA performance, there are several limitations that should be recognised and considered in interpreting the findings.

This thesis focuses only on a single case study of M&A performance on state owned enterprises to provide empirical findings and substantial insights into factors influencing M&A performance in case of ECWC. It should be noted that the M&A realized synergies maybe influenced by contextual factors, such as type of industry, firm size, cultural resistance and institutional factors which this study have not been taken into account. Particularly, there are methodological limitations in this thesis, particularly single case studies have limitations to generalize findings thus offers limited generalizability of findings.

Additionally, there are important areas for future research. First, this thesis calls for a dynamic view in future Ethiopian M&A studies. This thesis suggests that future research should explore contextual factors such as cultural and institutional intervention, the concept of M&A is complex and it is difficult to cover entire domain just in one study. Future research can expand the domain of M&A by considering additional dimensions.

Reference

Adams, C., & Neely, A. 2000. The performance prism to boost M&A success. *Measuring business excellence*, 4(3), 19-23.

Ala-Risku, T., Kärkkäinen, M. and Holmstrom, J. (2004) Evaluating the applicability of merge-in transit: a step by step process for supply chain managers. *International Journal of Logistics Management*, 14(2), pp. 67-81

Boateng, A., Qian, W. & Tianle, Y., 2008. Cross-Border M&As by Chinese Firms: An Analysis of Strategic Motives and Performance. *Thunderbird International Business Review*, 50(4), pp.259-70.

Bauer, F. and Matzler, K., 2014. Antecedents of M&A success: The role of strategic complementarity, cultural fit, and degree and speed of integration. *Strategic Management Journal*, 35 (2), 269.

Benitez, J., and Gordon, B., 'The Race is On for Supply Chain Success'. Anderson Consulting White Paper, 2000.

DePamphilis, D., 2009. *Mergers, acquisitions, and other restructuring activities: An integrated approach to process, tools, cases, and solutions*. Academic Press.

Elsborg, S., Bertelsen, S. and Dam, A. (2004) BygLOK – a Danish experiment on cooperation in construction. Proceedings of the 12th Annual Conference of the International Group for Lean Construction Elsinore Denmark, pp. 1-11

Forbes, <http://www.forbes.com/sites/baininsights/2016/03/03/getting-the-most-out-of-a-merger/#56719ed2baff>

Guffond J. and Leconte G. (2005) Developing construction logistics management: The French experience. *Construction Management and Economics*, 18, pp 679-687

Gaughan, P. A. (2011): *Mergers, acquisitions, and corporate restructurings*, 5 edition, Hoboken 2011.

Grant, Robert M. (2010). *Contemporary Strategy Analysis* (7th ed.) John Wiley & Sons, Ltd, Publication

Gates, S. & Very, P., 2003. Measuring Performance During M&A Integration. *Long Range Planning*, 36, pp. 167-185.

Häkkinen L, Norrman A, Himola O.P., and Ojala L., 'Logistic integration in horizontal mergers and acquisitions', *The International Journal of Logistics Management*, vol. 15 no. 1, 2004, pp. 27---42.

Herd, T., Saksena, A., and Steger, T., 'How Supply Chains Drive M&A Success', *Harvard Business Review Newsletter*, vol.1, no.8, 2005, pp. 9---11.

Immonen, R., 2008. *Yritysjärjestelyt*. 4th edition. Helsinki: Talentum Oyj.

Jang, H., Russell, J.S. and Yi, J.S. (2003) A Project Manager's Level of Satisfaction in Construction Logistics. *Canadian Journal of Civil Engineering*, 30, pp. 1133–1142

Katramo et al., 2011. *Yrityskauppa*. 1st edition. Espoo: WSOYpro Oy.

Lodorfos, G., and Boateng, A., 2006. The role of culture in the merger and acquisition process: Evidence from the European chemical industry. *Management Decision*, 44 (10), 1405-1421.

Merger Integration ASEAN hub, 2015 Ernst & Young Solutions LLP

Langabeer, J., and Seifert, D., 'Supply chain integration:the key to merger success', *McKinsey Quarterly*, March/April, 2003, pp. 58---64.

Pervaiz, M.,& Zafar Dr.F. (2014). Strategic Management Approach to Deal with Mergers in the era of Globalization. *International Journal of Information, Business and Management*, 6(3): 170-181

Vidalakis, C., Tookey, J. E. and Sommerville, J. (2011) The logistics of construction supply chains: the builders' merchant perspective. *Journal of Engineering, Construction and Architectural Management*, 18(1), pp. 66-81

Vrijhoef R. and Koskela L.J., (2000) The four roles of supply chain management in construction, *European Journal of Purchasing & Supply Management* 6, 2000 pp.169-178

Waldman, D. A. & Javidan, M., 2009. Alternative forms of charismatic leadership in the integration of mergers and acquisitions. *The Leadership Quarterly*, 20(2), pp. 130-142.

Weber, Y., Tarba, S. Y., and Oberg, C., 2014. A comprehensive guide to mergers and acquisitions: Managing the critical success factors across every stage of the M&A Process. New York – London: Pearson& Financial Times Press.

Yin, R.K. 2009, Case study research, Design and methods, USA: SAGE Publications, Inc.

Zhou, H., Benton, W.C., Schilling, D.A., Milligan, G.W. (2011). “Supply Chain Integration and the SCOR Model”. *Journal of Business Logistics*, 32(4), pp.332-344.

8 November 2012 <http://www.kurtsalmon.com/en-us/Retail/vertical-insight/599/When-One-and-One-Is-Three%3A-Successful-M%26A-Supply-Chain-Integration->

Appendix (1)

Interview Guide

Yemane Atakilty (MA student)

Addis Ababa University School of Commerce

Department of Logistics & supply chain management

Dear sir/madam

The intent of this interview is to explore information regarding the synergetic value of merger from the supply chain and logistics perspective of the merged construction SOEs in particular reference to Ethiopian Construction Works Corporation (ECWC). The study aims to generate credible information about the merger process in order to analyze the post-merger effects of mergers on the supply chain and logistics network of the consolidated corporation, define the important features of the motives or initial expectations regarding supply chain and logistics synergy value creation from the merger and to shed some light on the major difficulties for the merging firms in achieving synergies regarding supply chain and logistics consolidation. The information you provide in response to the items in the interview will be used as part of the data needed for a study on Supply chain & logistics synergies in post-merger environment: the case of Ethiopian Construction Works Corporation (ECWC).

I would like to assure you that the information you provide will be accessible only to the academic purpose. Your involvement is regarded as a great input to the quality of the research results. Hence, I believe that you will enlarge your assistance by participating in the study.

1. What was your initial expectation of the merger?
2. What were your areas of concern during the pre-merger process?
3. What expectations and areas of concern did you believe that the other party has?
4. What was the typical supply chain and logistics structure of the previous enterprise you were previously attached to?
5. In your opinion, which are the critical areas for ensuring successful merger in respect to supply chain and logistics operations?
6. Which of the following were the main motivating factors behind the merger transaction? Explore which are not relevant or not used within your company.
 - Synergy (resulting from economies of scale)
 - Valuable assets of a target company
 - Increased market power (lower degree of competition)
 - Increase number of customers and volume of sales
 - Managerial efficiency (acquirer's management is more efficient)
 - Excess capacity (extra cash available in the other organization)
 - Lowered degree of competition
 - New technology
 - Supply chain and logistics synergy
7. In your opinion, which were important similarities and differences between joining companies in terms of supply chain & logistics operations and capabilities?
8. What are your future predictions of new ECWC in terms of realizing supply chain and logistics synergies?

9. Do you think that the merger anticipated value realized within a short period of time in terms of consolidating supply chain and logistics operations of the two companies?

10. What was the main circumstantial conditions (pre & post-merger activities, various contextual factors) acted as either enablers or inhibitors to supply chain and logistics integration?

11. Do you have any additional comments with regards to the overall merger process in your organization?

Appendix 2

Questionnaire

Yemane Atakilty
Addis Ababa University
School of Commerce
Logistics & supply chain management

Dear sir/madam

The purpose of this questionnaire is to obtain information about the post-merger supply chain & logistics synergies of the recently merged construction SOEs in particular reference to Ethiopian construction Works Corporation (ECWC). As one of the target respondents, your views and opinion are very important to this study. The information you provide in response to the items in the questionnaire will be used as part of the data needed for a study on *supply chain & logistics synergies in post-merger environment: the case of Ethiopian construction works corporation*.

I would like to assure you that the information you provide will be accessible only to the academic purpose. Your involvement is regarded as a great input to the quality of the research results. Hence, I believe that you will enlarge your assistance by participating in the study.

Contact Address

If you have any query, please do not hesitate to contact me and I am available as per your convenience at (Mobile: 0911-417296 or e-mail: yemaneatak@gmail.com.)

Thank you for scarfifying your precious time in advance!

Section 1: Demographic Background

Please kindly tick (√) your answer in the appropriate boxes or respond by Writing if required.

1. Sex:

Female

Male

2. Academic level:

Diploma

Master's degree

Bachelor's degree

PHD

3. Working Experience:

Other (specify)

Less than 5 years

6 to 10 years

16 to 20 years

11 to 15 years

Over 20 years

4. Current position in your organization_____

Section 2: Strategic business combination benefits.

Each of the following items in this section refers the potential business combination benefits the merging firms intended to get through conducting the merger for each statement, there are 5 alternative responses. Please tick according to the code provided below for the indicators below: Very high (5), High (4), Medium (3), Low (2), Very low (1).

Indicators	1	2	3	4	5
Consolidated Procurement: - Reduce purchase price/cost per unit.					
Consolidated distribution network and storage facilities					
Consolidated Competitor:-Increase market power by reducing competition and being able to command higher prices (without losing corresponding volume).					
Consolidated Administration:-Reduce administration overhead per unit (like elimination of duplicated head-offices).					
Consolidated of Supplier or customer:-Reduce transaction cost per unit (like elimination of intermediate storage, marketing and purchasing).					
Access to new geographic markets:-Access into new markets, increase sales.					

Section 3: Strategic fit between merging parties.

Each of the following items in this section refers the strategic fit between the merging firms for each statement, there are 5 alternative responses. Please tick according to the code provided below for the indicators below: Very high (5), High (4), Medium (3), Low (2), Very low (1).

Indicators	1	2	3	4	5
Estimate the degree of customer similarity between joining parties					
Estimate the degree of competitor similarity between joining parties					
the degree of management style similarity between the joining firms					
Estimate the degree of geographical market similarity between joining parties					
Estimate the degree of complementarity in marketing capabilities of joining parties					
Estimate the degree of production & service similarity of joining parties					
Estimate the degree of production & service complementarity of joining parties					

Section 4: Organizational Integration.

Each of the following items in this question refers to the role of organizational integration realize synergies in the merger process for each statement, there are 5 alternative responses. Please tick according to the code provided below for the indicators below: Very high (5), High (4), Medium (3), Low (2), Very low (1).

Indicators	1	2	3	4	5
Estimate extent of established initial integration plan which guides the overall effectiveness of organizational integration.					
Estimate the amount of operational interactions between joining firms:- the total amount of activities happened in operational integration in regards to transfer of products, facilities and resources between joining parties.					
Estimate the degree of coordinative efforts between joining firms:- the degree of how much coordination mechanisms are used. For example, using of transition teams, special control mechanisms and systems, integration plans, staff exchange and etc.					
Estimate the speed of the integration process:- how fast the intended degree of operative integration and change were achieved after the legal combination					

Section 5: *Post-Merger realized synergies.*

Each of the following items in this section refers to post-merger synergies realized in the new corporation (ECWC) for each statement, there are 5 alternative responses. Please tick according to the code provided below for the indicators below: Strong increase (5), Increase (4), about the same as before (3), Decrease (2), Strong decrease (1).

Indicators	1	2	3	4	5
Financial performance:-Income growth/profitability					
Overall operational performance					
Increased sales/contracts:- Offer new products and services to existing and new customers					
Economies of scale and scope advantages speeding up and expanding the capacity					
Improvement in competitive position					
Optimized Procurement:-Unit cost reduction, pooled orders					
Improvement in the quality of products/services					
sharing existing & creating new technology					
Optimized inventories					
Reduction of logistics costs through shared distribution networks & storage facilities					
Centralization of back-office (HR, IT, finance, procurement)					
Improvement in job satisfaction					