Determinants of Airline Business in Aviation Industry: A Case Study on Ethiopian Airlines

Abel Yifru

Addis Ababa

Ethiopia

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Determinants of Airline Business in Aviation Industry: A Case Study on Ethiopian Airlines

Abel Yifru

Advisor: Mohammed Seid (PhD)

A Thesis Submitted to Faculty of Business and Economics Department of Business Administration. This Thesis is presented in Partial fulfillment of the Requirements for the Degree of Master of Business Administration Specialization in Management.

Addis Ababa University

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(Approval Sheet)

Determinants of Airline Business in Aviation Industry: A Case Study on Ethiopian Airlines

By: Abel Yifru

Approved by: Board of Examiners

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_____	_____
External Examiner	**Signature**
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Statement of Certification

This is to certify that Abel Yifru has carried out his research work on the topic entitled Determinants of Airline Business in Aviation Industry: A Case Study on Ethiopian Airlines; is his original work and is suitable for submission for the award of Masters Degree in Business Administration.

_____

Advisor: Mohammed Seid (PhD)

May, 2017

Statement of Declaration

I, Abel Yifru, declare that this Master research project entitled **— Determinants of Airline Business in Aviation Industry: A Case Study on Ethiopian Airlines** is submitted in partial fulfillment of the requirements for degree of Master of Business Administration, Faculty of Business and Economics, Addis Ababa University. This project contains no material that has been submitted previously, in whole or in part, for the award of any other academic achievements. Except where otherwise indicated, this project is my own work.

Declared by

Abel Yifru	_____	**May, 2017**
Student	**Signature**	**Date**

Abstract

In spite of the cutthroat competition, changing business models, thin profit margins and other turbulent industry nature, Ethiopian Airlines continued to register a successful record since its establishment. Its growth and success is significant especially in recent decades while many African and global airlines are registering bankruptcy, continues loss, layovers and other serious problems. Yet the industry is very interesting to study, despite its challenges and dynamism.

The main purpose of this research paper is to identify factors that determine the success of airline business. The specific objective of the study was to identify the determinant factors for the success of Ethiopian Airlines and to establish how and to what extent each factor understudy affects its success. These factors are: implementation of low-cost factors, influence of national culture, integration in airline Alliances, sate influence and privatization and market liberalization influences ET‟s success in airline business and to sustain same success in the years to come.

The target population was 415 management and senior level employees of Ethiopian Airlines working at outstations and head quarter. The research adopted mixed research approach. A mixed approach is selected in order to validate data sources. Descriptive and explanatory research (mixed) designs were employed. Stratified convenience sampling was employed to divide senior and management employees as the researcher deemed to have more relevant data in relation to the study. The study used mostly primary data source and secondary data sources as well as required. The Primary data collection instruments were questionnaires, interview and personal experience as aviation professional while secondary data was obtained from books, the internet and journals and articles. The model used in this study is the conceptual framework developed by Maik Huenttinger on: “what determines the business activities in the airline industry? A theoretical Framework”, in 2013. The researcher is interested to test this model in Ethiopian airlines context using these variables as a key success factors for its operation in the industry. As far as the researcher‟s knowledge is concerned, no prior research has been conducted to test in Ethiopian airlines context both conceptually and empirically.

The result of the research paper showed that Alliance, Low-Cost structure, Market Liberalization, Government and Privatization and National Culture influences Ethiopian Airlines Business Success in Aviation Industry as well.The result also indicated that State (Government) Influence is the most important factor influencing Ethiopian Airlines success most in areas like allowing industry experts to freely manage the airline, in allowing the airline to reinvest its profit with no tax payment, etc, followed by membership in Star Alliance, implementation of low-cost strategy, Market Liberalization dimension and national culture respectively.

Keywords: ***Airline Success factors, Aviation industry, determinants, national culture, low-cost, Airline Alliance, Airlines, Market liberalization,, value addition.***

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First of all, I would like to thank the almighty God for the will and support He gave me all the time and during my journey.

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All participants of the research in filling the questionnaire and who were parts of the interview deserve to be thanked as well.

Finally, Finally, I would like to express my heartfelt gratitude to all my friends, co-workers and others who helped in any way while conducting this thesis.

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Abel Yifru

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List of Acronyms

- ACE: Achieving Competitive Excellence
- AFRA: African Airlines Association
- ANOVA: Analysis Of Variance
- ASK :Average Seat Kilometer
- AU: African Union
- A/VP: Acting Vice President
- CEO: Chief Executive Officer
- CLRM: Classical Linear Regression Model
- EAA: East African Airways
- EAC: East African Community
- EU: European Union
- ET: Ethiopian Airlines
- ETB: Ethiopian Birr
- ES: Ethiopian Airlines Success
- FDI: Foreign Direct Investment
- GP: Government and Privatization dimension
- GLOBE: Global Leadership and Organizational Behavior Effectiveness
- Gov't: Government
- HHI: Herfindahl-Hirschman Index
- HR: Human Resource
- HRD: Human Resource Development
- Intl: International
- ICAO: International Civil Aviation Organization
- IATA: International air transport association
- LC: Low-Cost
- LF: Load Factor
- MD: Managing Director

- ML: Market Liberalization
- Mgt: Management
- Ms.: Misses
- Non Mgt: Non-Management
- OAL: Other Airlines
- MD: Managing Director
- SQ: Singapore Airline
- SPSS: Statistical Package for Social Science
- SA: Star Alliance
- TWA: Transcontinental and Western Airlines
- US: United States
- USA: United States of America
- UX: Air Europa
- VS: Versus
- VP: Vice President
- VIF: Variance Inflation Factor
- Yrs: Years

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Chapter One

1. Background of the Study

1.1. Introduction

Air transportation is one of the most important and yet complex business that airlines are dealing with. The competition is stiff, profit margins are very thin, ever changing technologies and infrastructural requirements, high capital and skilled manpower intensive, high safety and operational standards (regulations), security threats and others are challenging for most carriers to fulfill easily. These and other challenges make the airline industry uneasy business to enter in to. Yet, its fastest, reliable and safest mode of transportation that linked the globe easily makes it the first choice. According to the Air Transportation Action Group (2013), the industry at the beginning of this decade produces more than 1.5 trillion worth of economic activities and employs directly and indirectly 57 million people. It is, furthermore, an essential element in the world transport network, as it is currently used by more than two and a half billion passengers per year, and ships around 35 percent of the world‟s manufactured products (by value). Despite being faced by rising fuel prices, environmental concerns, terrorist attacks, and small margins, airline business will still play a major role in the next decades (Haik 2013).

In many countries, the business activities of airlines are determined by their history of being national icons operating in a heavily regulated and restricted market (Prideaux and Kim, 2006; Merritt, 2000; Doganis, 2006). Redefining and adjusting the rules of competition finally led to the establishment of new market segments.

Industry characteristics are likely to be specific characteristics which are widespread among organizations within the same industry – and these might be significantly different from characteristics found in other industry sectors (Gordon, 1991). Spender (1989) argues that a kind of “industry-specific recipe” exists, which influences, determines and guides organizational strategies. Hrebiniak and Snow (1980) identified, different structural responses to environmental factors or uncertainties, depending on the industry. That can have to do with industry norms, the

degree to which an industry is technology driven, the degree to which an industry is growth/innovation driven or even industry historical events (Hof stede etal., 1990; Chatman and Jehn, 1994). Phillips (1994) suggests theoretical and partially empirical evidence for the existence of a shared industry-based mindset. Based on research done in the field of industrial economics, marketing, organizational behavior, strategic management and institutional theory, he developed a typology to uncover cultural assumptions in industries. The categories suggested (relationship between the group and the environment; origins of truth; nature of time and space; nature of innate human nature; purpose of work; nature of work relationships) are based on Schein (1985) and Kluckhohn and Strodtbeck (1961).

The belief that the environment has a strong interaction with the organization was also confirmed by the open-systems perspective, which was applied in the 1960s by Katzand Kahn(1966). Both authors argue that any closed-system approach would deny that organizations are reciprocally dependent on their stakeholders. The environment may consequently determine the distribution of power and control within the organization, its decision makers, and in turn its actions and structures (Pfeffer and Salancik, 1978). Calori and Sarnin (1991) suggest – based on an extensive literature review three contingency parameters: the diversity of the company, the characteristics of the industry/profession and the impact of the national culture. Weick (1979), on the other hand, warns against viewing these strategy-environmental-cultural ties as too ideal and perfect, as in reality they are loosely coupled. Globalization, on the other hand, may generate common "airline management standards" in the long term (Hickson and Pugh, 1995). The question of how far this will replace the current diversification is still unanswered as environmental factors may hinder the formation of global management standards. A model describing the airlines business consequently has therefore to concentrate on the entire working environment. On the one hand, environmental factors set and influenced by the nation states might have a significant influence and, on the other hand, strategic decisions of the company will also have to play a role. Mills and Hatfield (1998) suggested in a Canadian study seven distinct ways shaping the identities and character of airlines: government vs private ownership, service vs profit goals, and East vs west, language, leadership, structure and stability as well as employee commitment.

1.2. Ethiopian Airlines

Ethiopian Airlines (ET) is the flag carrier of Ethiopia. During the past seventy plus years, Ethiopian has become one of the continents leading carrier, unparalleled in Africa for its efficiency, operational excellence, strategic outlook, profitability, market growth, fleet management etc especially in recent decades where the air transportation competition become stiff and where the majority of African and other continents carriers are exhibiting continues loss and bankruptcies. The airline is also serving as ambassador of the country and giving good image (brand) for the country. This is witnessed through the interest of many African and other carries that are opting to work with. It also supports the country‟s tremendous import, export activities. Tourism is another area where Ethiopian Airlines is contributing highly for the incoming and outgoing tourists. In general, it helps to foster different investments, FDI, and other business activities coming in to the country and going out of the country. One can say that it is a dry port for this landlocked country. It covers a lion share of the pan African network including the daily and double daily east-west flight across the continent and beyond. Ethiopian currently serves 95 international destinations operating the newest and youngest fleets in the industry with an average age of five years in operation. This is the highest in the industry practice.

Ethiopian has come a long way since commencing operations in 1945 with a weekly service between Addis Ababa and Cairo. Early on the airline recognized that a successful future depended on first developing a far-reaching pan-African route network. With this aim now largely fulfilled, the airline‟s focus is shifting. New destinations and increased numbers of flights to Europe, the United States of America, Canada, Brazil, Asia and the Middle East have been launched, as the airline goes about bringing the world closer to Africa (Selamta, 2016).

Internationally, Ethiopian flies to 94 destinations, 56 destinations in Africa, 16 Europe and America, and Gulf, Middle East & Asia – 24, 1 Destination in South America.

1.3.Problem statement and structure

The global airline industry operates in service industry complexities within a highly turbulent environment. Keynes (2009) states how the sector has gone through a drastic change on both the supply and the demand side. Unlike other industry, airlines are subject to rapid change from customer expectations, competitor moves, supplier developments, government regulations and employee dynamics. Bissessur and Alamdari (1998) state that with increased liberalization in major airline transport markets, the intensity of competition has increased amongst air carriers. Bunz and Maes (1998) state this is an era in which adopting to change means survival. There is need for "zero latency" in response to the changes in the environment; be it opportunities or threats. According to Andrews (1971) and Child (1972), the most important task of top management is to align the opportunities and threats in the external environment with an organizational internal strengths and weakness (as cited in Goll, Johnson and Rasheed, 2007)

Despite operating in an industry that has witnessed reduced returns because of high and volatile fuel prices, stiff completions, geopolitical unrest, epidemic disease outbreaks, bilateral agreement issues with authorities especially in Africa, Ethiopian managed to score success(sustainable growth and profitability…) and witnessed that it has developed a profitable and successful business model. Ethiopian is now the largest and most profitable airline both in passenger and cargo services in Africa and is working towards the largest aviation group in Africa with 7 strategic business units in 2025 as part of its long term strategic vision. With the continent‟s increasing prominence, Africans are demanding efficient and convenient means of transportation. With its young and growing population, Africa is becoming a choice destination for investment and tourism (Ethiopian Airlines Selamta, May-June 2013, https://www. selamtamagazine.com/ stories/past-present- future)

Understanding the highly competitive and dynamic industry that causes several challenges on the airlines in terms of survival, expansion and growth is very important. Hence, identifying what key factors determine the airline‟s success so far and in the future will be the main aim of this paper. There is a gap in identifying the determinants of business activities in airline business so far in our country‟s contest and particularly in Ethiopian airlines context. Thus, a general and

conceptual model on determinants of airline business activities in the airline industry developed by Maik, Huenttinger, 2013 will be taken and tested in Ethiopian Airlines context whether the variables stated on this model and study really works for Ethiopian Airlines as well or not. The paper will in a way answers what determines (key success factor) in airlines business in general and in Ethiopian Airlines in particular.

Do these factors(Implementation of Low-Cost-Factors, Influence of National Culture, Integration in Airline Alliances, State Influence, and Liberalization of Markets) determine Ethiopian airline‟s business success or not. Do these variables really are applicable and significant in ET‟s case and how each one of them affect and determine Ethiopian success?

1.4. Research Question

The following research questions were addressed while conducting this research.

1. What are the major variables that determine an airline business and that of Ethiopian?
   - Does implementation of Low-Cost-Factors determine Ethiopian success in aviation business?
   - Does influence of National Culture has influence on Ethiopian success?
   - Does Ethiopian integration in Airline Alliances or not have any influence on its success?
   - Does the government activities (State influence) affects Ethiopian success or not?
   - How can Market liberalization determine Ethiopian operation and success?
2. Can the above variables be taken as determinants of Ethiopian operation and success as studied elsewhere or not?
3. How can these variables determine the success of Ethiopian? And which of these variables is more influential and directly related to Ethiopian over the other variables?
4. How is Ethiopian managing these factors so far and in the future with best efforts and strategies to sustain its success story in the future as well?

1.5. Research Hypothesis

H1. Implementation of low-cost-actors determines Ethiopian success in aviation business

H2. National culture has influence on Ethiopian success

H3. Ethiopian integration in Star Alliances contributed for its success in market share and revenue increment

H4. The government activities (State influence) affect Ethiopian success in aviation industry

H5. Market liberalization determines Ethiopian growth and expansion strategy and hence its success

1.6. Research Objectives

General objective

The general objective of this study was to identify whether the variables such as Implementation of Low-Cost Strategy, Influence of National Culture, Integration in Airline Alliances, State Influence, and Liberalization of Markets) determine airline business in general or not

Specific Objectives

The specific objective of this study was to identify whether these factors determine Ethiopian airlines success or not. The study also figured out if these variables are and will be the key determinants behind the success stories of Ethiopian so far and how these factors could help to assure such success in the future as well. Identifying the most influential of all variables was also be part of the research objectives that gave Ethiopian the best competitive advantage to beat competition and remains to be successful in one of the toughest business industries in the world. Addressing and finding answers to the above research questions were the major objective of this paper.

1.7. Scope of the study

There are quite a number of key determinant factors in aviation industry like fleet management, strategic management and strength of leader ship, operational qualities, infrastructure, working cultures, customer service, safety, strategic locations, technology, and human resource and so on. This study is limited to:

- Test only if these five mentioned determinant factors under problem statement affects EAL performance or not
- The study involved only senior staffs who at least served for five years in the airline and management employees only. This was made with the intention to get more reliable data as experience gives better understanding of these factors
- Both outstation and headquarter employees were part of the study.
- Only Area
- Managers and Station Managers are involved from outstations because of easy accessibility.

1.8. Significance of the study

The airline industry is one of the major economic activities that facilitate the movement of people and materials. This research identified the major determinant factors in aviation in general and that of Ethiopian in particular. The researcher believes that the following are some of the specific roles that this paper can address:

- Serves as a source of policy instrument for officials of airline transportation
- Better understanding of the airline industry by policy makers and others as the airline has huge contribution for the country be it economic, tourism, investment and image building
- Investors and tourists will use of the data as an input for their decision to invest or visit the country having known the country has strong airline for their requirements
- Will serve as an input to make further studies by different airlines in Africa and others
- Provides senior management of Ethiopian with better view on these determinant factors and thereby see strategic issues and outlooks to give more emphasis on important aspects from Ethiopian perspectives.
- Students who might be interested or find this thesis useful and interested to work further on this subject and incorporate other determinant factor in addition to these five can use this paper as a source of information.

1.9. Organization of the paper

This paper has four chapters. The first chapter is introduction which discusses the general idea of the study, which is related to previous studies, researcher aim, research problem, research objectives and the research scope and structure. The second chapter deals with literature review: Provides the theoretical perspective of the study. It discusses major theoretical discussions and review of research on similar topics with proper citations of all consulted materials. The third chapter is about the Methodology and Design of the research Paper. The fourth chapter talks about Data Analysis and Presentation. In this chapter all the findings through the research will be presented using different data presentation methods. The last chapter is conclusion and recommendations. This is where conclusions and recommendation, managerial implications, policy implication with possible areas that can be considered for further research are presented. Finally, references, annexes and appendixes are also part of this research.

Chapter Two

2. Literature Review

2.1. Brief History of World and Africa Air Transportation

Air transportation is a method of transportation by which people as well as materials move from one place to the other through the air (Donohue & Zellweger 2001). The chief advantage of this method is the considerable amount of time saved because of the high speed of the flight (Faulks 1969).

The history of air transportation in the world begins in the year 1903 with the first flight made by Wright brothers in North Carolina (Trani 2005). Afterwards, on January 1, 1914, the world‟s first scheduled flight was made with across the bay separating Tampa and St. Petersburg, Florida (Bowen & Rodriguez 1988-2011). Subsequently, commercial aviation has progressed starting from World War I and World War II when, better aircrafts were quickly designed and important technological advance in the air transportation was made, which this leads growth in the air transportation (Bowen & Rodriguez 1988-2011). Then, as Bowen and Rodriguez put it out, more than century after the first flight, the aviation now is intertwined in everybody‟s life across much of the world.

The aviation history in Africa has dual facet, on the one hand the size and terrain situation of the continent calls for a developed aviation. On the other hand the lack of cooperation among the regions especially at the early time of the industry establishment led to isolated development among the regions and no integration of the continent with the rest of the world (MyFundi 2011). As a result, the beginning history of the commercial aviation in Africa is presented separately dividing the continent in to four regions as East Africa, West Africa, South Africa and North Africa. On the east side of the continent, three countries which include Kenya, Tanzania and Uganda together formed East African Airways (EAA) Corporation in 1946 (Goldstein 1999). Subsequently, in 1967 these three countries formed an economic union called East African Community (EAC) (Debrah & Toroitich 2005).However, after a decade, due to the political

divergence among the capitalist Kenya and Socialist Tanzania as well as the crisis of Uganda under the rule of Idi Amid led the termination of the EAC and creation of three autonomous airlines (Goldstein 1999; Debrah & Toroitich 2005). Likewise, on the west side of the continent, West African countries including Benin, Cameron, Central African Republic, Chad, Congo Brazzaville, Gabon, Cotdivore, Mali, Mauritania, Niger, Burkina Faso and Senegal jointly signed a treaty which brought Air Afrique in 1961(Bofinger 2009; Goldstein 1999). However, after being sold to private investors and Air France for $69 million with debt of $500 million it collapsed in the year 2001(Bofinger 2009). Unlike, the Eastern and Western counterparts the South African commercial aviation history has different evolution (MyFundi n.d). The contemporary South African Airways was formerly known as Union Airways before it was bought by the South African government and renamed as South African Airways in 1934(Goldstein 1999; MyFundi n.d). As per the former encyclopedia (MyFundi n.d), a year later, another airway named as South West African Airways was incorporated to the South African Airways. Then, this airline prospered since 1980s and now it is the continents biggest and successful airline (Iches et.al 2005; Demuren 2007; Bofinger 2009).Finally, the Northern region of the continent is dominated by two major airlines which are Royal Air Maroc and the slightly larger Egypt‟s national carrier of Egypt Air(Bofinger 2009). In this regard, contemporarily African air transport industry progresses at different speeds in the different parts of the continent (Fatokun 2005). According to Fatokun, countries such as South Africa, Kenya, Egypt and Ethiopia are relatively successful in their airlines industry, while countries such as Nigeria are referred as relatively less successful. Similarly, another survey reveals that Egypt Air, South African Airways, Kenya Airways, Air Maroc and Ethiopian Airlines are considered as successful flag carrier airways whereas Nigeria Airways, Ghana Airways, Air Afrique, Cameroon Airways and Air Gabon are regarded as less performing Airways across the continent (Demuren 2007).

2.2. Historical Background of Ethiopian Airlines

In Ethiopia air transportation has a long history. The air transport technology is introduced two decades after the Wright brothers made the first flight in 1903. That is, the aviation history of the country dates back to 1921 when Ethiopia‟s government officials have made a visit to Yemen

(Civil Aviation Authority 2007; Eyob 2001). Along with, detail explanation about aviation history with particular attention to Ethiopian Airlines is presented as follows.

2.2.1. The Pre- foundation and Beginning of Ethiopian Airlines

Pre Foundation: In Ethiopia, prior to aircraft technology came into existence, the country largely has depended up on horses and mules for journey across the impossible mountain ranges (Bahru 2007; Bahru 1988). The existence of such terrain situation of the country made these means of transport to be dangerous and more time consuming. Hence, airplane, which does not require heavy road, terrain or bridges, provides a perfect solution for such problems that prevailed in most parts of the country (Bahru 1988). So, this new technology becomes visible when the first two aircrafts had landed in the late 1920s which, it regarded as a very historical moment in the country‟s history of air transport (Ibid). It was on August 18, 1929 that the first aircraft arrived at Gefersa, which is 15 kilometers to west of Addis Ababa (Abel 1972; Bahru 2011). Few months later, the second aircraft had arrived bringing the first air mail delivery (Bahru, 1988).

Training of Ethiopian pilots started in 1930 which was held within and outside the country (Civil Aviation Authority 2007).In line with this, in 1935, the country owned a large size of aircraft through gifts and purchase (Ministry of Information 1965). In such a way, it had accumulated different types of aircraft including the Potez25 A-2 type with a leading position (Bahru 1988). After a while, the first aircraft named as „Ethiopia1‟, had assembled in the country which reveals that the craft technology crossed a new frontier (Civil Aviation Authority 2011). However, by the same year, the Fascist Italy had invaded the country which accompanied by the bombardment and destruction of a considerable number of aircrafts (Mak 2006). Consequently, the progress had been affected by the war until Italian was defeated in 1941(Nayrigo 1964; Ministry of Information 1965; Bahru 1988). When the country began to reassert its control on aviation, first it was in the military sphere (Bahru 1988). Then, in 1944 and 1945 Ethiopian Air force was born based on the Ivo Olivetti airport used by Italian during occupation and later used to serve Ethiopian Airlines (Mak 2007). Afterwards, training ground shifted to its present city Harar Meda in Bishiftu. Later on, Emperor Haillessilase, who were interested in the money and military matters for its existence were not so happy to alley with the British‟s which has the same interest as well (Bahru 1988). As a result, the ruler looks for new partner and selects Americans

which had a marginal effect in the war (Ibid). Hence, it was around this time that Ethiopian Airlines came in to being.

Beginning: The present day Ethiopian Airlines founded On September 8, 1945 by an agreement made between Ethiopian government and Transcontinental and Western Airlines (TWA) (Mak 2006; Civil Aviation Authority 2007). Sooner, both had signed for the creation of an airline which is called Ethiopian Airlines (Bahru 2007).Following that, the corporation was enjoying an exclusive right of providing domestic air service and TWA was acting as an agent for purchase of aircrafts and spare parts, hiring of personnel to flight, maintenance, accounting, communication and traffic. Moreover, TWA was committed in hiring maintenance and flight crew and other key personnel as well (Ministry of Information 1965; Bahru 1988). Ethiopian Airlines began to deliver domestic and international service soon after its foundation. Then, the airline had acquired five Douglas C-47 sky trains and made the first scheduled international flight to Cairo in April 8, 1946 (Ethiopian Herald 1946). Very soon, weekly flight service to Cairo, Djibouti and Aden as well as domestic service to Jimma has been started (Saunders 1971).However, the existing Douglas was incapable to give service for the growing demand; the airline acquired four more sky trains which still could not address the problem. Hence, three more sky trains were purchased and these were the first aircrafts to wear the colorful Ethiopian Airlines livery (Selamta 2001).

Progress: Few years after the inauguration, three quarter of the airlines staffs were Ethiopians with key posts still held by the expatriate (Selamta 2006). Subsequently, the Ethiopian government and TWA made a new agreement aiming at operating entirely with Ethiopian personnel (Bahru 1988). Then, in 1957 the first Ethiopian commercial commander Alemayehu Abebe was made his solo flight as captain and the airline also established maintenance facility at Addis Ababa (Selamta 2006; Bahru 2007). The airline further strengthens during the subsequent years; it expanded and new services were introduced. For instance, the year 1960 for Ethiopian Airlines was a year to enter the jet age and after extensive study it was decided that the Boeing 727 B best met its requirement (Mak 2006; Bahru 2011). In addition, the Lideta airway which was built in 1936 by Italian were too short to meet this need and building new airport at Bole became the only solution and then becomes operational in 1962(Mak 2007). Besides, in 1965 the

company changed its legal status from a corporation to share company and changed its title from Ethiopian Air Lines to the more modern name Ethiopian Airlines (Selamta 2006).

Industry characteristics: There are likely to be specific characteristics which are widespread among organizations within the same industry – and these might be significantly different from characteristics found in other industry sectors (Gordon, 1991). Spender (1989) argues that a kind of "industry-specific recipe", exists, which influences, determines and guides organizational strategies. Hrebiniak and Snow (1980) have identified different structural responses to environmental factors or uncertainties, depending on the industry. That can have to do with industry norms, the degree to which an industry is technology driven, the degree to which an industry is growth/innovation driven or even industry historical events (Hofstede et al., 1990; ChatmanandJehn, 1994). Phillips (1994) suggests theoretical and partially empirical evidence for the existence of a shared industry-based mindset. Based on research done in the field of industrial economics, marketing organizational behavior, strategic management and institutional theory, he developed a typology to uncover cultural assumptions in industries. The categories suggested(relationship between the group and the environment; origins of truth; nature of time and space; nature of innate human nature; purpose of work; nature of work relationships) are based on Schein (1985) and Kluckhohn and Strodtbeck (1961).

The belief that the environment has a strong interaction with the organization was also confirmed by the open-systems perspective, which was applied in the 1960s by KatzandKahn (1966). Both authors argue that any closed-system approach would deny that organizations are reciprocally dependent on their stakeholders. The environment may consequently determine the distribution of power and control within the organization, its decision makers, and in turn its actions and structures (Pfeffer and Salancik, 1978). Working for a state-run bank, which does not have to operate under market conditions, probably has a bigger impact on the performance than the question of risk-management, which is mostly determined by identical and globally used computer software. Calori and Sarnin (1991) suggest – based on an extensive literature review – three contingency parameters: the diversity of the company, the characteristics of the industry/profession and the impact of the national culture. Weick (1979), on the other hand, warns against viewing these strategy-environmental-cultural ties as too ideal and perfect, as in reality they are loosely coupled. Globalization, on the other hand, may generate common "airline

management standards" in the long term (Hickson and Pugh, 1995). The question of how far this will replace the current diversification is still unanswered as environmental factors may hinder the formation of global management standards. A model describing the airlines business consequently has therefore to concentrate on the entire working environment. On the one hand, environmental factors set and influenced by the nation states might have a significant influence and, on the other hand, strategic decisions of the company will also have to play a role. Mills and Hatfield (1998) suggested in a Canadian study seven distinct ways shaping the identities and character of airlines: government versus private ownership, service versus profit goals, East versus West, language, leadership, structure and stability as well as employee commitment.

2.3. Industry characteristics

According to Paul Stephen and Dempsey Tomlinson Professor of Law and Director, at Institute of Air & Space Law- McGill University, the airline business is a tough business. Profits margins are thin, fixed costs are high, capital expenditures are large, government regulation has been unstable, and taxation can be unmerciful. Demand can be chilled by an outbreak of disease, recession, war or terrorism. They argue that, the airline business is also a glamorous business. Its technology is breathtaking. The defiance of gravity, the allure of exotic destinations or primordial geographic domination has drawn investment and managerial talent into the industry at a level surpassing what dispassionate financial analysis seemingly would warrant.

The global airline industry provides a service to virtually every country in the world, and has played an integral role in the creation of a global economy. The airline industry itself is a major economic force, in terms of both its own operations and its impacts on related industries such as aircraft manufacturing and tourism, to name but two. Few other industries generate the amount and intensity of attention given to airlines, not only by those directly engaged in its operations, but also by government policy makers, the news media, as well as its billions of users, who, almost to a person, have an anecdote to relate about an unusual, good or bad, air travel experience (The Global Airline Industry: Peter Belobaba, Amedeo Odoni and Cynthia Barnhart, 2009: pp 40)

On his study about, "What determines the business activities in the airline industry? A theoretical framework", by Maik Huettinger; there are likely to be specific characteristics which are widespread among organizations within the same industry – and these might be significantly different from characteristics found in other industry sectors (Gordon, 1991). Spender (1989) argues that a kind of "industry-specific recipe" exists, which influences, determines and guides organizational strategies. Hrebiniak and Snow (1980) identified different structural responses to environmental factors or uncertainties, depending on the industry. That can have to do with industry norms, the degree to which an industry is technology driven, the degree to which an industry is growth/innovation driven or even industry historical events (Hofstede et al., 1990; Chatman and Jehn, 1994). Phillips (1994) suggests theoretical and partially empirical evidence for the existence of a shared industry-based mindset. Based on research done in the field of industrial economics, marketing organizational behavior, strategic management and institutional theory, he developed a typology to uncover cultural assumptions in industries. The categories suggested (relationship between the group and the environment; origins of truth; nature of time and space; nature of innate human nature; purpose of work; nature of work relationships) are based on Schein (1985) and Kluckhohn and Strodtbeck (1961).

The belief that the environment has a strong interaction with the organization was also confirmed by the open-systems perspective, which was applied in the 1960s by Katz and Kahn (1966). Both authors argue that any closed-system approach would deny that organizations are reciprocally dependent on their stakeholders. The environment may consequently determine the distribution of power and control within the organization, its decision makers, and in turn its actions and structures (Pfeffer and Salancik, 1978). Working for a state-run bank, which does not have to operate under market conditions, probably has a bigger impact on the performance than the question of risk-management, which is mostly determined by identical and globally used computer software. Calori and Sarnin (1991) suggest – based on an extensive literature review – three contingency parameters: the diversity of the company, the characteristics of the industry/profession and the impact of the national culture. Weick (1979), on the other hand, warns against viewing these strategy-environmental-cultural ties as too ideal and perfect, as in reality they are loosely coupled.

Globalization, on the other hand, may generate common "airline management standards" in the long term (Hickson and Pugh, 1995). The question of how far this will replace the current diversification is still unanswered as environmental factors may hinder the formation of global management standards. A model describing the airlines business consequently has therefore to concentrate on the entire working environment.

On the one hand, environmental factors set and influenced by the nation states might have a significant influence and, on the other hand, strategic decisions of the company will also have to play a role. Mills and Hatfield (1998) suggested in a Canadian study seven distinct ways to shape the identities and character of airlines: government versus private ownership, service versus profit goals, East versus West, language, leadership, structure and stability as well as employee commitment.

2.4. What determines the business activities in the airline industry?

To reflect success of a company business properly, performance measures should increase or decrease based on the existing condition in the business (Merchant &Van der Stede 2007). Thus, discussion about performance indicators is significant in order to evaluate success of a firm business. In this regard, provided that enterprises are created to produce goods or services to customers, several measuring factors which are internal as well as external to the organization are used to measure their business performance (Lussiler 1997). Internal factors refer to those which affect the performance of a given organization and are under the control of the organization. These include management, strategic plan (vision, mission & values), organizational structure, resources, overall system etc (Lussiler1997).

Resources such as human, physical, financial, and information are the major inputs used to achieve mission of a given organization (Lussler 1997). According to Lussler, specifically human resources are responsible for meeting mission and objectives of an organization. In addition, ability and commitment of the human resource or work force are one major factor that improve the overall performance of an organization and brings it to success (Blunt & Jones 1992). On the other hand, organizations external factors refer to those exterior factors that affect the performance of the organization and are outside the control of the organization. Such factors

include: customers, competition, suppliers, labor unions, government, technology, overall economy etc (Lussler 1997). There are several additional financial and non-financial factors that influence or contribute significantly to the performance of a firm. These include profitability, productivity, working standard, autonomous management, human resource development, overall system, market share, customer base, integrity, on time performance, etc. (Blunt & Jones 1992; Lussler 1997; Merchant &Van der Stede 2007; Deusenet.al2007).

Overall, factors such as autonomous management, human resource development, overall system, market share, integrity, customer base, etc have their own contribution to the overall performance of a firm performance and hence on the success/failure of a firm (Blunt & Jones 1992; Lussler 1997; Merchant &Van der Stede2007; Deusenet.al2007).

According to Dr Stephen Nhuta, on his study," An analysis of the forces that determine the competitive intensity in the airline industry and the implications for strategy, 2012", he suggested and came up strategy and spirit(sprit of strategy execution), strategic alliance, and pricing strategies are among the determinant forces that determine competitiveness in an airline business.

According to a study made by Marcella Riwo-Abudho1, Lily W. Njanja1 & Isaac Ochieng an academic article that was published by, The International Institute for Science, Technology and Education (IISTE) in 2013, under the title, "Key Success Factors in Airlines: Overcoming the Challenges ", they found out that for excellence in airlines they have to focus on seven KSFs: structure, culture, strategic alliances, planning and forecasting, technology, marketing and branding and outsourcing. Golightly (1967) states, "If recent airline experience has proved anything new about organization, it is that structure is even more important to a service business that it is in a typical make-and-sell enterprise" (p.70). Byles (2007) found that the organizational chart for Continental Airlines is organized along functional lines i.e. marketing, finance and operations (as cited in David, 2011, p. 186) which allows the firm to operate on a clear chain of command and focus on its strategies building competitive advantage. With the different types of structures, a firm can pick on a type of organization structure and tailor-make it to fit in with its operations. The best structures are those that maximize effectiveness of communication and break down barriers between people and hierarchies (Harogopal, 2006). Firms can have structures that focus on strategies that help them build competitive advantage. According to

Spector (2007) functional structures focus on functional excellence, divisional structures are for market place responsiveness and horizontal structures are for value chain processes. Structure is a KSF that unifies the organization‟s system and how it caters to the market it serves. Culture is a fundamental set of assumptions, values and ways of doing things that has been accepted by most of its members (Laudon & Laudon, 2007, p.87). The set of values and attitudes practiced are translated into business processes and these are reflected on the end product hence felt by the customers. According to Bissesur and Alamdari (1998) , airlines are in search of size by first ensuring a dominant position within their own markets then gaining a foothold in other major regional markets and finally establishing a global presence. Strategic alliances make these possible by bringing in various advantages. However the members of a same strategic group will not get equal benefits due to various reasons including their resources, capabilities, customer base and potential their routes bring along. Technology is used by airlines to increase convenience and reduce on cost as carriers incur high amounts of cost from labor, inefficiencies and fuel. Shah (2007) states that due to e-business at Southwest Airlines, "Passenger revenue generated by online bookings increased from 65% in 2005 to 70% in 2006" (as cited in David, 2011, p. 207) as booking via the internet costs about $1 while that of a travel agent is $10. Quinn and Hilmer (1994) state that strategic outsourcing ensures the organization concentrates its resources on a set of core competencies; where it can achieve definable pre-eminence and provide unique values for customers (Jennings, 2002). Finally, marketing and branding is another factor that determines the success of an airline or company in general. Yang (2007) argues that airlines should provide the right service and the right product ahead of the customer‟s request.

Another interesting study by Dr.Richard M. McCabe, on airline industry key success factors in 2006, he came up with four major factors: attracting customers, managing the fleet, managing people and managing finance.

Maik Huettinger is the main focus in this study as the research is intended to test his model in Ethiopian airlines context. Hence, the researcher will present details on his model here below.

According to Maik Huettinger, on his study on, what determines the business activities in the airline industry? A theoretical framework, he studied and came up with five-dimensional model of airline business. Huettinger explains in his study that, the leading airline literature

concentrates on identifying the origin of the factors that create, change and express differences by showing mutual interactions. According to him, most scholars focus on specific aspects ("cultural turns in order to improve the performance" or "low-budget wave") by avoiding the big picture. Strategic management researchers in particular often simplify the situation by leaving environmental influences aside. During his study, he has proved that, all below five determinants of an airline business indicators were found to be either of strategic (internal) or environmental (external).

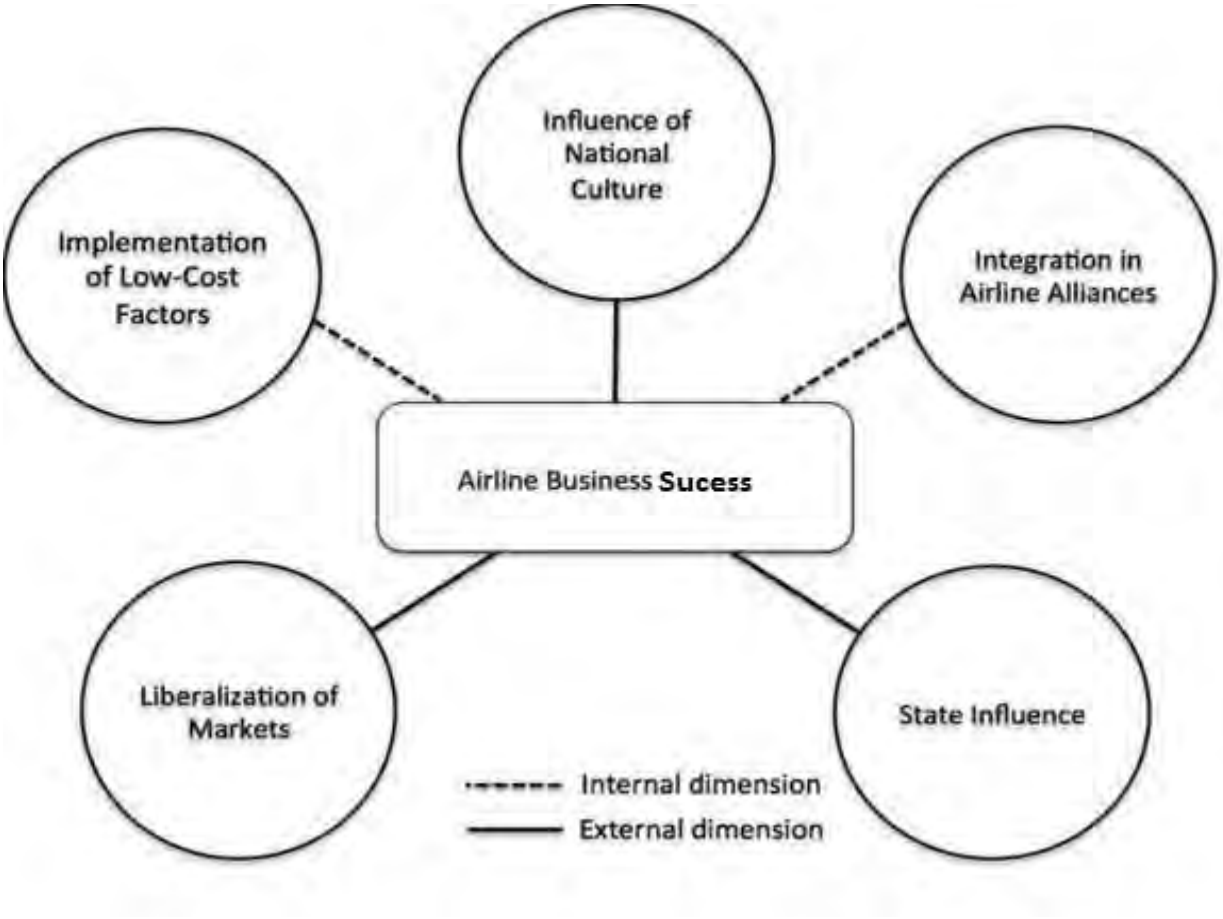


Fig1. Conceptual model of Determinants of Airline Business

For the first group, the strategic positioning of an airline (whether it is a low-budget carrier as opposed to a traditional airline), and its positioning within the global network of airlines (alliances) were identified as main dimensions. In practice, the creation of airline alliances and the adaptation of the low-fare philosophy is a strategic decision by the business stakeholders.

Bromann and Piwinger (1992) describe the success of a company in the perfect strategy-culture fit, which is influenced by the current situation and the long-term goals of the company, as well as by the prevailing environmental factors.

For the second group (the external factors), the primarily state-driven privatization process (change of ownership structure), and the "open skies policy" (market liberalization) were labeled as third and fourth determinants. These four dimensions (five including the national cultural dimension) not only cover important aspects like labor union power (as a part of national culture and strategic positioning of the airline), they also reflect the research focus of the scientific literature. Huettinger believes that, hardly any other topic concerning airlines besides low-cost, airline alliances, liberalization and privatization has raised considerable interest in the academic community.

The descriptions in this section will focus on the five-aforementioned (independent) dimensions with "airline business" as range dimension. Let‟s see how each of these dimensions affects airline business activities and be considered as key success factors as well.

1. The National Culture Dimension

National culture had a strong impact on the foundation and development of state airlines, and is still one of the most important influencing factors. The study of national cultures is based on the premise that cultures can be described according to national borders. Probably all scholars, even supporters of the hard-side of business management accountants, financial controllers and production managers), as well as globally oriented decision makers, would agree that national culture has some kind of impact on any company (Bjerke, 1999).

Moreover, the home country of an airline is also relevant in other aspects. Customers choosing flag carriers even use the name of the host country as a synonym for their preferred airlines ("I am flying with the German" – as a synonym for Deutsche Lufthansa). The service quality and the security standards of the airline are expected to contribute to the stereotypes of the associated national culture they represent. A number of airlines use their positive prevailing cultural attributes to promote their national cultures in cabin decor or uniforms (Holloway, 1998). According to Reisinger and Crotts (2010), cultural differences in the cockpit (such as respect for authority and hierarchy) produce significant different performance levels of cockpit crews. To

what extent these factors influence operations is a complex sociological issue and investigating them is often limited by political correctness.

For the purpose of analyzing the national culture of the home country of a selected airline, most of the known models would probably qualify to be a tool of this comparative research. After an intensive study, the author concluded that the methodology of Hofstede‟s (2001) national cultural model would be best suitable – due to its worldwide acceptance and its focus on work cultures. Hofstede suggests dimensions like “power distance”, “uncertainty avoidance” or “individualism versus collectivism” to distinguish countries from each other. An alternative would be to use the data of the Global Leadership and Organizational Behavior Effectiveness (GLOBE) project, which extended Hofstede‟s five-dimensional model to nine (Boyacigiller et al., 2004).

2. The Low-Fare Dimension

According to Huettinger, the implementation of “low-fare”, “no-frills” or “low-budget” elements is often termed “following the Southwest model”, as the strategy is based on the business concept with which the US Southwest Airlines Company started in the 1970s. The main idea behind it was to make flights so cheap that the airline could compete not only with other airlines, but even with alternative forms of surface transportation (Buyck, 2008).

This was made possible by reducing service standards to a minimum, cutting costs and increasing the efficiency wherever possible (Sommer, 2005). Extremely friendly and motivated employees, however, balance out the lack of on-board amenities.

Furthermore, a different standard does not automatically mean that service is poor; in the abovementioned case it expresses a clear focus on the essentials (Franke, 2004).

Southwest identified a tailored human resources policy as an essential tool for guaranteeing the long-term success of its strategy (Kaydo, 1998). The focus of employees on consumers therefore has to be targeted in all forms of HR training. The former CEO of Southwest, Herb Kelleher – a US American management legend – established a service-oriented business strategy. In his opinion, employees should not perceive their company as “an airline with great customer service, but as a great customer service that happens to be an airline” (Laszlo, 1999).

The concept of the low-fare sector seriously challenged the entire air transport market, and forced established carriers toward a strategy based on market needs.

In order to cut costs, traditional carriers have already adapted various elements of low-fare airlines. According to Doganis (2006), the Southwest business model is based on various product and operational features that were incorporated in order to analyze the degree to which an airline follows the low-fare idea. A recent study has actually shown that it is currently the European airline Ryanair which has implemented the no-frills idea the most Huettinger and Giedraitis, 2010). In fact, Southwest Airlines even transformed its low-cost core strategy by improving the "customer experience" (Heskett and Sasser, 2010). This included the adding of more flights to distant locations, improving on-board service and entering co-share agreements with other airlines. Based on the Doganis research, the author proposes to split the low-cost determinant in cost-related and strategic factors (Figure 2).

For cost-related factors, Doganis calculated the impact of cost-saving measures on costs per seat. Originally, the calculation is based on the observation of low-budget and traditional airlines in the UK, and verified and updated by his later studies. The decrease in cost advantages of low-cost carriers (from 59 to 51 percent per seat), according to the 2001 and 2006 editions of his book, The Airline Business, is an indicator of the progressive implementation of no-frills elements by traditional carriers (Doganis, 2006, 2001). Typical for low-fare airlines are therefore a "high level of outsourcing of maintenance" and a "small number of different aircrafts in use". Their airplanes are "highly utilized" (number of flying hours per plane per day by serving only secondary airports) and its labor force shows a high productivity (few employees in administration and performance related pay). The companies have reduced "airport-related costs" (lower handling costs, no airport lounges) and "distribution costs" (no commissions paid, no loyalty programs or ticketless traveling) to an absolute minimum.

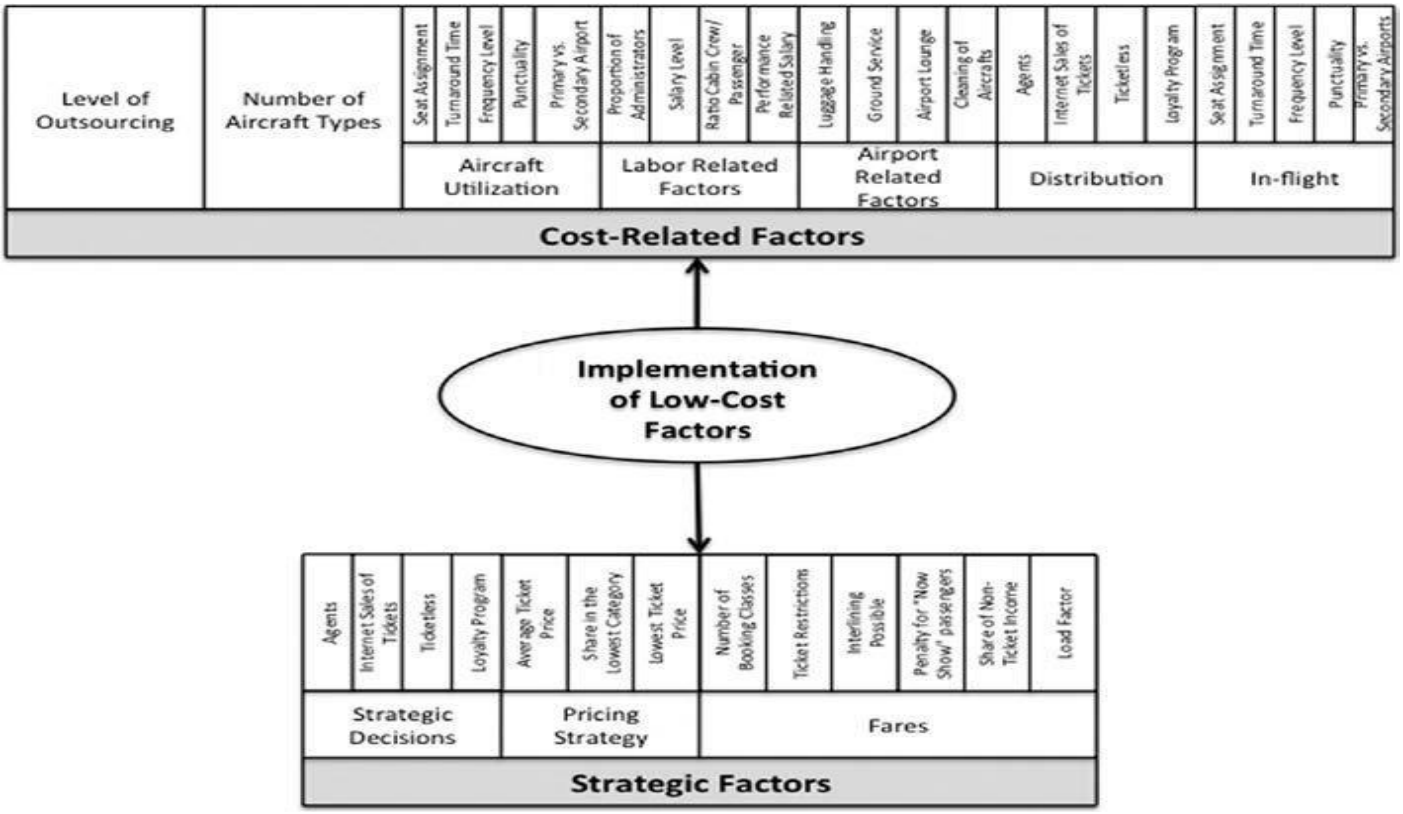


Fig 2.The Components of the low-cost determinant

Furthermore, huge cost savings are achieved by lowering the level of "in-flight services" (no free drinks on board, a high seating density, no separate business class).

Moreover, the efficiency of the electronic markets (internet ticket sale) tends to decrease the price dispersion among all airlines (Piga and Filippi, 2002; Smith et al., 2000). As most low-fare airlines exclusively sell their tickets via the internet, it is easy for the providers to change the ticket prices according to the demand. In comparison to the full-cost carrier that uses classic price discrimination, they rather use dynamic pricing strategies (Malighetti et al., 2009). Dynamic pricing adjusts prices based on the option value of future sales aimed at increasing profits (McAfee and te Velde, 2006).

3. The Airline-Alliance Dimension

Airline alliances and cooperations became very popular in the 1990s. According to Nunes, the term "airline alliance" describes the accord, the partnership, joint ventures and cooperative agreements, code sharing agreements or marketing alliances (Nunes, 1997). The most famous strategic airline alliance so far has been "STAR Alliance", which was originally launched in

1997 by Lufthansa, SAS, United Airlines, Thai Airways Internationals, and Air Canada (Abeyratne, 2000). Two other recognized global alliances, which were established slightly later, are the "One world Alliance" (1999) and the "SkyTeam Alliance" (2000). Besides these global alliances, there are regionally acting ones (e.g. SAS-Group, which focuses on Northern Europe) and national ones (e.g. Xinxing, which focuses on China).

Alliances have often been discussed as a response to changing industry conditions. In the last few decades they have been perceived as a useful tool for gaining access to protected markets, as many nation states still believe that passengers or cargo leaving or entering the country are the rightful property of the national carrier (Abeyratne, 2001).

Since the 1980s, there has been a shift from technically oriented corporations toward collaborations focused on marketing (Kleymann, 1999). Empirical research has proven that the success of the alliance is related to the ability to manage attributional, interpretational and behavioral conflicts (Kumar and Nti, 2004). Kleymann and Seristoe (2004) identified several types of cooperative links in order to describe the basic forms of cooperation among airlines: cost sharing ventures joint purchasing), asset pools (pooling of spare parts), pro-rate arrangements (revenue split), and code sharing, feeder (hierarchical code sharing between smaller and larger airlines), marketing alliances, joint ventures (joint pricing/revenue sharing on a set of routes), integrated feeder (strong form of feeder whereby the smaller airline is totally integrated) and equity stakes.

The number of existing cooperations and airline alliances is impressive, but many of the agreements turn out to be either disadvantageous or not to work out at all for one of the partners (Kleymann and Seristoe, 2004). A lack of strategic, organizational and cultural fit has been identified as being responsible for an alliance failure rate of 50-60 percent (Ulijn et al., 2003).

Empirical field studies have shown that cultural issues in alliance building are particularly an issue for the middle management level, and far less so for the top management or frontline managers (Kleymann and Seristoe, 2004). Ohmae (1989) considers the compatibility between airlines as a prerequisite for airline cooperation. He names trust and understanding, flexibility, cultural compatibility, and mutual benefits as the essential criteria that determine compatibility. That implies that common practices of an alliance will influence each member and, as a result, each business process. A striking similarity exists between airline cooperation and cooperation

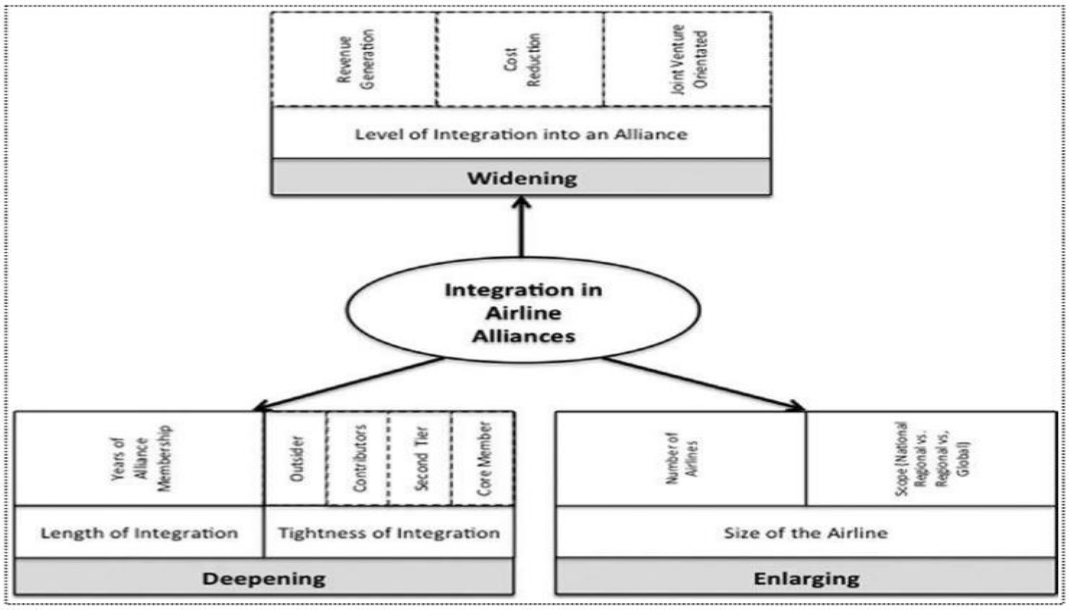
between countries – particularly among trade blocks. The intensity of integration and cooperation is very closely related to the principle of subsidiarity. Subsidiarity allows that organizational matters are handled at the most competent – in case lowest or least centralized – hierarchical level – an idea on which several trade blocks like the European Union are based. The evolution of airline alliances, with stronger and weaker, more influential and less influential core members, and second tiers follow similar patterns to the political unification process. The author proposes therefore to apply and adopt the three components of integration of the European Union: widening, deepening and enlarging.

Deepening describes the strengthening process in existing fields of cooperation (CEPR, 1995). Widening uses an existing form of integration in new areas and enlarging extends the geographical scope of integration to new members. In the case of airline alliances, "deepening" is therefore about which role an airline plays in an alliance, "widening" is about the degree to which the alliance determines the processes of an airline, and "enlarging" is about the size and the geographical scope of the alliance.

The first component, "deepening", can equally be sub-divided into "length of membership" and "tightness of integration" in an alliance. Time is therefore an essential element, which strongly determines the depth of the alliance. The "tightness of integration" can be determined by the role of each airline within the group.

Kleymann (1999) identified "at least three positions within an alliance": "full members", "second tier members" and "contributors". Together with her colleague Seristoe, Kleymann finally proposes a pattern to distinguish between the three groups.

Figure3. The components of the liberalization determinant



Together, they identified three objectives (market-defensive, efficiency-seeking and market-offensive) with three relevant factors each (Kleymann and Seristoe, 2001).

Generally speaking, the more objectives are fulfilled, the more likely the airline is to be a "second tier" or even a "core member".

Doganis (2006) proposes distinguishing three phases of cementing an airline alliance, which he names: "revenue generation", "cost reduction" and "joint venture". The stages describe the level of integration in an alliance, and the stability, strength and long-term success of the partnership agreement. His model represents the core structure of the "widening" dimension. In the first phase, the focus is on generating additional revenue by expanding the network, and through joint marketing. Airlines are still likely to maintain their separate brands, but they try to achieve cost savings by running joint airport lounges, sales offices, common frequent-flyer programs, code sharing and closer network co-ordination. Phase 2, "cost reduction", extends the joint operations to common ground handling, joint maintenance and common IT platforms. Furthermore, alliance partners work on advanced sales distribution channels like common call centers, and joint sales operations in third countries. Further cost reductions can be achieved with a focus on fleet harmonization. The third phase, "joint venture", includes sharing of aircraft crews, franchising and joint product development. In many cases, single operating companies are established to run specific operations (passenger flights, cargo operations).

The "enlarging" component consists of the two factors that are necessary to evaluate the size of an airline alliance. One is the "quantity of members" within an airline alliance and the other is the "geographical scope" of the alliance. Scope determines the global importance, as well as the perceived power and the public attention the alliance will get. Being part of a powerful, leading, global alliance may give employees the feeling of belonging to a group which influences international air transport. On the practical side, employees will get used to acting as feeders for long-distance flights – which might bring them in touch with a higher share of passengers from other cultures.

4. The Liberalization Dimension

As Huenttinger explained further on this, the common market of the EU brought many benefits for the aviation sector, and the accompanying "open skies policy" opened the partly closed market. For the first time, the balance of power in the European air transport regime shifted from

government toward private entities (Brurghouwt et al., 2003). As a result, it enabled every European airline to operate from any other member state under the same conditions as the established carriers. Based on the idea of the 1944 Convention on International Civil Aviation (Chicago Convention), which should provide a framework for international civil air transport, the European Union aimed to implement the proposed "freedoms of the air" within the entire market. Moreover, since 2007, the EU and the USA have agreed to phase out restrictions in several steps (ICAO, 2004).

These nine "freedoms of the air" initially made the emergence of low-fare providers possible.

The first two freedoms are known as technical freedoms and regulated with the Chicago Convention. The third, fourth and fifth freedoms are additional points of the Chicago Convention (Rhoades, 2003). The remaining four "freedoms of the air" deal with commercial issues and rights in aviation and are not regulated under international treaties. According to Newbery (1997), liberalization has the greatest potential to induce improvements in performance. Non-monetary advantages of the host carriers are often summed up under the term "grandfather rights". Flynn (1995) argues that the European liberalization wave is still the essential driver for the improvements in airline service quality. Other scholars point out increasing externality costs to society (e.g. air pollution, noise), resulting from higher frequencies and additional competitors in a fully liberalized market (Schipper et al., 2003). From a business perspective, the latter argument plays a role only if policy makers internalize such externalities through noise standards or the inclusion of aviation in the European Emission Trading Scheme (European Commission, 2013). As a result, it has to be concluded that the airline industry remains the most regulated and restricted industry in global trade (Oum et al., 2001). As liberalization efforts are still being delayed by national governments, alliances will remain the dominant form of international cooperation.

Doganis (2006) divides the topic "liberalization" into two successive chapters, starting with a review of regulatory changes of the last decades. He argues that modern liberalization efforts can hardly be understood without considering the smoothing of bilateral and international agreements over the last 30 years; hence, progressive relaxation of the national clause is finally leading to the creation of a common airspace.

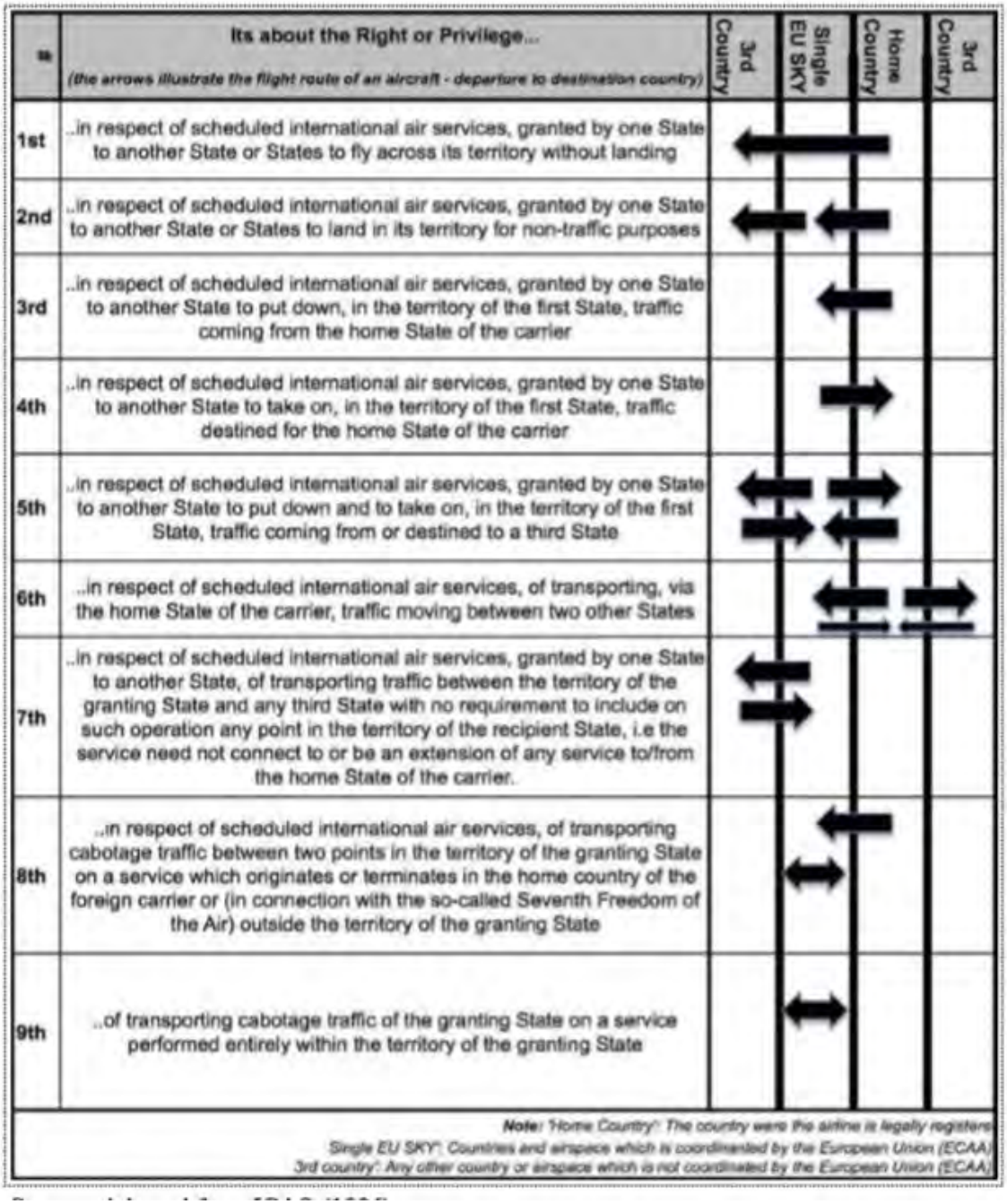


Fig4. Freedom of Air

The author therefore has to concentrate on combining various factors that have been discussed in the framework of liberalization. Undoubtedly, the "freedoms of the air" is a classification that should be at the core of this determinant.

The author proposes to split the "freedom of the air" factor into sub-factors to evaluate its impact in detail: "degree of participation in the single European sky", "length of time being able to use the 5th to the 9th freedoms of the air" and "percentage of business done under the regulations of the 5th to the 9th freedoms of the air". Despite being regulated by the traffic agreements of the Chicago Convention, the fifth freedom was included in that dimension, as it was often an issue of international renegotiations.

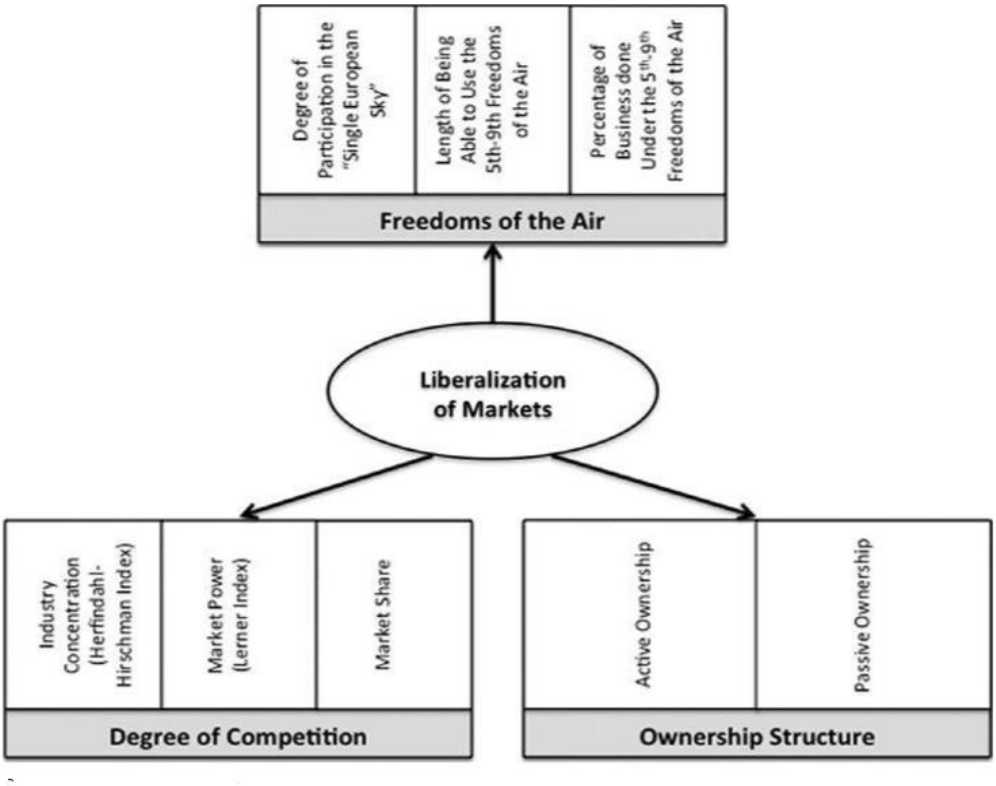


Figure5. The components of the liberalization determinant

Despite being regulated by the traffic agreements of the Chicago Convention, the fifth freedom was included in that dimension, as it was often an issue of international renegotiations.

The first two factors relate to the interval in which airlines were able to use the advantages of the "freedoms of the air". The Herfindahl-Hirschman Index (HHI) suggests that competition (concentration within the industry) is low if the sum of the squares of the market shares (by passenger) of all actors in the market is high (Stavins, 2001). Airlines operating on routes where they exercise practically a monopoly have little incentive to care about a customer-oriented

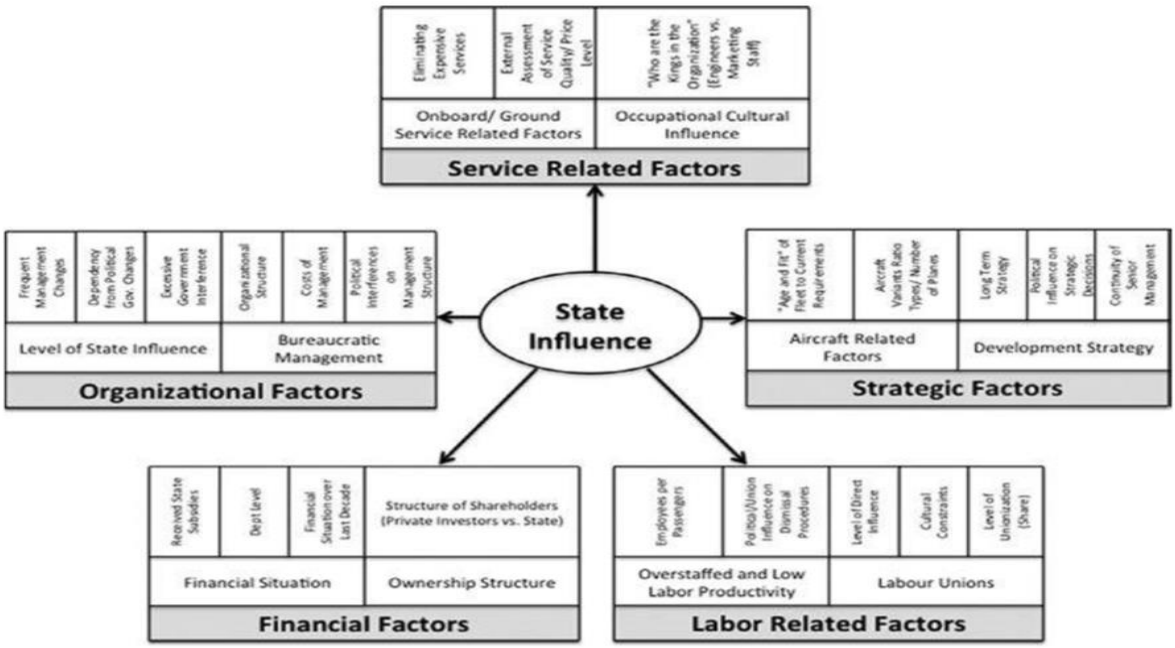
approach. The average HHI of all operating routes including nearby airports) is a feasible way to measure the competitive environment for an airline. A second method to analyze competition and market power is the Learner Index, which subtracts the average costs of an airline from its average price of all tickets sold, and then divides the result by the average price of all tickets sold (Weiher, 2002). The lower the Learner Index, as higher the concentration of market power. A third method is to evaluate the market share of the airline under investigation. A higher market share indicates more power to influence the market – particularly in a market which is faced with differentiated products and services (Hay, 1987).

5 The state (privatization) Dimension

According to Huenttinger, another aspect which had a substantial impact on European airlines was the ongoing privatization process. In contrast to the USA, most carriers in Europe were set up by national governments. The emerging globalization trend has revealed the growing need for implementing business values. The ownership structure is essential for the study of processes within an airline, as state-owned airlines have a far more bureaucratic mentality than privately owned carriers. One of the effects is that flag carriers typically have a lower overall passenger satisfaction score than their private counterparts. The past has shown that deregulation and, particularly, the privatization process are successful in increasing the overall utility for consumers (Andreassen, 1995). According to Taylor and Warrack (1998), a successful privatization of a state carrier either has to improve the service level or decrease the unit costs. This idea has been widely accepted in business and society, but governments that solely consider quick privatization of the irnational carriers frequently concentrate too much one economic and political factors (Obloj and Kostera, 1993). This can even affect performance, and might threaten the ability to survive in a free market economy. The traditional technical orientation of airline management barely focused on satisfying customers‟ needs. One of the main reasons for this is that state-owned carriers merely have to fulfill the demands of the government – providing direct flights to a maximum number of destinations – while performance orientation often ranks a poor second. For instance, the strong influence of the French Government on every single management decision of Air France was the main factor in regard to the airline lagging behind other European state-run carriers (Lehrer, 2000). Doganis (2006) formulated the “symptoms of distressed airline syndrome”, which have become a standard tool in academic papers for

analyzing the privatization process of state-owned airlines. The term "syndrome" should stress that it is like a virus that can challenge the survival abilities of any airline. He grouped several significant factors into seven groups: "substantial losses", "over-politicized", "strong unions", "overstaffing and low labor productivity", "no clear development strategy", "bureaucratic management", and "poor service quality". The author decided to re-group Doganis" model and added additional aspects. The following five components are finally proposed: "financial factors", "organizational factors", "strategic factors", "labor related factors" and "service related factors". "Substantial losses" was renamed "financial situation" and, together with "ownership structure", represents the "financial factors". The financial situation of an airline can probably be best described by the level of debt, the financial situation over the last decade, and the amount of state subsidies received. According to Newbery (1997), privatization deals mainly with the re-distribution of ownership, instead of the sharing of control. Whether a company is owned by the state or by private investors is essential in financial management, as it decides whether business decisions are based on market conditions or rather on social and political interests. Furthermore, only state-run airlines are able to operate with substantial losses over a longer period. Backxetal.(2002) found a strong correlation between ownership structure and performance of the airline. Hybrid or mixed private-public carriers perform better than state-run companies, although to a significantly lesser extent than fully privately owned carriers. The two labor-related factors "strong unions" and "over staffing and low labor productivity" combined form one component.

Figure6.The components of the state influence (privatization) determinant



The degree of political influence on state owned airlines usually has a positive influence on the number of employees. First of all, most governments treat the airlines as a pool for civil servants who have to be employed somehow. Second, in many countries there is a strong personal and historical link between labor unions and political parties, especially from the left. Third, as almost every occupational group within an airline is able to bring the entire operation to a halt, the unions gain a disproportionate amount of power. Labor unions are traditionally used to block any kind of management reforms, which focus on a reduction in the numbers of employees. This very often results in a disproportionately large number of employees in comparison to the number of passengers. This creates a culture of safety, and jobs for life, with negative effects on service quality and efficiency. Cultural constraints also include social attitudes towards education, self-improvement, and acceptable working hours (Holloway, 1998). Ford and Slocum (1977) consider the administrative intensity (ratio of administrative personnel to total or production personnel) to be an important aspect of the organizational structure overall. "Organizational factors" consists of "bureaucratic management" and "level of state influence" (equivalent to "over-politicized"). The ruling party often appoints the CEOs of many airlines,

and it is expected that they will tolerate, support and implement the policies of the government. Airlines that were built up by the state show in most cases a very hierarchical internal structure, and swamp the top management with paperwork and a high number of decisions to make. In many traditional airlines, air transport was seen as a technical issue and engineers were perceived as the "kings within the organization" (Hofstede, 1993). Poor management and the inability to replace in adequate staff lead automatically to poor service performance in the air as well as on the ground.

2.5. Research Gap

As far as the researcher knowledge is concerned and the effort made while reading previous studies, the determinants of airline business are not worked so far in Ethiopian airlines context. Even on the African context, no as such conclusive study is made on determinants of airline business activities and success factors on airlines industry per the information from AFRA (African Airlines Association) until the end of 2016(Ms. Elin M. Bukhala**:** Training Coordinator | African Airlines Association, 24 February, 2017)

Therefore, the purpose of this research was also to provide empirical validation of Maik, Huenttinger(2013) on implementation of low-cost-factors, influence of national culture, integration in airline alliances, state influence, and liberalization of markets are factors determines the business activities in airline industry.

Chapter Three

3. Research Methodology

Research designs are plans and the procedures for research that span the decisions from broad assumptions to detailed methods of data collection and analysis (Creswell, 2009).

According to Creswell, there are three types of research designs: Qualitative, Quantitative and Mixed methods. Qualitative and quantitative approaches should not be viewed as polar opposites or dichotomies; instead, they represent different ends on a continuum (Newman and Benz, 1998). A study tends to be more qualitative than quantitative or vice versa. Mixed methods research resides in the middle of this continuum because it incorporates elements of both qualitative and quantitative approaches (Creswell, 2009). Often, the distinction between qualitative and quantitate research is framed in terms of using words(qualitative) rather than their number(quantitative), or using close- ended questions(quantitative hypothesis) rather than open-ended(qualitative interview questions).

This study is both qualitative and quantitative study (mixed method) that attempts to study the determinant factors in airline business regarding the variables under the problem statement in general and in Ethiopian Airlines context in particular.

3.1. Research Methods

Research methods involve the form of data collection, analysis, and interpretation that researchers propose for their studies. It is useful to consider the full range of possibilities of data collection and to organize methods, their use of close-ended versus open-ended questioning, and their focus on numeric versus non-numeric data analysis (Creswell, 2009).

The research will utilize both descriptive and exploratory research methods while conducting the study. Descriptive research is a method used to obtain information relating to the current status of an issue or phenomenon to describe "what exists" within the variables or conditions of the situation. The two most common types of descriptive research tools are surveys and observation.

The researcher would make use of his observations from his past experience as aviation professional. It allows the researcher to familiarize himself/herself with the concepts of the problem under study to facilitate development of insights and hypotheses. This study is an exploratory attempt since it would try to gather information regarding determinant factors in aviation industry. It also investigates how these factors capitalize on airlines success if used effectively and efficiently or will have a negatively effects that can affect profitability of an airline otherwise.

3.2. Research Paradigms

Creswell and Clark (2007, p. 21) described 'worldview' and 'paradigm' as how we view the world and, thus, go about conducting research. They contain a basic set of beliefs or assumptions that guide our enquiries. They are a philosophy deeply rooted in our personal experiences, our culture, and our history (Guba and Lincoln, 2005). They may change during our lives and be shaped by new experiences and new thought". According to the authors, there are four different worldviews: Post positivism, Constructivism, Advocacy and Participatory, and Pragmatism.

• Post positivism: generally associated with quantitative research. Post positivism researchers develop knowledge through a post positivist lens that is based on careful observation and measurement of existing objective reality. Knowledge is claimed on the basis of cause-and-effect thinking, empirical observations and measurement of variables, continuous theory testing, and reduction and focusing on selected variables to interrelate (Creswell and Clark, 2007).

• Constructivism: generally associated with qualitative research and the researcher's subjective views form the meaning of the phenomena. When researchers elaborate their understanding, they speak about meanings based on their social interaction and their personal histories. Research is formed "from the bottom up and from individual perspectives to broad patterns and, ultimately, to theory" (Creswell and Clark, 2007, p. 22). Moreover, social constructivism is usually combined with interpretivism (Creswell, 2003).

• Advocacy and Participatory: research is more likely to be associated with qualitative approaches, rather than quantitative. The worldviews are influenced by political concerns. The

views are characterized by the need to improve society to incorporate issues such as marginalization, hegemony, empowerment, and other issues affecting marginalized groups. The aim for the researchers is to see the world changing for the better (Creswell and Clark, 2007).

• Pragmatism: generally associated with mixed methods research. The main concern is the question and the consequences of research, rather than the methods. Data collection is done through multiple methods. Hence, it is pluralistic and based on 'what works' in practice (Creswell and Clark, 2007).

The main objective of this study is to explore and describe what factors determine the airline business in aviation industry and testing the factors mentioned under problem statement in Ethiopian context, considering the lack of the empirical study and testing in Ethiopian case. A more pragmatic view is adopted in this case. The Positivist paradigm is still predominant. The Pragmatic paradigm, however, allows a more pluralistic view of the phenomena. Since a more holistic understanding of the subject is required, the pragmatic view seems more appropriate for this study. And mixed method is adopted in conducting the research as well.

3.3. Research Design

Research design is "the framework or plan for a study, used as a guide in collecting and analyzing data. It is the blueprint that is followed in completing a study. It resembles the architect's blueprint for a house" Churchill (1999, p. 98). Cooper and Schindler (2008, p. 711) explains that research design is the "blueprint for fulfilling objectives and answering questions". There are different classifications of research design. The major ones are: exploratory, descriptive, or causal (Cooper and Schindler, 2008; Churchill, 1999).

Exploratory research: the objective of exploratory research is to gain insights into the topic, particularly in situations where nothing or little is known about the research area (Cooper and Schindler, 2008).

Descriptive research is guided by the initial hypotheses or research questions (Cooper and Schindler, 2008; Churchill, 1999). Its objective is to describe the phenomena associated with a subject population or to estimate the proportions of the population that possess certain

characteristics. Its objectives also include the discovery of associations among different variables (Cooper and Schindler, 2008).

Causal/explanatory research: the objectives of causal research are to discover the effect that a variable(s) has on other variable(s) or why certain outcomes are attained. The logic of hypothesis testing forms the foundation for the concept of causality. Consequently, inductive conclusions can be obtained. Explanatory studies may be qualitative and/or quantitative, according to Robson (2002).

This research employed both explanatory and descriptive designs in order to test and describe the major determinants of airline business in Ethiopian perspectives. A description of each factor in Ethiopian context was examined and their relationship was studied. As there is no empirical study conducted regarding these determinant factors in Ethiopian context, explanatory research design is found to be one of the proper research designs to be applied in this study. The researcher thought that this is appropriate design to discover the effect that these five determinant variables have on the success record of Ethiopian so far and in the future.

3.4. Research Approaches

The two basic approaches in social sciences research are qualitative and quantitative. However, the literature suggests a growing interest in a mixed method approach (triangulation) following on from the argument that 'one is used to strengthen the other'. Qualitative approaches are those in which the inquirer often makes knowledge claims based primarily on constructivist perspectives or advocacy/participatory perspectives or both. It also uses strategies of inquiry such as narratives, phenomenologies, ethnographies, grounded theory studies, or case studies. The researcher collects open-ended, emerging data with the primary intent of developing themes from the data Creswell, 2003, p.18). A qualitative approach to research involves the observation of individuals in their natural setting (Pope and Mays, 2006). These approaches allow the observation on how processes change over time as claimed by Easterby-Smith et al. (2008). Qualitative methods are useful in gaining insights into research areas where little is known about the topic. Qualitative methods such as case research can also generate initial theories and/or important variables as claimed by Eisenhardt (1989).

In this study, the determinants of airline business can be accessed through semi-structured interviews with airline senior staffs and management members in order to examine the results with the researcher view point included.

In quantitative approaches, the investigator primarily uses post-positivist claims for developing knowledge (i.e. cause and effect thinking, reduction to specific variables and hypotheses and questions, use of measurement and observation, and the test of theories), employs strategies of inquiry such as experiments and surveys, and collects data on predetermined instruments that yield statistical data (Creswell, 2003, p. 18).

The mixed approaches are those "in which the researcher tends to base knowledge claims on pragmatic grounds. It employs strategies of inquiry that involve collecting data either simultaneously or sequentially to best understand research problems. The data collection also involves gathering both numeric information as well as text information so that the final database represents both quantitative and qualitative information" (Creswell, 2003, p.18). Often, combining qualitative and quantitative methods, also known as the triangulation of methods, can capture a more holistic, complete and contextual view of a phenomenon (lick, 1979). The 'most effectiveness' is sought, as suggested by Teddlie and Tashakkori (2003). Therefore, the combination of quantitative and qualitative approaches tends to lead to a better understanding of research problems than either approach alone (Creswell and Clark, 2007; Mangan et al., 2004). While quantitative approaches measure objective facts and focus on variables, qualitative approaches construct social reality, cultural meaning and focus on interactive processes and events (Neuman, 2006). Denzin (1989) and Babbie (2007) suggest that combining more than one method often overcomes the inherent weaknesses of single measurement instruments and takes advantage of their different strengths. Moreover, according to Mintzberg (1979, p. 587), 'hard' data helps researchers to uncover all kinds of relationships, yet it is only through the use of 'soft' data that they are able to explain them, and explanation is, of course, the purpose of research.

In this study on determinants of airline business, even though a qualitative orientation is predominant, the quantitative analysis contributes to produce a more in-depth understanding of determinant factors in the airline industry. Therefore, a mix-method approach is adopted, and the

researcher believed it is more appropriate for such kind of study as described in Jick (1979) and Creswell (2003).

3.5. Population and Sampling

As many agreed, the researcher believes that the airline business requires skilled and experienced employees for better understanding of the nature of the industry and for better productivity. As a result, the research was targeted senior employees and management employees who served in the airline for a minimum of five years. This is to make the research more feasible as the issue requires deeper understanding of these factors to respond to research questions better. The total company employees with mix of years of experience is shown in the below table.

Year of Service	Male	Female	Total	Percentage
<1	640	801	1,441	13.09%
1≤ X<5	3,318	1,791	5,109	46.42%
5≤ X< 10	1,301	798	2099	19.07%
10≤ X<15	650	213	863	7.84%
15≤ X<20	439	162	601	5.46%
20≤ X<25	368	109	477	4.33%
≥25	323	92	415	3.77%
Total	**7,039**	**3,966**	**11,005**	**100%**

Table3.1: Ethiopian Employees and their experience mix until April 2017

The total number of seniors and management staffs who served the airline at least five years and above are 4455 which is 41% of the total population (11,005 active and permanent employees).

3.5.1. Sampling Technique

A stratified convenience sampling method was applied for this research. The reason is the research addresses two major targets of populations, senior but non-management employees and management employees and yet, there is no defined list of employees that will be participants of the study.

It is also important to divide non-management and management employees in different strata‟s so that it will be advantageous to sample each sub population when there is a significant variation within the population (Cochran, 1977).

In stratified sampling a population of N units is sub divided into sub population of N1,N2…….NL units. The sub populations are non-over lapping (Cochran, 1977)

The questionnaire was distributed to the employees at headquarter in person with hard copy and employees abroad(out stations in different parts of the world) using company mail. The out station employees are all management employees (country area managers or station managers in the country they are appointed). Convenience sampling is found to be appropriate to group the area managers and station managers as it is very difficult and impractical to contact randomly selected employees due to time and cost constraints. All area managers and station managers (95) are addressed to fill the questionnaire through company generic mail. To increase generalizability of the sample to the whole population, the data collection was made cautiously by identifying appropriate departments with senior staffs and more related departments to the subject of study by taking the necessary time that is convenient for respondents to give response by taking time difference (especially for those abroad) and workloads that everyone has in to consideration..

3.5.2. Sample Size

Sample size refers to the number of items to be selected from the universe to constitute a sample. Determining sample size is a very important issue because samples that are too large may waste a lot of time, resource and money, while samples that are too small may lead to in accurate results (Kothari, 2004). According to De Coster (2004), minimum sample size used in statistics analysis should be equal to or greater than five times the number of variables(items), but not less than 100 to generate reliable results: $n \geq 100$ and $n \geq 5k$ (where k is the number of items). This research has 41 items, as a result, the minimum sample size required for this research is: n = 5 x41 = 200. According to Sekaran (2009), a sample size larger than 30 and less than 500 is usually appropriate and adequate for most researches and valid to be analyzed using general statistical tools.

Accordingly, four hundred fifty Ethiopian airlines senior and management member employees were participated in this study. Participants‟ position ranges from senior employees to senior management levels. The minimum work experience while identifying the participants to fill

questionnaire or while conducting interview is with those 5 years and more experience in the airline and aviation industry in general.

3.5.3. Data Collection Instruments

This study was conducted mostly using primarily data sources and secondary data analysis as well. The two major primary data collection instruments; interview, and questioners were used. Structured questionnaire was prepared to collect relevant information from the participants in the study. The questionnaires contained information regarding demographics of respondents such as sex, age, educational level, work experience, and likert-scale questions that address all variables used to determine airline business as stated under problem statement in order to gather firsthand information from the participants.

3.5.3.1. Interviews

A series of in-depth interviews was undertaken with employees in Ethiopian Airlines. A Two area managers were interviewed. One area manager was interviewed while he was at head office and the other out station area manager at Singapore over viber on May 13, 2017. Other managers of key departments in head quarter, especially cost saving department, A/VP Strategic Planning and Alliance, Manager Partnership and Commercial Cooperation, Manager Corporate Strategy and Industry affairs, MD international and Ethiopian ancillaries were part of the interview. The plan to interview the CEO was not fulfilled as he was very busy and traveled abroad a lot.

3.5.3.2. Questionnaire

All area managers and station managers (95) were given questionnaires via personal and company mail after proper permission is secured from A/VP Human Resource Management. And other management and non-management employees in the head quarter were also given both in hard and soft copy to fill the questionnaire. The involvement of all these diverse company teams and major stake holders was very important. The reason is studying the impact

under question is very serious and needs critical understanding of the exact and accurate findings would mean a lot for the company.

In terms of approach, the study employed both qualitative and quantitative approaches. The quantitative approach focused on obtaining numerical findings and interpretations. And the interview on the other hand, made up the qualitative approach of the study as this focused on personal accounts, observations, description and individual insights of the respondents. This study employed the combined (mixed) approach so as to overcome the limitations of both approaches. The combination of quantitative and qualitative approaches tends to lead to a better understanding of research problems than either approach alone (Creswell and Clark, 2007; Mangan et al., 2004).

In general, the study also used proper secondary sources, previous studies, literatures models and tried to see what has been studied and what gaps are there for further investigation.

3.5.4. Statistical Treatment and Method of Data Analysis

The data collected from the likert scaled questions for each construct were analysed. To analyse the collected data both descriptive and inferential statistical methods were employed.

To assure reliability of measures Cronbach‟s alpha test is performed for the pilot taste. And the data analysis is made by a statistical package for social sciences (SPSS) version 20.

3.6. Reliability and Validity

Four tests are usually used to determine the quality of empirical social research: construct (content) validity, internal validity, external validity, and reliability (Yin, 1994). Construct or content validity corresponds to the extent to which the operational measure for a construct reflects the construct's observable effects, appears to describe a single construct and correlates with operational measures of the other constructs (McCutcheon and Meredith, 1993). Yin (2009) emphasized the difficulties in dealing with this issue in case research. Mainly, because subjective judgments are used to collect the data and researchers fail to develop operational measures. Among the tactics to overcome these issues, establishing a clear chain of evidence is mentioned

by McCutcheon and Meredith (1993) and Yin (2009). Moreover, multiple sources were used to ensure the content validity as suggested by McCutcheon and Meredith (1993).

With the same view and understanding, while conducting this study, members of the airline management from different departments were interviewed, seeking multiple viewpoints related to the five determinant factors under the study. These includes senior staffs in marketing, commercial, alliance, international sales, customer service, corporate governance and others which are pertinent for this study.

The internal validity is concerned with whether the right causal relationships are established in the data analysis (Yin, 2009). McCutcheon and Meredith (1993) indicated pattern matching as one of the main tactics to deal with this issue. In order to ensure the internal validity, major previous studies on determinants of airline business and key success factors in airline business are considered and compared with this study in Ethiopian context.

The external validity refers to the results' generalizability, i.e. how the results obtained in one group are applicable to other groups or settings. McCutcheon and Meredith (1993) suggested the use of the replication logic of multiple case studies for case research. In the case of the qualitative interviews, the interview guide created a set of procedures that were replicated for every interview, other groups or settings.

The researcher believed that further inclusive study has to be made to make the research more inclusive but also believes this result will be applicable to other airlines in different environment as well as these factors under the study are very critical and important for all players in the industry.

The reliability refers to the extent to which data would be duplicated if collected at another time or through other means (McCutcheon and Meredith, 1993). McCutcheon and Meredith (1993) indicated the importance of using more than one data gathering method to increase the reliability of social research. Similarly, in this study, a mix of quantitative (linear regression analysis) and qualitative (questionnaires and qualitative interviews) methods was adopted to overcome the potential deficiencies of each method. Moreover, as reported by lick (1979), the triangulation of methods can increase the data reliability, since a more holistic and complete understanding of the phenomenon may be achieved.

3.7. Model Specification

This paper will use multiple regression models in order to study the relationship between dependent and independent variables. Regression analysis is concerned with the study of the dependence of one variable, dependent variable, on one or more variables, independent variable, with the view of estimating and /or predicting the population mean or average value in terms of the known or fixed values of the sample (Guajarati, 2003). Its focus is on describing and evaluating the relationship between given variable and one or more other variables. More specifically, regression is an attempt to explain movements in variable by reference to movements in one or more of other variables. That is, it tells us why observations deviate from the mean. Is it one, two or all of these factors that will determine the business success will be addressed at the end of the research.

Hence, the researcher attempted to describe and evaluate the relationship between ET success in airline industry (the dependent variable) and the independent five variables (membership in star alliance, low cost strategy, market liberalization, national culture and Government and Privatization influence).

Model Specification for multiple regressions:

$$\mathbf{Y = \beta o+\beta 1X1+\beta 2X2+\beta 3X1+\beta 4X4+\beta 5X5+\mu}$$

Where, Y is the dependent variable, β is the constant, X1, X2…X5 are the independent variables and **μ** is the error term(all other variables that can have influence on the dependent variable).

In this research the model is:

$$\mathbf{ES= \beta o+\beta 1SA1+\beta 2NA2+\beta 3LC3+\beta 4ML4+\beta 5GP5+\mu}$$

Where: ES is Ethiopian Success (Business Activity)

SA: is Star Alliance membership

NC: is National Culture Influence

LC: is Low Cost Strategy

ML: is Market Liberalization

GP: is Government (state) influence and Privatization

B0: is the constant term

β1, β2, β3…are coefficients of the independent variables

μ: is the error term

3.8. Ethical Considerations

As the study was conducted and utilized human participants who are on the actual operation of the airline‟s business, it will be conducted with high care and proper investigation of each variable. The privacy of participants as well as the security of the participants‟ was kept unrevealed. These issues were identified in advance so as prevent future problems that could have risen during the research process. Among the significant issues that were considered includes consent, confidentiality and data protection (Creswell, 2002)

In the conduct of this research, the questionnaires and interview methods were drafted in a very clear and concise manner to prevent conflicts among respondents. People who participated in the research were given an ample time to respond to the questions to avoid errors and inaccuracies in their answers. The respondents were also given a waiver regarding the confidentiality of their identity and the information that they did not wished to disclose. The respondents' cooperation were eagerly sought, and were rest assured that the data gathered from them would be treated with the strictest confidence, so that they would be more open. This was done with the hope that this would promote trust between the researcher and the respondents and to keep the ethical standard of the research(researcher) as well. The purpose of the research was also clearly stated that it is to identify which whether these determinant factors determine Ethiopian business success or not and, on which factors is Ethiopian strong and on which factors further improvement should be done to strengthen and continue to win competition for the best of the airline everyone is working for and aspire to work for clearly.

Chapter Four

4. Result and Analysis

This chapter covers the presentation, analysis and interpretation of data collected from primary sources. The data collected through interviews and questionnaires is analyzed with respect to the problems under study and in line with the literatures using proper tools and models.

From the total number of seniors and management staffs who served the airline at least five years and above are 4455 which is 41% of the total population (11,005 active and permanent employees) Ethiopian airlines which doesn‟t include temporary and outsourced employees. In order to collect first-hand information using questionnaire, a total of 450 Questionnaire were distributed both in hard copy and soft copy to employees in headquarter and outstations. From the 450 questioners distributed, 415 are collected and used for this analysis. 35 questionnaires are not filled properly and the rest are not collected due to different reasons.

The collected data is analyzed using descriptive statistics in order to present the characteristics of the data under study and to analyze the determinants of the airline business. Cronbach‟s alpha and analysis of confirmatory factors are used in addition to testing the reliability and validity of the data. To come up with the applicable model with the data and test the hypothesis data is analyzed using SPSS version 20 software.

4.1. Descriptive Statistics of Survey Outcomes

4.1.1. Sample Size and Respondent Profile

A total of 450 questionnaires were distributed from which a valid 415 were collected. Out of 35 left, 9 of them were not filled properly and hence not included in the analysis while 26 were not returned at all. The rate of return is 94% from which 9 were not filled properly as stated and

hence rejected because of missing data. Missing data refers to a situation in which valid values are not available for analysis (Hair et al,2010).According to Hair et al (2010) missing data can be remedied by deleting offending cases or variables with excessive levels of missing data. Thus as the cases with missing data are found to be less than 10% of the total i.e. 9 cases out of 450, it is decided to take the simplest remedy suggested and eliminate the cases from further analysis.

From the respondents 98.6% of them responded for the question stated, whether ET is successful or not. Almost all responded and agreed that Ethiopian is a successful company indeed.

Out of the 415 respondents 254 are male which is 61% of the total respondents is while the number of female respondents is 161 which account 39% of the total respondents.

When it comes to position of employees, 52% of the respondents are management employees while 42% are senior non-management employees. This shows that majority of respondents know the business very well and have more experience in the industry. This in turn helps to gather accurate information.

Regarding educational back ground, the number of respondents with BA degree is 279 which is 67% of the total respondents and the rest 33% holds MA degree. Again the educational background tells us that the respondent‟s academic status is good enough and high to understand and respond the questions well.

Speaking of the division of departments involved in the study, marketing accounts 57%, international sales 29% and ground and inflight services account the rest 14%. The reason why these are area of focus is that these departments are the front in running the operation and have a lot of interactions with the factors understudy as well.

When it comes to the age category of the respondents, 42% are below 30yrs of age, 48% between 31 to 40yrs age, 6% between 41 and 45 and finally 4% above 45yrs of age.

The experience of respondents are also tabulated with 63% between 5 to 10yrs, 28% from 11 to 20yrs and 9% have an experience of more than 21years. Experience is one of the most important factor in airlines business. And hence, as can be seen, all respondents have five years and more experience with diverse years of experience ranging from 5 to more than 30 years. The researcher believes that the response coming from these set of respondents is based on prior knowledge and experience to each question under the subject and hence increase the reliability of the data gathered.

Profiles of respondents analyzed on SPSS version 2.0.

Variables	Category	Frequency	Percent
SEX	Male	254	61.2
	Female	161	38.8
AGE	Below 30	175	42.2
	31 to 40	199	48.0
	41-45	22	5.3
	Above 45	19	4.6
NATIONALITY	Ethiopian	415	100.0
POSITION	Non Mgt	199	48.0
	Mgt	216	52.0
EXPERIENCE	5 to 10 Yrs	260	62.7
	11 to 20 Yrs	118	28.4
	21 to 30Yrs	37	8.9
EDUCATION	BA	279	67.2
	MA	136	32.8
DIVISION	Marketing	237	57.1
	Intl Sales	122	29.4
	Ground & Inflight Operations	56	13.5
ET_SUCS	Successful	409	98.6
	Not Successful	6	1.4

Table 4.1 Demographic Variables. Source: Own Survey, May2017

4.1.2. Analysis of each determinants factors of Airline Business

The determinants of airline business under study includes, Integration in airline alliance, implementation of low-cost structure, the influence of national culture, the influence of government and privatization and markets liberalization. The survey results of each will be presented below one after the other.

4.1.2.1. Star Alliance Membership

Out of the total respondents 55.4% strongly agreed that ET is beneficial by joining star alliance which is the majority of the respondents and quite significant numbers agreed that it is again important, 42.4%. 48% responded agreed on ET benefited on marketing, promotion and joint advertisement from star alliance. Again 56.2% of the respondents agreed that knowledge sharing and best practice are other areas that ET can benefit from star alliance, while 58.8% again agreed operational efficiency, safety and enhanced customer service are another areas of advantage for ET. Same goes to increased revenue, traffic volume and coordinated schedule which accounts 48.4% agreed and 55.9% again agreed on that ET can benefit further on easy check-ins, brand recognition etc. the overall survey shows that ET is beneficial by being a member of star alliance with majority agreed and strongly agreed on the idea of being membership in the first place.

Table4.2 Summary of Survey Findings for star alliance membership

Statements to Evaluate		Rating Points in Percentage					
STAR ALLIANCE MEMBERSHIP		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total
SA1	Being a member of Star-Alliance is important for ET			2.2	42.4	55.4	100.0
SA2	ET can benefit from star alliance on marketing, promotion and joint advertisements		2.7	12.3	48.9	36.1	100.0
SA3	Knowledge sharing and best practice		2.4	9.4	56.2	32.0	100.0
SA4	Operational efficiency, safety, enhanced customer service		1.7	19.3	58.8	20.2	100.0
SA5	Shared and increased revenue, increased in traffic volume, coordinated schedule, cost reduction,		4.8	26.7	48.4	20.0	100.0
SA6	Increased network size in global reaches, Easy check-in, transfers and connections, frequent flyer programs, global recognition, & enhanced product propositions and brand recognition, state of the art online presence			5.8	55.9	38.3	100.0

Source: Own Survey, May2017

4.1.2.2. Influence of National Culture

The second determinant factor under study is the influence of national culture on ETs business success. Majority with 47.2% strongly agreed that ET is a pan African carrier providing Ethiopian and African flavors to its customers. Plus, 28.9% strongly agreed that Ethiopian

employees would like to associate themselves to their company while respondents agreed on the other points as can be seen from the below table with few strongly disagreed as well. This survey in general shows that national working culture is one of the determinants of ETs business success in the industry and hence needs to be viewed carefully.

Table4.3 Summary of Survey Findings for Influence of National Culture

Statements to Evaluate		Rating Points in Percentage					
	INFULENCE OF NATIONAL CULTURE	**Strongly Disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**	**Total**
NC	ET is a pan African carrier and it positions itself as an a Pan-African airline		1.4	8.9	42.4	47.2	100.0
NC	The Ethiopian culture as a country contributed for the success of Ethiopian		8.0	26.7	34.9	30.4	100.0
NC	Ethiopian employees like to associate with their company and love to work for it	3.6	16.9	22.9	27.7	28.9	100.0
NC	Our culture promotes innovation, hard work and belongingness to our company	5.3	9.2	33.3	34.7	17.6	100.0
NC	Team work is one of our strong culture as ET employees	1.4	13.7	17.3	50.6	16.9	100.0
NC	Top management performance and view can help and positively influence the work culture of the company and top mgt can establish norms of behavior by their action can be role models	3.1	5.8	23.4	49.6	18.1	100.0
NC	ET‟s socialization culture helps to familiarize new entrants and feel motivated others as well.	1.4	9.6	34.5	39.5	14.9	100.0
NC	Strong dedication and going extra mile(discretionary behavior) is what most ET employees exhibit		8.2	22.4	42.7	26.7	100.0
NC	ET‟s working culture is adoptable to current changing and very dynamic aviation industry	.7	11.6	23.1	54.2	10.4	100.0
NC	ET‟s culture promotes and validates individual growth of its employees which is basically based on merit & believes its employee are its number one assets	5.8	13.0	35.7	36.6	8.9	100.0

Source: Own Survey, May2017

4.1.2.3. Implementation of low cost structure

The third determinant factor in this study is implementation of low-cost structure. As can be seen from the below table summary, majority of employees agreed on all cost saving initiatives and have good awareness on this element. In addition, 40.5% , 52% and 50.8% strongly agreed

points; cost saving doesn‟t mean doesn‟t mean compromising service and other important areas, global standard ET‟s maintenance and training facilities helped ET to reduce cost and ET is also advantageous in labor related cost and cost saving from its strategic location respectively. The summary shows this, the respondents responded either agreed or strongly agreed on majority of points raised. This shows that this factor is real determinant of the airlines success.

Table4.4 Summary of Survey Findings for Implementation of Low-Cost Structure

Statements to Evaluate		Rating Points in Percentage					
IMPLEMENTATION OF LOW COST STRUCTURE		**Strongly Disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**	**Total**
LC	Cost saving/reduction is one strategic area that ET is working on and can be balanced with increased efficiency wherever possible		0.7	8.9	58.1	32.3	100.0
LC	Extremely motivated and friendly employees can balance lack of on-board amenities that are put in place because of cost cutting strategy. Increased efficiency an also balance cost cutting initiatives.	0.7	8.2	32.8	42.9	15.4	100.0
LC	Cost saving/cutting doesn‟t mean providing inferior service, it expresses a clear focus on the essentials		3.6	12.0	43.9	40.5	100.0
LC	ET considers availing lowest possible fares in order to attract more customers and to compete with low cost carriers	3.6	15.9	27.7	33.5	19.3	100.0
LC	Efficient network and connection, efficient aircraft utilizations helped to ET to save cost like saving aircraft ground time cost		.7	16.6	48.7	34.0	100.0
LC	ETs strong in-house maintenance and world class training facilities are one means of reducing cost in addition to sources of income			12.8	35.2	52.0	100.0
LC	ET‟s web based sales helps to reduce GDS cost very significantly	3.9	8.2	27.5	42.4	18.1	100.0
LC	ET has a cost advantage from low labor available in the market as compared to OALs(other airlines) and the strategic location of ET also helped to reduce cost in terms of accessibility to the world with an average of short flight hours like on fuel consumption		.7	5.1	43.4	50.8	100.0

Source: Own Survey, May2017

4.1.2.4. Market Liberalization

Market liberalization is another critical factor for airlines operation and for ET in particular as well. Its only when the market is liberalized that airlines have markets to fly and grow. Market liberalization ranges from the first overflying permit to the most liberalized freedom of air called 9th freedom that will allow traffic rights entirely in another foreign country. From this survey, majority of the respondents agreed that market liberalization is really important as can be seen from the below table summary. Hence, we can conclude that it determines ET‟s business success.

Table4.5 Summary of Survey Findings for Market Liberalization dimension

Statements to Evaluate		Rating Points in Percentage					
MARKET LIBRALIZATION		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total
ML	ET benefited from open sky agreements and bilateral agreements to expand its operation to closed markets		7.0	32.3	42.2	18.6	100.0
ML	Still African restricted open-sky policies have negative impact on ET‟s expansion strategy		3.4	24.3	51.1	21.2	100.0
ML	ET‟s major markets are 6th freedom markets which are the result of market liberalization followed by 5th air freedom		4.8	27.0	51.8	16.4	100.0
ML	Air freedoms are the best models/factors to determine the progress & degree of liberalization in airline business		1.0	19.0	59.0	21.0	100.0
ML	5. Protection of domestic carriers by respective govts and inadequate implementation of all air freedoms contributed to the limited expansion of ETs 5th, 7th, 8th and 9th freedoms expansion and all airlines in general		7.2	32.3	44.8	15.7	100.0

4.1.2.5. Government and Privatization

The last dimension under study is the influence of government and privatization. Privatization has no or little impact in the case of Ethiopian Airlines as there are very small airlines like National Airways, Air Djibouti. Again the overall result on this factor show that majority of the respondents agreed on all questions raised with below table detail. In fact this factor is found to

be the most determinant factor while checking the regression coefficients of betas under the model. Hence, one can easily tell that government is one of the important determinant factor in airlines business. With the same opinion, the data analyzed in this research showed that the support of Ethiopian government in different areas is critical for the success of Ethiopian airlines.

Table4.5 Summary of Survey Findings for Government Influence & Privatization

Statements to Evaluate		Rating Points in Percentage					
GOVERNMENT INFULENCE & PRIVATIZATION		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total
GP	Ethiopian gov't has a huge contribution for ET‟s success	.7	1.0	16.6	52.8	28.9	100.0
GP	The gov't allows free Mgt& left the company leadership for the industry experts without or little intervention	1.7	7.0	34.2	35.2	21.9	100.0
GP	Ethiopian gov't also assist ET in bilateral, multilateral & open sky agreements(issues)		.7	15.7	55.9	27.7	100.0
GP	Gov't also assist in facilitation & support of securing loans for its capital & other major financing		7.2	40.7	39.0	13.0	100.0
GP	Government also supports in tax exemptions and allow ET to reinvest its tax for its growth		5.1	36.6	36.4	21.9	100.0
GP	Air transport, FDI and other economic, social, & political agreements by govt with other govts help ET to benefit from market opportunities both in terms of passengers and cargo		1.7	25.3	47.7	25.3	100.0

4.1.3. Taste of Statistical Assumptions

Here, the major statistical assumptions, like validity of construct, reliability test, validity test, multi Collinearity test; homoscedasticity test and normality of the data will be tested and verified.

4.1.3.1. Reliability Test

Looking at the reliability test of the underlying variables and the detail constructs, all are reliable. In order to examine the internal consistency exhibited by the indictors of each construct in the model an analysis of Cronbach‟s alpha is conducted. According to Nunnally (1978) alpha value greater than 0.65 is acceptable to indicate the reliability of the construct.

All constructs exhibited a Cronbach alpha value of greater than 0.67, thus they are accepted as being reliable. Sakaran (2003) also suggests the minimum acceptable level to be (Alpha ≥ 0.60). As can be seen in below figures, the cronbach alpha of the latent variables is 0.784 and the cronbach alpha for each construct is 0.87 as can be seen on the appendix attached. So it is higher than 0.67 and which proves the data is reliable.

Table 4.6 Reliability Test Table

Reliability Statistics

Cronbach's Alpha	N of Items
.784	6

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
SA	19.51	3.117	.424	.777
NC	19.99	2.519	.538	.761
LC	19.67	3.194	.485	.765
ML	19.84	3.072	.493	.762
GP	19.84	2.812	.519	.757
ES	19.60	2.639	.836	.683

4.1.3.2. Normality of Data Test

A common rule of thumb test for normality is to get skewness and kurtosis within range of +2 to -2 when data is normally distributed (Hair et al). Thus normality analysis for the 5 variables was conducted. As table shows all variables are within +2 to -2 range .That means the data is normally distributed.

Table 4.7 Normality Test

Descriptive Statistics

	N	Mean	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
SA	123	4.18	.099	.218	-.444	.433
NC	123	3.70	-.282	.218	-.160	.433
LC	123	4.02	-.079	.218	-.221	.433
ML	123	3.85	.013	.218	-.531	.433
GP	123	3.85	.008	.218	-.102	.433
ES	123	4.09	-.144	.218	-.104	.433
Valid N (listwise)	123					

Source: own Survey, May 2017

Normality test can also be explained by how fit the regression line is with the data in the analysis.

4.1.3.3. Correlation Tests

The correlation analysis is conducted to check the relationship between the independent variables and behavior indicator and the correlation among the independent variable. Correlations measure the linear relationship between two variables. It helps to gain insight into the direction and strength of correlation between variables. Correlation coefficients take values between -1 and 1 ranging from being negatively correlated (-1) to uncorrelated (0) to positively correlated (+). The sign of the correlation coefficient defines the direction of the relationship. The absolute value indicates the strength of the correlation.

As per the general principle suggested by Field (2005), correlation values less than 0.3 are considered weak, correlations between 0.3 and 0.7 are considered moderate, and correlations greater than 0.7 are considered strong as the closer it gets to 1 the stronger it becomes and the closer it gets to zero the weaker it is.

Hence, from the below survey, we can say that there is strong correlation as the values of tolerance is higher than 0.7 in all of the variables (determinant factors) under study. Plus, all exhibited positive correlation indicating that there is a positive linear relationship between airline business (ES) and the other independent variables (SA, NC, LC, ML and GP). This means, as the value of one of these independent variables increases, so does the value of the dependent variable.

Table 4.8 Correlation Test

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-.459	.282		-1.630	.106		
	SA	.259	.053	.271	4.885	.000	.740	1.351
	NC	.108	.038	.159	2.811	.006	.716	1.396
	ML	.166	.057	.165	2.929	.004	.717	1.395
	GP	.372	.045	.451	8.185	.000	.749	1.335
	LC	.248	.061	.218	4.051	.000	.785	1.274

a. Dependent Variable: ES

Source: Own Survey, May2017

4.1.3.4. Multi-Collinearity

One of the assumptions of the classical linear regression model (CLRM) is that there is no exact linear relationship among the regressors. If there are one or more such relationships among the regressors we call it multi-collinearity or Collinearity, for short. At the outset, we must distinguish between perfect Collinearity and imperfect Collinearity (Damodar Gujarati 2011, 2012). Multicollinearity is one of the tests to be seen while testing the assumptions. The commonly used cut-off points as Pallant (2005) mentioned for determining the existence of multi-collinearity among independent variables are tolerance value and variance inflation factor (VIF) value. The rule is that when tolerance value is less than 0.2 and the VIF exceeds 10; it is a signal of multi-collinearity, which could lead to misleading and/or inaccurate results. Multi-collinearity occurs when there are high inter-correlations among some set of the predictor

variables. In other words, multi Collinearity happens when two or more predictors contain much of the same information.

As can be seen from below table, the tolerance and VIF showed that there was no multi-collinearity because VIF of all variables were less than 10 and tolerance of all variables also greater than 0.2.

Table 4.9 Multi collinearity Test

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-.459	.282		-1.630	.106		
	SA	.259	.053	.271	4.885	.000	.740	1.351
	NC	.108	.038	.159	2.811	.006	.716	1.396
	ML	.166	.057	.165	2.929	.004	.717	1.395
	GP	.372	.045	.451	8.185	.000	.749	1.335
	LC	.248	.061	.218	4.051	.000	.785	1.274

a. Dependent Variable: ES **source: own Survey, May2017**

4.1.3.5. Test of Homoscedasticity Assumption

One of the problems commonly encountered in cross-sectional data is hetero-scedasticity (unequal variance) in the error term. There are various reasons for hetero-scedasticity, such as the presence of outliers in the data, or incorrect functional form of the regression model, or incorrect transformation of data, or mixing observations with different measures of scale. The classical linear regression model (CLRM) assumes that the error term in the regression model has homoscedasticity (equal variance) across observations, denoted by (Guajarati 2012).

As can be seen from the below graph we don‟t have straight line on the loess line and it has no Sharpe angle. Hence, the data didn‟t violate the assumption of homoscedasticity. Which means the error terms have equal variance across observations?

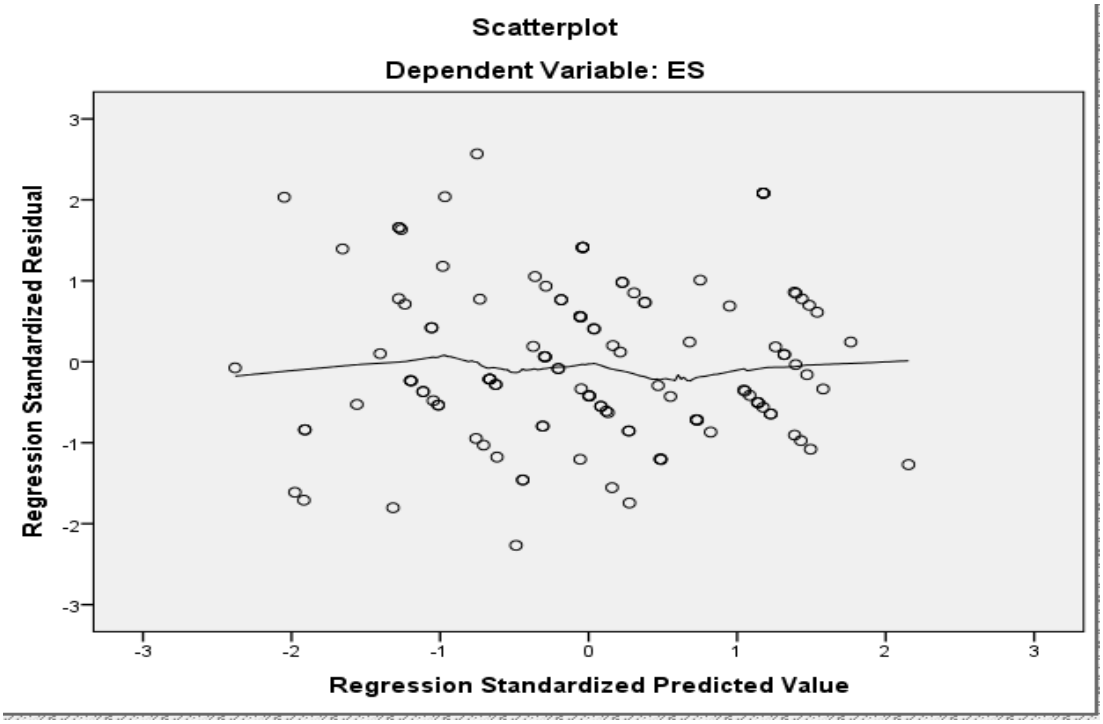


Fig7.homoscedasticity assumption test

In addition, Brooks (2008) explains, heteroskedasticity test as a very important test because if the model consists of heteroskedasticity problem, the OLS (Ordinary Least Square) estimators are no longer BEST and error variances are incorrect, therefore the hypothesis testing, standard error and confident level will be invalid. A Harvey test has been made, to ensure that this assumption is no longer violated. Accordingly, as the P value is not lower than 0.05, this assumption is not violated as can be seen below.

Table4.10 Heteroskedasticity Test

Heteroskedasticity Test: Harvey

F-statistic	0.582758	Prob. F(5,117)	0.7131
Obs*R-squared	2.988783	Prob. Chi-Square(5)	0.7017
Scaled explained SS	1.994720	Prob. Chi-Square(5)	0.8499

Source: Own survey: Eview output, May2017

4.2. Hypotheses Testing

After examining the correlation between the independent variables and airline business, multiple regression analysis was conducted using airline business success, as a dependent variable and low-cost, influence of national culture, integration in airline alliances, state influence, and liberalization of markets, as independent variables. The regression analysis helps to see the relevance of these five independent variables in affecting airline business.

H1. Implementation of low-cost-actors determines Ethiopian success in aviation business

H2. National culture has influence on Ethiopian success

H3. Ethiopian integration in Star Alliances contributed for its success in market share and revenue increment

H4. The government activities (State influence) affect Ethiopian success in aviation industry

H5. Market liberalization determines Ethiopian growth and expansion strategy and hence its success

Multiple Regressions

Multiple regression analysis is used to test the hypothesis and to ensure the influence of integration in alliance, market liberalization, national culture, low cost and government and privatization on airline business. This can be seen on the below two tables.

Multiple regression analysis test results of the effects of Star Alliance (SA), National Culture (NC), Market Liberalization (ML), Government influence and Privatization (GP) and Low Cost (LC) on Airline business success.

Table 4.11 Multiple Regression Model Test

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.459	.282		-1.630	.106
	SA	.259	.053	.271	4.885	.000
	NC	.108	.038	.159	2.811	.006
	ML	.166	.057	.165	2.929	.004
	GP	.372	.045	.451	8.185	.000
	LC	.248	.061	.218	4.051	.000

a. Dependent Variable: ES **Source: own Survey, May2017**

Table 4.12 Model Summary of Multiple Regression Test

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.856[a]	.734	.722	.227	.734	64.422	5	117	.000

a. Predictors: (Constant), LC, SA, GP, ML, NC **source: own Survey, May2017**
b. Dependent Variable: ES

The results from table 4.7 indicate that there is a positive and significant influence of star alliance membership, national culture, market liberalization, government and privatization influence, and low-cost strategy on ET‟s Business success in airline industry. The R was (0.856) at level ($\alpha \leq 0.05$), whereas the R^2 was (0.734). This means the (0.734) of airline business success results from these five determinant factors. Which means 73.4% of variability in airline business is explained by the model. It means also goodness of fit or the amount of variance explained by the independent airline business determinant factors, i.e 73.4% of airline business activity or success is explained by these five independent determinant factors in the model. In other words, 26.63% of the variation in airline business success is affected by other factors which are different from the five factors under this study. As β (standardized coefficients) was (SA = 0.271; NC=0.159, ML= 0.165, GP= 0.451 and LC= 0.218), this means the increase of one unit in Airline Business will increase each variables with their respective values (SA = 0.271, NC= 0.159, ML= 0.165, GP= 0.451 and LC=0.218). SA, NC, ML, GP and LC have a p value score of 0, 0.005, 0.004, 0.0, and 0.0respectively. All the P values are < 0.05, which shows that these factors are affecting (determining) the overall Ethiopian business success level at a significant level. **Therefore, Alliance, Low-Cost structure, Market Liberalization, Government and Privatization and National Culture influences Ethiopian Business Success in Aviation Industry as well.**.

The result also indicated that Government and Privatization dimension is the most important factor determining airline business in case of ET. Among the major factors here under the question were that the government support in allowing free management, tax exemption and

allowing for reinvestment, support in bilateral deals and others , followed by membership in alliance, implementation of low-cost strategy, Market Liberalization dimension and National Culture.

The established regression function is:

ES= -0.459+0.259SA+0.108NC+0.166ML+0.372GP+0.24LC

Where: ES is ET Business Success in Aviation Industry

SA is Star Alliance Membership

NC is Effect of National Culture

ML is Market Liberalization

GP is Government influence and Privatization and

LC is low-Cost Structure

The regression coefficient of each independent variable shows or tells how strong a variable affects or significant to describe the dependent variable. In this case, GP(Government influence and Privatization dimension) has the largest beta coefficient β= 0.372 which shows it is the most significant determinant factor in Ethiopian airlines context and followed by, integration in Star Alliance, β= 0.259 the second most determinant factor for ET, then Low-Cost Structure β= 0.24 the third determinant factor of ET‟s business success, followed by Market Liberalization dimension with β= 0.166 which makes it the fourth determinant and important factor of ET success in aviation and lastly the National Culture β= 0.108. The data analysis in this research finding shows that national culture has the least influence on Ethiopian Airlines business activity(success) while the impact of government and privatization dimension has the strongest influence or significance for Ethiopian business operations. In short, all the hypothesis tests show that the null hypothesis could not be rejected in this study.

ANOVA (Analysis of Variance)

ANOVA describes the overall variance accounted for the model. If the significance value of F statistics is small (smaller than say 0.05) then the independent variable does a good job

explaining the variation in the dependent variable. If the significance value of F test is larger than say 0.5, then the independent variables do not explain the variation in the dependent variable.

Table4.13 AVOVA Test

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	16.568	5	3.314	64.422	.000[b]
	Residual	6.018	117	.051		
	Total	22.586	122			

a. Dependent Variable: ES

b. Predictors: (Constant), GP, SA, LC, ML, **NC** **Source: own survey, May 2017**

The study used ANOVA to establish the significance of the regression model. In testing the significance level, the statistical significance was considered significant if the P value was less or equal to 0.05. The significance of the regression model is as per Table 4.8 above with P value of 0.0 which is less than 0.05. This indicates that the regression model is statistically significant in predicting factors affecting airline business in Ethiopian airlines case. Basing the confidence level at 95% the analysis indicates high reliability of the results obtained.

4.3. Interview Analysis

Interview is made with A/VP Strategic Planning and Alliance, Manager Partnership and Commercial Cooperation, Manager Corporate Strategy and Industry affairs, manager cost saving department, and with two area managers who works outstations. The summary of the interview will be summarized below.

Star Alliance and Strategic Partnership

Per the interview made with Manager Partnership and Commercial Cooperation, with a guidance and additional information from A/VP Strategic Planning and Alliance, the interview is presented below on each area.

The manager started by stressing that cooperation in current industry is important and is not an option unless for few wealthy exceptional organizations. The cooperation in airlines is even more important and very few gulf carriers may stand alone the competition like Emirates having huge

petro dollar support from their respective governments. Thus, cooptation is the call of the day. You cooperate in areas you need to cooperate and you will compete on areas you need to compete. Star Alliance is the biggest airline alliance with 28 member airlines with below details

Ethiopian is beneficial from star alliance member ship in the following major areas:

- **Increased Network and accessibility to different markets**: The Star Alliance network is the answer. It offers more than 1,000 destinations and more than 20,000 flights daily across our 29 airline partners (ADRIA Airways, Aegean Airlines, Air Canada, Air China, Air India, Air New Zealand, ANA, Asiana, Austrian, Avianca, Avianca in Brazil, Brussels Airlines, Copa Airlines, Croatia Airlines, Egypt Air, Ethiopian Airlines, EVA Airways, Juneyao Airlines, LOT Polish Airlines, Lufthansa, SAS, Shenzhen Airlines, Singapore Airlines, South African Airways, SWISS, TAP Portugal, THAI, Turkish Airlines, United® Airlines). You can choose the combination of airlines you prefer to get you where you want to go, and you can even choose to only fly one-way. It all adds up to the global advantage of using your miles for Star Alliance travel. Ethiopian is getting access to markets that it is not flying directly through star alliance members. In the future, this will include even local connecting partners which are not network carriers to address the local and regional needs to the deepest network service where these big network carriers won‟t reach (niche markets).
- It is also a means to beat competition through united and pooled resources. Digitization of products, ICT and global standard working procedures, consolidated systems like baggage hub, training and development, experience sharing, strategic resource sharing, knowledge sharing are among the few. Example, The baggage hub, the most recent IT hub project, went live at the end of 2016, and facilitates baggage message transfer between the member airlines, their ground handlers and the baggage handling systems at the airports. Today it processes on average five million baggage messages a day. This allows the airlines to better steer baggage operations and to keep customers informed on the status of their bag. Once implemented across the entire network, it will become easier to give customers proactive updates on their baggage delivery status. Using the existing IT Hub, Star Alliance has now introduced a new functionality which allows front line

employees to better assist customers in case of irregularities. Should their feeder flight be delayed, the connecting boarding pass information can now be access by the airline operating the feeder flight, thus enabling a faster and simpler rebooking process.

- ET and its customers are benefiting much from the alliance. It has given customers the confidence to fly and boosted the quality of service as well. Prior to joining star alliance, majority of ET‟s passengers are African Ethnics and passengers who tried ET‟s product are those willing to fly with. New passengers won‟t be confident enough to fly with ET. However, post star alliance membership, this trend has changed. The brand of ET increased, they equate ET service to global standards with that of big carriers like United Alliances, Lufthansa and others, feel secured, and the trend is remarkable to have new segments of passengers and markets as well.
- The other important advantage of star alliance is the FFP (Frequent Flyer Program) Program. One of the obstacles for passengers to fly on a new airline like ET was the issue of accumulated miles with another airline throughout its flying experience. And they won‟t opt to go to a new airline and lose those accumulated miles for nothing. But now all-star members can share their FFP miles and use it on any member carrier without restrictions. This really boosted the confidence and convenience of customers to choose star member carriers with no frustration or second thought about their miles accumulated before. The unlikely case of missing miles, members in any Star Alliance frequent flyer programme (FFP) can now claim these online, through their own FFP website, even when the miles were collected on another Star Alliance member carrier flight.

In general, the Alliance enters its third decade with a strong and comprehensive network serving over 1,300 destinations in 191 countries. Connectivity continues to expand by member carriers launching new routes and increasing frequencies, while network reach will grow through the addition of local and regional airlines through the connecting partner concept. Against this background, the Alliance‟s clear strategic focus has shifted from network expansion, to providing a seamless experience especially to the over 14 million annual customers who connect between member carriers on their journeys. Going forward, digital technologies will lie at the heart of this strategy. The IT hub infrastructure which the Alliance has put in place in recent years has allowed for the better integration of back-end services between the member airlines.

The new IT hub infrastructure has already enabled the Alliance; for example, improve the reliability of such processes as through-check in for multi-carrier itineraries or ensuring fast crediting of accrued frequent flyer miles into the correct customer account. And ET is benefiting a lot from star alliance membership in different ways and so does its customers. The compliance to the star standard will it self requires ET to cooperate and perform at the highest standard which helped the airline to improve its operational standard indirectly as well.

Market Liberalization

As many argue, increased intra-African air connectivity is essential if Africa is to seize the opportunities for growth promised by its demographic and resources advantages. Aviation in Africa supports nearly seven million jobs and $80 billion in GDP, but it faces challenges in terms of liberalization of markets, safety, costs, infrastructure, and regulation. Only through industry and governments working hand-in-hand can these challenges be overcome, to the benefit of everyone across Africa (Raphael Kuuchi, IATA‟s Vice President for Africa,2013)

A key enabler of liberalization is the Yamoussoukro Decision, signed by 44 African countries in 1999. To support economic growth, the agreement committed the countries to aviation deregulation and the promotion of transnational competition in regional markets. Specifically mentioned was the full liberalization of intra-African air transport services in terms of access, capacity, frequency, and tariffs. The Yamoussoukro Decision further encouraged sub-regional and regional organizations to pursue its implementation due to Africa‟s fragmented nature. But, to date, there has been no satisfactory move in this regard.

The potential dominance of some carriers is a concern for certain governments. Throughout Africa, a number of countries continue to restrict market access under the pretext that their national airline is not ready to compete in a liberalized market.

Discriminatory practices have also hampered the pace of liberalization. Some African countries have opened up to intercontinental traffic despite refusing access to their neighbors in Africa. This is particularly apparent in West Africa, where non-African airlines tend to be given more third/fourth and sometimes fifth freedom traffic rights while African carriers are denied.

As a result, often the best connection between two African cities can be via Europe or the Gulf.

So when it comes to market liberalization dimension, still African skies are restricted to African airlines. Ethiopian airlines and the government of Ethiopia have been playing its role and will continue to play on further liberalization of African skies. Despite possession of weak or no flag carriers by most African states, their skies are not free to airlines, especially to African carriers. This is coupled mainly with lack of awareness and corruption. It is easy for non-African carriers to get permission than African counter parts due to corruption and malpractice in government officials. This is in fact one of the major area that affected African airlines operation with their intention to increase market share. If this is not going to be streamlined well and facilitated, carriers like Ethiopian will face many challenges. Among these, high cost of aircraft utilization. If you don‟t have markets to fly, the aircrafts are going to be on ground and which means a huge cost in aviation. Understanding its importance, Ethiopian Airlines is working towards its improvement especially in Africa. The officials suggested that all African carriers through AFRA should further push for its improvement through AU and it really needs every ones cooperation and coordination. The role of Ethiopian government is also critical in pushing this agenda through regional and continental organizations. However, ET is trying its best to use best of this factor.

For example, in the past 6monthsof the calendar year, the department has signed Bilateral Air Services Agreements/ Memorandums of Understanding signed with 9 countries; Greece, Ghana, Portugal, Guinea ,Nigeria, Argentina, Peoples Republic of China, Democratic Republic of Congo, Republic of France. Codeshare agreement signed with Singapore Air (SQ) and Air Europa (UX). All round Partnership discussions with, Government delegation of Zimbabwe, Delegations of Blue Ocean Airlines, Jubba Airways and Congo airways is made. Business plan submitted to the government of Uganda, Chad and Madagascar. Signed Memorandum of Understanding with ¯ ECAir, Lam Mozambique Airlines was also signed.

Cost Saving

Without exaggeration, the airline business is the toughest business in the world. The fact that it is highly capital intensive and highly skilled labor intensive makes it volume driven which needs minimum critical mass in size to make a difference in the hyper competitive market and that in turn needs fast growth to reach mega size (mega carrier level which is at least 100 airplanes in service) and fast growth brings its own stretch of internal resources both in finance and critical

human resources etc… this game plays continuously to form a vicious circle which keeps airline executive management awake in the night. On the other hand, individual airlines in their continuous quest to grow internally, they collectively oversupply excess capacity in the market which causes supply to exceed demand and price war which is good to the customer but very bad to the airlines eating up on their profit margin; as a result of this the airline business is now the most unprofitable with return on investment lower than the cost of capital.

The predicaments of airline do not stop here; even the inadequate and cutthroat thin profit margin is affected by many unpredictable global and regional shocks like wars, terrorism, epidemic diseases, global, regional, national economic cycles, oil prices, monopoly suppliers behavior, excessive and uncoordinated regulations etc….

As part of the global mid-size carrier, Ethiopian has been facing these problems from time to time; accordingly we are now again seriously challenged by weak African economies and significantly reduced passenger and cargo traffic specially those heavily dependent on the export of oil. This will make the airline not to utilize our current capacity which will significantly increase cost. Hence, cost saving is not an option; it is an area everyone should work on daily basis. This can be achieved through fighting inefficiency, wastage of resources, materials, supplies, creativity, streamlined processes, effectiveness(doing the right things), efficiency (doing things in the right way) and economical (doing things at the lowest possible cost). The costs saving areas are where costs can really be saved through operational excellence and increased efficiency and productivity. The major strategic and structural cost saving area includes, fuel tinkering, catering, foreign overhaul, landing and overflying, aircraft materials and others. For example, the airline saved a cost of ETB 1.13 billon in this semiannual calendar year alone (semiannual report 2017).

National Culture

When it comes to the national culture dimension, the management officials belive that there is a change as a nation towards working culture. The motives and ambitions to grow fast and be one of middle income country in 2020 have motivated most Ethiopians to work hard and change prior perceptions. The live challenge and scale has also forced most youngsters to believe, working hard would be the only means to survive. Yet, the culture is not developed to the highest level. But all agree that Ethiopian Airlines has its own corporate culture that aspires team work,

high productivity, efficiency and effectiveness, exhibiting citizenship behavior, strong attire, work and ethical disciplines would create a good working culture. Otherwise, the environment wouldn‟t allow staying. Hence, everyone will strive to adjust itself with this culture.

State (Government) Influence and Privatization

When it comes to government influence, Ethiopian Airlines suggested that the government of Ethiopia is supporting ET in all areas needed. The support is immense and includes in areas of bilateral issues, overflying permits issues, allowing and leaving the management of ET for industry experts, investment and other government to government deals also help ET to gain business and may others. Regarding privatization dimension, the officials believe that this has the minimal impact so far as there are a few private airlines with insignificant market share on domestic and international sectors.

Chapter Five

5. Summary, Conclusions, Recommendations and Future Work

5.1. Summary of Findings

Looking at the demographic characteristics of respondents, out of the 415 respondents 254 were male which is 61% of the total respondents is while the numbers of female respondents were 161, which accounted 39% of the total respondents. 52% of the respondents were management employees which shows majority of them have proper understanding of the subject understudy and while 42% were senior non-management employees. Regarding educational back ground, the numbers of respondents with BA degree were 279 which accounted for 67% of the total respondents. And the rest 33% hold MA degree. Regarding their divisions (departments) marketing was 57%, international sales 29% and ground and inflight services accounted the rest 14%. When it comes to the age category of the respondents, 42% were below 30yrs of age, 48% between 31 to 40yrs age, 6% between 41 and 45 and finally 4% above 45yrs of age. The experience of respondents were also tabulated with 63% between 5 to 10yrs, which are the majority, 28% from 11 to 20yrs and 9% have an experience of more than 21years. Moreover, 98.6% of them responded and agreed that Ethiopian Airlines is a successful company while only 1.4% of them responded not successful.

From the descriptive statistics point of view, the study showed, there is strong correlation as the value of tolerance is higher than 0.7 in all of the variables (determinant factors) under study. Plus, all exhibited positive correlation indicating that there is a positive linear relationship between airline business (ES) and the other independent variables (SA, NC, LC, ML and GP). This means, as the value of one of these independent variables increases, so does the value of the dependent variable. As suggested by Field (2005), correlation values less than 0.3 are considered

weak, correlations between 0.3 and 0.7 are considered moderate, and correlations greater than 0.7 are considered strong as the closer it gets to 1 the stronger it becomes and the closer it gets to zero the weaker it is.

And lastly, the regression coefficient of each independent variable shows or tells how strong a variable affects or stasistically significant to describe the dependent variable. In this case, GP(Government Influence and Privatization dimension) has the largest beta coefficient(β) which shows it is the most stasistically significant determinant factor in Ethiopian airlines context and followed by, Integration in Star Alliance, then Low-Cost Structure, Market Liberalization dimension and lastly by National Culture. The data analysis in this research finding showed that national culture has the least influence on Ethiopian Airlines business activity(success) while the impact of government and has the strongest influence or significance for Ethiopian Airlines business operations.

Implementation of low cost structure is another area the airline is working hard. The airline sees cost saving as one area of improvement and gained remarkable achievement in this regard as well. The airline strictly stresses and believes that, cost saving doesn‟t mean to compromise customer service or any other important operation of the airline business. The costs saving areas are where costs can really be saved through operational excellence and increased efficiency and productivity. The major strategic and structural cost saving area includes, fuel tinkering, catering, foreign overhaul, landing and overflying, aircraft materials and others. For example, the airline saved a cost of ETB 1.13 billon in this semiannual calendar year alone (cost saving department, May 05, 2017).

5.2. Conclusions

The main objective of this research was to test the determinants of airline business in Ethiopian airlines context based on a conceptual study by Maik, Huenttinger, 2013. The aim was also to test it empirically in ET‟s context. These determinant factors includes, influence of national culture, implementation of low-cost, integration in airlines alliance, liberalization of markets and state influence. Accordingly, the study tried to test if these factors determine the business success of ET. The finding of this study showed that, all of these five factors determine the Ethiopian Airlines business success and showed positive relations. Furthermore, GP(Government influence and Privatization dimension) has the largest beta coefficient(β) which shows it is the most statistically significant determinant factor in Ethiopian airlines context and followed by, integration in Star Alliance, then Low-Cost Structure membership, followed by Market Liberalization dimension and lastly by National Culture. The data analysis in this research finding shows that national culture has the least influence on Ethiopian Airlines business activity(success) while the impact of government and privatization dimension has the strongest influence or significance for Ethiopian Airlines business operations.

From this, we can say that the role of government in areas of allowing the airline management to be managed by industry experts, in areas of bilateral and multilateral negotiations and open sky agreements in AFRA and others, in allowing the airline to reinvest its profit instead of paying for government, in areas of helping ET to secure loan etc. is quite significant. The government has to continue this support to further shine the airlines success and achieve its strategic vision2025; to be the leading aviation group in Africa. The liberalization aspect has minimum effect on Ethiopian case. This is because there small private airlines in the country and doesn‟t really affect Ethiopian markets both in domestic and international markets so far.

The study also showed that being a member of star alliance helped for its operational success and found to be the second most important factor. This can be demonstrated in high markets share, increased load factor, shared revenue, shared costs like promotions, strong brand and access to restricted or remote markets, increased and enhanced customer service, ICT etc to name a few.

Implementation of low cost structure is another area the airline is working hard. The airline sees cost saving as one area of improvement and gained remarkable achievement in this regard as well. The airline strictly stresses and believes that, cost saving doesn‟t mean to compromise customer service or any other important operation of the airline business. The costs saving areas are where costs can really be saved through operational excellence and increased efficiency and productivity. The major strategic and structural cost saving area includes, fuel tinkering, catering, foreign overhaul, landing and overflying, aircraft materials and others. For example, the airline saved a cost of ETB 1.13 billon in this semiannual calendar year alone (semiannual report 2017).

When it comes to market liberalization dimension, still African skies are restricted to African airlines. Ethiopian airlines and the government of Ethiopia have been playing its role and will continue to play on further liberalization of African skies. Despite possession of weak or no flag carriers by most African states, their skies are not free to airlines, especially to African carriers. This is coupled mainly with lack of awareness and corruption. It is easy for non-African carriers to get permission than African counter parts due to corruption and malpractice in government officials. This is in fact one of the major area that affect airlines operation with their intention to increase market share. If this is not going to be streamlined well and facilitated, carriers like Ethiopian will face many challenges. Among these, high cost of aircraft utilization. If you don‟t have markets to fly, the aircrafts are going to be on ground and which means a huge cost in aviation.

Speaking of the influence of national culture, this survey showed that it is the least determining factor in Ethiopian context. According to Hofstede‟s (2001) national cultural model would be best suitable – due to its worldwide acceptance and its focus on work cultures. Hofstede suggests dimensions like “power distance”, “uncertainty avoidance” or “individualism versus collectivism” to distinguish countries from each other. Probably all scholars, even supporters of the hard-side of business management accountants, financial controllers and production managers), as well as globally oriented decision makers, would agree that national culture has some kind of impact on any company (Bjerke, 1999). But the result of this study showed otherwise, the least influence with lower beta coefficient in the regression analysis. The researcher believes that, our culture as a nation is weak in promoting hard work, high productivity, high team sprit etc. So in this regard, the study showed the national culture has

contributed less for Ethiopian Airlines Success. In fact, a further study is required as it is generally believed that, the fact that we are welcoming and hospitable people helped us and Ethiopian airlines in customer handling areas. Thus this needs further study to be strengthened. But the fact is, the airline industry needs high caliber, committed, team spirited hardworking employees to be successful. In this regard, as reported on the airlines a semi-annual report Ethiopian employees‟ productivity is on the lowest side as compared to the industry average further witnessing the corporate culture has to be strong to overcome and fills the gap created by the national culture in promoting hard work and creativity.

5.3. Recommendations

The regression coefficient of each independent variable shows or tells how strong a variable affects or significant to describe the dependent variable. In this case, GP(Government influence and Privatization dimension) has the largest beta coefficient β= 0.372 which shows it is the most statistically significant determinant factor in Ethiopian airlines context and followed by, integration in Star Alliance, β= 0.259 the second most determinant factor for ET, then Low-Cost Structure β= 0.24 the third determinant factor of ET‟s business success, followed by Market Liberalization dimension with β= 0.166 which makes it the fourth determinant and important factor of ET success in aviation and lastly the National Culture β= 0.108. The data analysis in this research finding shows that national culture has the least influence on Ethiopian Airlines business activity(success) while the impact of government and privatization dimension has the strongest influence or significance for Ethiopian business operations. Therefore, the following are the major recommendations that need to be looked at:

- As the role of government is high according to this study, the airline should work closed with government to further increase its sustainable growth in areas of bilateral and multilateral air transportation agreements and all other areas where the government support is needed. And the government has to take it series and continue to support the airline as well. Both parties should work closely and look for diverse areas to take every opportunity. The governance and industrial affairs office of Ethiopian Airlines has to take the leading role in this respect as well.
- Being Star Alliance membership is the second most important for ET. Hence ET should work more in cooperation with star members in areas like information technology, customer service, baggage handling, code shares etc in order to enjoy all the benefits of the alliance. Employees should get enough awareness and training on the advantages that EAL gets from other star members. Customers of ET needs to more familiarized all the

benefits and advantages they can get from this partnership. This will increase the loyalty, confidence to fly with ET and member airlines with excellent experience.

- More areas of cost savings which will not compromise operational excellence and customer service has to be investigated further and continue to save costs. This element is the third most important determinant factor for ET‟s success. As the company has huge capital and operational cost basically emerging from the very nature of the business itself, improved internal efficiency, streamlined processes, increased employee productivity, creativity and maximum utilization of ICT infrastructures, and bringing operational efficiency and effectiveness through proper and refined implementation of ACE(Achieving Competitive Excellence) by all divisions would help a lot to save cost. Its certified aviation academy has to work more in producing quality trainees (both new and recurrent) so that employees will be efficient and effective in handling their jobs. This in turn contributes in cost saving by minimizing and avoiding waste and error in doing things right the first time.
- Market Liberalization is the forth and important factor that determines ET‟s success. As African economies especially those oil dependent countries are struggling, the airline should also look for alternate markets with actual or potential market growth to serve by strengthening bilateral and other agreements or through star alliances, code shares or special prorate agreements. As an African and Pan-African airline, ET has to continue to grow more in African markets. However, African skies are still most restricted to African carriers. So ET has to push further in cooperation with government, AFRA and other concerned to liberalize it more and enjoy the maximum share. One way of achieving this would be by cooperating and helping small and emerging airlines in Africa and support them to grow better. ET should also push for continental cooperation of African Airlines with sprit of an African brotherhood. This will help African Airlines to have the better share from African market which is otherwise today. Currently 80% of African traffic is taken by non-African carriers especially by Gulf Carriers and this has to be reversed. And one way of doing this is through African airlines and government cooperations. Thus ET has to play the leading role here as a giant African carrier. The airline has to continue its multi-hub strategy and expanding its hubs in other parts of Africa to increase its market

share and growth like it did in West Africa, Togo with ASKY Airline, in southern Africa with Malawian Air.

- According to this study, national working culture exhibited the lowest influence on the airline success and hence this is a good indicator that our culture as a nation has weakness on promoting high productivity and creativity in general. Hence, the airline has to work hard towards building and sustaining its strong corporate culture that promotes hard work, team spirit, high productivity, and be area of high socialization and motivation using different meanses be it intrinsic or extrinsic meanses.
- Ethiopian airlines should work relentlessly by conducting research on these and other determinant factors for its success in aviation industry. It has to continue on its strength and work towards areas where it is doing weak. Ethiopian has to also identify its core competencies and competitive advantages in order to make these and other determinant factors suit to its best interest.
- Ethiopian has to also device the best human resource development, human capital management, talent management, best corporate culture that fosters individual and group development and other important infrastructures as it is doing now in order to be beneficial from these and other determinant factors in the industry.

5.3 Limitations and Future Areas of Research

This research is conducted by taking sample population of size 415 senior and management employees of Ethiopian airlines and restricted to the three major divisions of the airline, namely Marketing, International Sales and Ground and Inflight Operations. All of these three divisions are under commercial division. It would be worth to have diverse departments in the airline like the aviation academy, Maintenance and Overhaul Repair (MRO) Cargo, Catering, Human Resource and other divisions (departments). Plus, all employees at all levels can be part of further research as the researcher believes there could be elements that are overseen by seniors and management employees while it could be area of focus for juniors.

More importantly, the researcher believes that future researches can incorporate other determinant factors in the industry which are not part of this study to make the research further incorporative and accurate. These includes, profit, Market share, Load Factor(LF), Average Seat Kilometer(ASK), Operational Excellence, Fleet management, Infrastructure, Customer Satisfaction, Branding, (HRD) Human Resource Development to name a few. From the determinant factor under study, State (Government) influence and Privatization, the privatization aspect doesn‟t have that much impact on Ethiopian Airlines operations as there are few private owned airline companies in Ethiopia which has no as such big impact on Ethiopian Airlines business. This can also be area of future research as the markets for private airlines grow to study the impact of these local and regional airlines on Ethiopian Airlines business.

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Appendix

ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES
COLLEGE OF BUSSINES AND ECONOMICS
DEPARTEMENT OF BUSINESS ADMINSTRAION
Research Questionnaire

Thesis Title: Determinants of Airline Business in Aviation Industry: A Case Study on Ethiopian Airlines

This questionnaire is prepared to gather primary data from Ethiopian Airlines senior and management employees in order to gather the necessary information that is necessary for my thesis. The research basically addresses the determinants of airline business in aviation industry. And the objective of this questionnaire is to obtain the first hand information from you all and come up with useful conclusion.

There are three types of questions which include: yes or no questions, Matrix format questions and open ended questions. Please answer all questions by reading carefully and spending your valuable time on it.

Note that your response will not be used other than pure academic purposes. Please give your response as per the direction(s) presented in each question

Thank you in advance.

I. Personal information

1. Name of the respondent (optional) _____ 1.1Age: A) Below 30 B) 30-40 C) 40-45 D) above 45

1.2 Sex: A). Male B). Female 1.3 Nationality: _____

1.4 Educational Background: A) Below Diploma B) College Diploma C) Degree D) MA E) PhD and Above

1.5 Profession: _____

1.6 Working Position/Occupation: _____

1.7 Working experience in the company: _____

II. Research related information

2. Do you think Ethiopian Airlines is a successful company? A. Yes B. No

Note: your answer to Question no. 3 4 will be based on the information provided in the tables.

Please circle the number of your choice ranging from **1 (strongly Disagree)** to…. **5(strongly Agree). Please select only one at a time. And read the statements carefully!**

3. **3.1. Star Alliance Related Questions**	**Strongly Disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
1. Being a member of Star-Alliance is important for ET	1	2	3	4	5
2. ET can benefit from star alliance on marketing, promotion and joint advertisements	1	2	3	4	5
3. Knowledge sharing and best practice is another advantage ET can get from star alliance	1	2	3	4	5
4. Operational efficiency, safety, customer service is another area of benefit ET can get from star alliance	1	2	3	4	5
5. Shared and increased revenue, increased in traffic volume, coordinated schedule, cost reduction, are advantages that ET benefits from star alliance	1	2	3	4	5
6. Star alliance has Increased ET"s network size in global reaches, Easy check-in, transfers and connections, frequent flyer programs, global recognition, & enhanced product propositions and brand recognition, state of the art online presence are additional advantages to ET & other members airline customers	1	2	3	4	5
3.2. Questions Related to Influence of National Culture	**Strongly Disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
1. ET is a pan African carrier and it positions itself as an a Pan-African airline	1	2	3	4	5
2. The Ethiopian culture as a country contributed for the success of Ethiopian	1	2	3	4	5
3. Ethiopian employees like to associate with their company and love to work for it	1	2	3	4	5
4. Our culture promotes innovation, hard work and belongingness to our company	1	2	3	4	5
5. Team work is one of our strong culture as ET	1	2	3	4	5

employees					
6. ET‟s top management performance and view can help and positively influence the work culture of the company and top mgt can establish norms of behavior by their action can be role models	1	2	3	4	5
7. ET‟s socialization culture helps to familiarize new entrants and feel motivated others as well.	1	2	3	4	5
8. Strong dedication and going extra mile(discretionary behavior) is what most ET employees exhibit	1	2	3	4	5
9. ET‟s working culture is adoptable to current changing and very dynamic aviation industry	1	2	3	4	5
10. ET‟s culture promotes and validates individual growth of its employees which is basically based on merit & believes its employee are its number one assets	1	2	3	4	5
3.3. Questions Related to Implementation of Low-Cost Factors	**Strongly Disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
1. Cost saving/reduction is one strategic area that ET is working on and can be balanced with increased efficiency wherever possible	1	2	3	4	5
2. Extremely motivated and friendly employees can balance lack of on-board amenities that are put in place because of cost cutting strategy. Increased efficiency an also balance cost cutting initiatives.	1	2	3	4	5
3. Cost saving/cutting doesn‟t mean providing inferior service, it expresses a clear focus on the essentials	1	2	3	4	5
4. ET considers availing lowest possible fares in	1	2	3	4	5

order to attract more customers and to compete with low cost carriers					
5. Efficient network and connection, efficient aircraft utilizations helped to ET to save cost like saving aircraft ground time cost	1	2	3	4	5
6. ETs strong in-house maintenance and world class training facilities are one means of reducing cost in addition to sources of income	1	2	3	4	5
7. ET‟s web based sales helps to reduce GDS cost very significantly	1	2	3	4	5
8. ET has a cost advantage from low labor available in the market as compared to OALs(other airlines) and the strategic location of ET also helped to reduce cost in terms of accessibility to the world with an average of short flight hours like on fuel consumption	1	2	3	4	5
3.4. **Questions Related to the Market Liberalization Dimension**	**Strongly Disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
1. ET benefited from open sky agreements and bilateral agreements to expand its operation to closed markets	1	2	3	4	5
2. Still African restricted open-sky policies have negative impact on ET‟s expansion strategy	1	2	3	4	5
3. ET‟s major markets are 6th freedom markets which are the result of market liberalization followed by 5th air freedom	1	2	3	4	5
4. Air freedoms are the best models/factors to determine the progress & degree of liberalization in airline business	1	2	3	4	5

5. Protection of domestic and flag carriers by respective governments and inadequate implementation of all air freedoms contributed to the limited expansion of ETs 5th, 7th, 8th and 9th freedoms expansion and all airlines in general	1	2	3	4	5
3.5. **Questions Related to State(government) and Privatization Dimension**	**Strongly Disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
1. Ethiopian government has a huge contribution for ET‟s success	1	2	3	4	5
2. The government allows free management and left the company leadership for the industry experts without or little intervention	1	2	3	4	5
3. Ethiopian government also assist ET in bilateral, multilateral and open sky agreements(issues)	1	2	3	4	5
4. Government also assist in facilitation and support of securing loans for its capital and other major financing	1	2	3	4	5
5. Government also supports in tax exemptions and allow ET to reinvest its tax for its growth	1	2	3	4	5
6. Air transport, FDI and other economic, social, and political agreements by Ethiopian govt with other govts help ET to benefit from market opportunities both in terms of passengers and cargo	1	2	3	4	5

4. Please rank the below five determinant factors of airline business from top to the lowest according to their contribution (1st, 2nd,…) and per your understanding

4 Questions Related To Ethiopian Success	Strongly Disagree	Disagree	No
1. ET is a profitable company			
2. ET is global competitor, brand, & has high growth rate, Market share, Load Factor and best Product			
3. Infrastructure, operational efficiency, safety, best network structure, youngest fleet and utilization are among areas ET is very successful			
4. ET provides best customer service and high on time performance			
5. ET has strong strategic management and HRD plan			

5. Please Rank the determinant factors in order of importance you think.

Determinant Factors for the Success of the airline	Rank the factors according to their importance
Influence of the national culture	
Implementation of low-cost structures/factors	
Integration in Airline Alliance	
State Influence	
Liberalization of Markets	

6. If you have anything to add, comment, suggest, question, or criticizes about the questioner and the issues rose on the topic, you are very welcome.

_____

_____

_____

Thank you!!!

Interview Questions

Part A: General information about the interviewee

The respondent:

Position: .....

Years of experience with the airline: (in years)…….

Department_____

B: Questions related to the problem under study

General Questions

1. Do you think ET is a successful company?
2. How do you explain Ethiopian successes? What are the measures for its success?
3. What do you think are the most determinant factors in airline business?
4. Do you think factors like Low-Cost-Factors, Influence of National Culture, Integration in Airline Alliances, State Influence, and Liberalization of Markets) determine Ethiopian airlines success?
5. Please elaborate how each of the determinant factors under item 4 affect ETs operation/success.
6. Tell me how market liberalization helps or affects ET‟s operation positively or negatively? Regionally, globally, bilateral issues as well
7. How can ET will be beneficial from being a member of star alliance
    a. Financially
    b. Non-financial and C. How do customers of ET be beneficial from star alliance?
8. What does cost saving mean and how can pursue low cost strategy be determinant factor for ETs success?
9. How can we explain the support of Ethiopian government for ET‟s success so far and what can be recommended in the future as well? In what areas does government support ET? Can we mention them?
10. Why is the African skies are yet restricted especially to African carriers like ET though they have no or weak carriers to save the market for? Gulf Carriers have better access than African counter parts, why is this?
11. Please mention if you think any other determinant factors are left capable of determining airline business and worth included.

Thank you!

Statistical and Regression Analysis Reports

Reliability Test

Cronbach alpha for each construct

Reliability Statistics

Cronbach's Alpha	N of Items
.841	49

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
SA1	191.06	297.859	.222	.840
SA2	191.38	296.112	.224	.840
SA3	191.41	298.065	.159	.841
SA4	191.62	296.164	.244	.839
SA5	191.75	292.446	.339	.838
SA6	191.28	292.729	.471	.837
NC1	191.26	292.727	.370	.837
NC2	191.72	295.456	.188	.840
NC3	192.02	282.570	.473	.834
NC4	192.10	285.420	.458	.835
NC5	191.91	292.906	.262	.839
NC6	191.89	282.687	.594	.832
NC7	192.05	284.481	.545	.833
NC8	191.72	287.687	.451	.835
NC9	191.98	286.893	.515	.834
NC10	192.31	285.488	.476	.834
LC1	191.37	295.656	.289	.839
LC2	191.95	296.298	.177	.841
LC3	191.40	294.364	.265	.839
LC4	192.08	300.120	.027	.844
LC5	191.44	293.203	.354	.838
LC6	191.23	295.102	.274	.839
LC7	191.94	293.560	.228	.840
LC8	191.17	297.124	.218	.840

ML1	191.83	295.277	.221	.840
ML2	191.67	291.243	.400	.837
ML3	191.76	301.693	.003	.843
ML4	191.57	295.613	.279	.839
ML5	191.88	292.138	.343	.838
GP1	191.53	292.681	.353	.838
GP2	191.93	287.712	.428	.836
GP3	191.50	291.814	.436	.837
GP4	192.02	296.062	.212	.840
GP5	191.86	292.617	.314	.838
GP6	191.63	293.132	.331	.838
ES1	191.28	293.322	.442	.837
ES2	191.19	298.330	.160	.841
ES3	191.87	293.235	.296	.838
ES4	191.28	292.729	.471	.837
ES5	191.88	281.737	.622	.832
SA	191.41	295.304	.443	.838
NC	191.90	287.134	.694	.833
LC	191.57	295.139	.544	.838
ML	191.74	294.780	.504	.838
GP	191.75	291.972	.567	.836
ES	191.50	291.521	.725	.836
Mahalanobis Distance	190.63	267.879	.275	.850
Mahalanobis Distance	190.63	267.879	.275	.850
Mahalanobis Distance	190.63	267.879	.275	.850

Normality Test
Skeweness and Kurtosis

Descriptive Statistics

	N	Mean	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
SA	123	4.18	.099	.218	-.444	.433
NC	123	3.70	-.282	.218	-.160	.433
LC	123	4.02	-.079	.218	-.221	.433
ML	123	3.85	.013	.218	-.531	.433
GP	123	3.85	.008	.218	-.102	.433
ES	123	4.09	-.144	.218	-.104	.433
Valid N (listwise)	123					

Colliniarity and Multi-colliniarity Tests

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-.459	.282		-1.630	.106		
	SA	.259	.053	.271	4.885	.000	.740	1.351
	NC	.108	.038	.159	2.811	.006	.716	1.396
	ML	.166	.057	.165	2.929	.004	.717	1.395
	GP	.372	.045	.451	8.185	.000	.749	1.335
	LC	.248	.061	.218	4.051	.000	.785	1.274

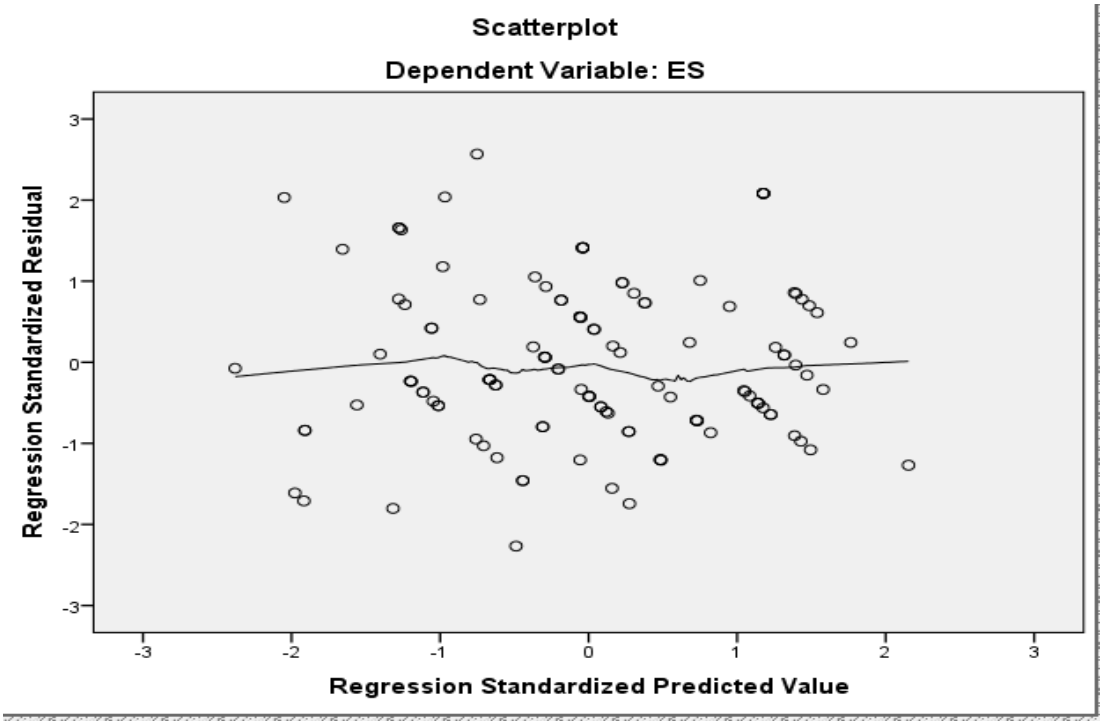
a. Dependent Variable: ES

Table 4.5 Multi collinearity Test

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-.459	.282		-1.630	.106		
	SA	.259	.053	.271	4.885	.000	.740	1.351
	NC	.108	.038	.159	2.811	.006	.716	1.396
	ML	.166	.057	.165	2.929	.004	.717	1.395
	GP	.372	.045	.451	8.185	.000	.749	1.335
	LC	.248	.061	.218	4.051	.000	.785	1.274

a. Dependent Variable: ES **source: own Survey, May2017**



Homoscedasticity Test: visual inspection of absence of sharp lines and sharpe angels which tells that the homoscedasticity assumption is met.

Table 4.6 Multiple Regression Model Test

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.459	.282		-1.630	.106
	SA	.259	.053	.271	4.885	.000
	NC	.108	.038	.159	2.811	.006
	ML	.166	.057	.165	2.929	.004
	GP	.372	.045	.451	8.185	.000
	LC	.248	.061	.218	4.051	.000

a. Dependent Variable: ES **Source: own Survey, May2017**

Table 4.7 Model Summary of Multiple Regression Test

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.856[a]	.734	.722	.227	.734	64.422	5	117	.000

a. Predictors: (Constant), LC, SA, GP, ML, NC **source: own Survey, May2017**
b. Dependent Variable: ES

Table4.10 Heteroskedasticity Test

Heteroskedasticity Test: Harvey

F-statistic	0.582758	Prob. F(5,117)	0.7131
Obs*R-squared	2.988783	Prob. Chi-Square(5)	0.7017
Scaled explained SS	1.994720	Prob. Chi-Square(5)	0.8499

Source: Own survey: Eview output, May2017