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**FINANCIAL STATEMENT ANALYSIS IN THE AIRLINE
INDUSTRY: A COMPARATIVE STUDY OF TURKISH
AIRLINES AND ROYAL DUTCH AIRLINES (KLM)**

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ÖZET

Tez, “Havayolu Sektöründe Mali Tablo Analizi: Türk Hava Yolları (THY) ve Royal Dutch Havayolları (KLM) Karşılaştırması” başlığı ile incelenen firmaların finansal performansının değerlendirilmesini ve mali tablo analizlerinin uygulanmasını içermektedir. Çalışmanın amacı, firmanın finansal durumları hakkında değerlendirme yapmaktır. Bu, bir süreç içerisinde anahtar performans göstergesi olan; likidite, ödeme gücü ve karlılıkla birlikte verimliliğin analizinden oluşmaktadır. Çalışmada kullanılan bilgiler firmaların yıllık raporlarından elde edilmiştir. Finansal performans trendinin analizi için finansal tablolar en ince ayrıntısına kadar titizlikle incelenmiştir. Burada amaç; finansal oran analizi, trend analizi ve dikey analiz gibi farklı finansal analiz araçlarını ve tekniklerini uygulamaktır. Ayrıca firmalar arasında karşılaştırma yaparken, bunların geçmişleri ve gelecekteki beklentileri de sektörle karşılaştırmalı olarak analiz edilmiştir.

Bilanço analizinde THY güzel bir sonuç elde ederek en fazla büyüme gösteren havayolu şirketlerinden biri olduğunu ispat etmiştir. Firmanın özellikle duran varlıkları artış gösterirken özsermayesi de artış eğilimindedir. Buna karşılık KLM'nin bilançosu çok açık bir şekilde daha kötüdür. Firmaların gelir tabloları ele alındığında ise THY'nin gelirleri analizin gerçekleştirildiği dönemler içinde artış göstermiş ve ekonomik kriz ve yakıt maliyetlerindeki yükselişe rağmen kar açıklamıştır.

Oran analizinde likidite ve karlılık oranlarında THY rakiplerine ve sektöre göre iyi bir durumdadır ancak firmanın verimliliği; satışların işletme sermayesine, topla varlıklara, duran varlıklara oranı ile ilgili problemleri vardır. KLM'nin verimliliği de düşüktür. Borç oranına bakıldığında ise KLM ve THY'nin sermaye yapılarında uzun vadeli borçların büyük bir yer kapladığı görülmektedir. Bu oran kendi ortaklarından daha yüksek olarak %60-80 aralığındadır. Uzun vadeli borçlar yüklü faiz ödemelerine neden olduğu için bu durum pahalı ve risklidir. THY ve KLM arasında bir karşılaştırma yapıldığında KLM daha büyük borç oranına sahip olduğu için daha risklidir.

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SUMMARY

The thesis entitled “Financial Statement Analysis in the Airline Industry: A comparative Study on Turkish Airlines (THY) and Royal Dutch Airlines (KLM) applies financial statement analysis and assesses the financial performance of the Studied companies. The objective is to evaluate the financial health of the companies. It is through the process of financial analysis that the key performance indicators, such as, liquidity, solvency, and profitability as well as the efficiency of operations of a business entity will be ascertained. The data used in the study was obtained from the annual reports of the studied companies mainly financial statements. Financial statements were thoroughly investigated to analyze the financial performance trend. The goal is achieved through implementation of different financial analyzing tools and techniques, mainly financial ratio analysis, trend analysis and vertical analysis. Furthermore, comparisons are made between companies; their past and expected future development is analyzed and compared with the industry average.

From the common size analysis of balance sheet, Turkish airlines being one of the fastest growing airline companies, have demonstrated quite good result of balance sheet analysis. The company’s assets were increasing especially its fixed assets and its shareholder’s equity also was increasing. In contrast, KLM balance sheet was obviously worse. Having analyzed the companies’ income statements, THY’s revenue was increasing through the analyzed period and it was reporting a profit regardless the economic crisis and increase in fuel costs.

From the ratio analysis, liquidity and profitability ratios for THY was good compared to its rival and industry average but the company had a problem in efficiency measured by sales revenue to capital employed especially total assets and fixed assets. KLM’s efficiency was also low. In debt ratio, both THY and KLM indicated a great portion in long-term debt in their overall capital structure. The portion was higher than their own equity – reaching the gearing ratio values over 60 – 80%. This situation can be considered risky and expensive, since substantial long-term debt induces substantial interest payment burden. By making comparison between THY and KLM, KLM is riskier and carries high debt ratio.

Abbreviations

AFB	: Accounting Based Financial Performance
ATAG	: Air Transport Action Group
BRSA	: Banking Regulation and Supervision Agency
CMB	: Capital Market Board
DFI	: Development Financial Institutions
EBIT	: Earnings before Interest and Tax
EBITDAR	: Earnings before Interest, Tax, Depreciation, Amortization and Restructuring or Rent costs
EEA	: European Economic Area
EFRAG	: European Financial Reporting Advisory Group
EPS	: Earnings per Share
EU	: European Union
GAAP	: General Accepted Accounting Standards
GDP	: Gross Domestic Product
IAS	: International Accounting Standards
IASB	: International Accounting Standard Board
IASC	: International Accounting Standards Committee
IATA	: International Air Transport Association
ICAO	: International Civil Aviation Organization
IFAC	: International Federation of Accounting
IFRS	: International Financial Reporting Standards
IOSCO	: International Organization of Securities Commission
KLM	: Royal Dutch Airlines
MDA	: Multiple Discriminate Analyses
ROA	: Return on Asset
ROABIT	: Return on Asset before Interest and Tax

ROCE	: Return on Capital Employed
ROE	: Return on Equity
TASB	: Turkish Accounting Standard Board
TFRS	: Turkish Financial Reporting Standards
THY	: Turkish Airlines
TL	: Turkish Lira
UNCTAD	: United Nations Conference on Trade and Development

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CHAPTER ONE

1. BACKGROUND OF THE STUDY

1.1. GENERAL INTRODUCTION

Accounting is the language of business. It is the vehicle for communicating financial information about a company in the forms of financial statements to many different groups of people. The financial statements of the business firm serve as the primary financial reporting mechanism of the firm, both internally and externally. It is the method by which management communicates financial information to decision makers such owners, creditors, investors, customers, suppliers, government agencies, economists, and others. Each of these groups may have different uses for the information. Owners are concerned that the company produce a profit and increase their wealth. Creditors want to know that the company is liquid enough to make debt payments and solvent enough to repay the loan principle if the business fails. Managers want to be compensated for their work and have confidence their employer will provide job security. Customers and suppliers want to benefit from their ongoing business relationships. The government wants to ensure the public good, by collecting taxes and improving financial reporting. All these stakeholders can benefit and achieve their objectives if they have good accounting information.

Accounting is an ever-changing communicative system. All parties with a stake in the economic environment, upon which accounting reports, continually press for improvements in the information that accounting systems provide. They are records that provide an indication of the organization's financial status. It quantitatively describes the financial health of the company. It helps in the evaluation of company's prospects and risks for the purpose of making business decisions. The objective of financial statements is to provide information about the financial position, performance and changes in financial position of an enterprise that is useful to a wide range of users in making economic decisions. Financial statements should be understandable, relevant, reliable and comparable. They give an accurate picture of a company's condition and operating results in a condensed form. Reported assets, liabilities and equity are directly related to an organization's financial position whereas reported income and expenses are directly related to an organization's financial performance.

Because of the competition conditions, increase in liberalization and internationalization of financial markets, diversification of the activities in these markets and increase in the mobility of capital, the importance of the efficient usage of resources in the companies has become vital and activities aimed at appreciating the company values has also gained importance. In today's competitive world economy, evaluating the financial performance of a company has a great importance not only for managers, creditors and current or potential investors but also for the companies taking place in the same sector. Performance evaluation of companies is generally carried out within the context of financial analyses (Yalcin, Bayrakdaroglu and Kahraman, 2012: 350-364).

Business activities of a company always attract certain attention from various market participants such as associates, investors, competitors or authorities, who are expressly or by implication interested in its financial results. The third parties are able to estimate financial performance by analyzing accounting statements available for public use. Financial analysis serves as a primary tool for this purpose. The main idea of financial analysis is to obtain enough of key values (the most informative ones), that represent objective and exact financial situation within a company: its profits and losses, structural changes in assets and liabilities, level of competitiveness, relations with debtors and creditors. This analysis can be used both for estimation of current financial condition and for its prediction in the nearest or more remote future. As the concept of financial performance is considered under different meanings such as return, productivity, output and economic growth, using the financial ratios in the performance evaluation process can be suitable for both companies and related sectors. Financial ratios derived from the data in income statement and balance sheets are considered as crucial measurement tools in determining performance and financial assets of companies.

The basic accounting information derived from financial reports does not indicate whether gained profit is sufficient or not; or are assets being used proficiently? Is the overall productivity efficient? Do the financial problems exist within the business? To answer such questions, ratio analysis can be performed in which required data are extracted from income statements and balance sheets (Stallwood, 1996: 1). Analysis and interpretation of financial statements helps in determining the liquidity position, long term solvency, financial viability, profitability and soundness of a firm. Therefore, The four basic types of financial statements: balance sheet, income statements, cash flow statements, and statements of retained earnings should be analyzed and interpreted.

In the performance evaluation, the most common used financial ratios are traditional financial indicators that are usually related to profitability. Traditional financial measures known to be as accounting-based financial performance (AFP) measures have basically been used to evaluate the company's financial situation and performance. These measures provide useful quantitative financial information to both investors and analysts so that they can evaluate the operation of a company and analyze its position within a sector over time (Gallizo & Salvador, 2003: 267 – 283). However, these measures are gathered into one group within itself because they provide similar information. In other words, AFP measures can be classified as liquidity ratios, financial leverage ratios, profitability ratios, activity ratios, and growth ratios with respect to the information they provide.

For many years, a great number of studies in the literature have shown the benefits and uses of the financial ratios (Chen and Shimerda, 1981: 50-60). Financial ratios allow the user to summarize and analyze related data to provide meaningful information for making decisions (Singh and Schmidgall, 2002: 201-213). And, the significance of the financial ratios also demonstrates the strong and weak sides of companies in terms of liquidity, growth, and profitability. Therefore, it implies whether the firm is operating properly or corrective action is required. Moreover, ratios make it possible to audit, estimate the bankruptcy, rank the company, approve a loan, determine the company value, issue the stocks, rate the bond, proceed with acquisitions and mergers, and stop firm operations in a territory (Manger et al., 1995: 97-106; Gallizo et al., 2002). Martikainen et al., (1995) and Emrouznejad et al., (2012) declared that ratio analysis is done through a comparison of the behavior of a ratio with some criteria expressing the general success of the economy or industry, and it can also be conducted with other businesses operating in the same sector.

According to Whittington (1980: 219–223) there are mainly two usages of financial ratios: normative and positive. When company ratios are compared with some standard values such as mean, the utilization is normative (Barnes, 1987: 449–461). The positive application of financial ratios is for forecasting purpose.

Financial ratio analysis is a useful measure to provide a snapshot of a firm's financial position (Muresan and Wolitzer, 2004: 2) at any particular moment of time or to provide a comprehensive idea about the financial performance of the company over a particular period of time. Use of financial ratios in finance is multi-dimensional. It is not only useful for judging the financial health or performance of a particular firm over time, it is also a useful

tool for comparing a firm's financial position and performance with respect to others in the same or different industry to pinpoint problem areas or to identify areas of further improvements (Bandyopadhyay and Chakraborty, 2010: 142-164).

Financial ratios are computed from financial statements of a company namely Balance Sheet, Profit and Loss Account or Income Statement, and Cash Flow Analysis. Interpretation of the financial ratios is complicated and multi-dimensional. While developing and computing the different financial ratios, consideration is given to capture the various aspects of financial position and financial performance of a company. In order to use a financial ratio, one needs to have a relatively decent knowledge of basic mathematical and accounting concepts. Over the years, there has been a proliferation in the number of financial ratios developed and applied by analysts and researchers (Ali Hamdi and Charbaji, 1994:1 – 25).

However, it is impractical and sometimes improbable to compute all the ratios to reach to a conclusion desired for. With the presence of inter-relationships within and among the sets of financial ratios, a smaller number of representative ratios may be sufficient to capture most of the desired information (Ali Hamdi and Charbaji, 1994: 1 – 25). This inter-relationship is called as 'multicollinearity' in statistical language. The traditional ad hoc grouping of ratio such as earnings and profitability, liquidity, leverage and solvency, asset efficiency, operating efficiency, etc. is based on the analysis conducted in the studied companies.

1.1.1. RESEARCH TOPIC

All companies are living in an era of ever changing world which is uncertain, complex and unpredictable. Globalization of markets, increase in competition and constant changes in technological advancement has put huge pressure on organizations to continuously develop and be adaptable to face the challenges of rapidly changing environment. Most organizations are struggling to survive and are concentrating on developing efficiency at all levels of the organization. In such case performance evaluation of the company is very much important. Performance evaluation of a company is usually related to how well a company can use its assets, shareholder equity and liability, revenue and expenses.

The airline industry exists in an intensely competitive market. In recent years, there has been an industry-wide shakedown, which will have far-reaching effects on the industry's trend towards expanding domestic and international services. An important key area to keep a close eye on is costs. The airline industry is extremely sensitive to costs such as fuel, labor and

borrowing costs. Because many costs are fixed, the profitability of individual companies is determined by efficient operations and on favorable fuel and labor costs.

Despite the headline number, the airline business remains vulnerable—to oil-price shocks, accidents and terrorism. Since September 11, 2001 and during the ensuing economic slowdown, a number of airline companies have experienced significant financial difficulties, including bankruptcies and near bankruptcies. In an economic setting where many airlines are struggling to achieve or maintain profitability, it is important for accountants, auditors, and financial analysts to be able to analyze the relative performance of such companies.

In order to determine the financial position of the airline companies and to make a judgment of how well the companies are efficiency in their operations and how well the companies have been able to utilize their assets and earn profit, This thesis will present comparison of the financial statement analysis for Royal Dutch Airlines (KLM) and Turkish Airlines (THY) for the years ended 2009 – 2013. The analysis will include horizontal and vertical of the financial statements of both companies and key ratio analysis.

1.1.2. OBJECTIVES AND THESIS QUESTIONS

The financial analysis of companies is usually undertaken so that investors, creditors, and other stakeholders can make decisions about those companies. The focus of this thesis is on the financial statement analysis of Turkish Airlines (THY) and Royal Dutch Airlines (KLM) that are publicly traded and therefore make public the data and information needed by stakeholders, who can then use the analytical procedures.

The primary objectives of this thesis include:

- To identify the historical trends and growth levels which have driven the studied companies up until now.
- To measure and evaluate the liquidity, profitability, solvency and overall financial performance of selected airline companies.
- The analysis conducted in the thesis is intended to give an investor the insight into the profitability of Turkish airlines and Royal Dutch Airlines in the future as well as other financial insights as they are key indicators to any valuations.
- To evaluate how the companies have been performing in creating value for its shareholders, generate growth and control its risks, both operational as well as financial, will help reveal some of the financial aspects for the company.

THESIS QUESTIONS/ HYPOTHESIS:

- What is the performance of the companies related to liquidity ratios?
- What is the performance of the companies related to Asset management ratios?
- What is the performance of the companies related to Profitability ratios?
- What is the performance of the companies related to Market value ratios?
- What is the performance of the companies related to debt management ratios.
- What is the best performance between two companies?

1.1.3. IMPORTANCE OF THE STUDY

Financial analysis determines a company's health and stability. The data gives you an intuitive understanding of how the company conducts business. Stockholders can find out how management employs resources and whether they use them properly. Governments and regulatory authorities use financial statements to determine the legality of a company's fiscal decisions and whether the firm is following correct accounting procedures. Finally, government agencies, such as the Internal Revenue Service, use financial statement analysis to decide the correct taxation for the company. So, the study made in this thesis is useful for all stakeholders of Turkish airlines and Royal Dutch airlines.

1.1.4. LIMITATIONS

The valuation is made from the point of view of an external investor and will as such only be based on publicly available information. As the valuation is made from an external investor's perspective the thesis is solely based on secondary information.

Furthermore the data used will mainly be that of the last five years annual reports made by Turkish Airlines and Royal Dutch Airlines and only to a very limited extend the subsequent interim reports, the reason being that the annual report is more detailed than the interim reports.

In terms of models used for the strategic analysis, this thesis will be using horizontal analysis, vertical analysis and ratio analysis and the findings and conclusions are based the results reached by using these models.

1.1.5. METHODOLOGY

Financial statement analysis should focus primarily on isolating information useful for making a particular decision. The information required can take many forms but usually involves comparisons, such as comparing changes in the same item for the same company over a number of years, comparing key relationships within the same year, or comparing the operations of several different companies in the same industry. This thesis presents a quantitative analysis of information reported in financial statements of selected airlines using three categories of analysis methods: horizontal (trend analysis), vertical and ratios analysis to not only understand their behavior specific to the airline industry and trends in the course of time, but also assess the airlines' financial performance for the last five years (2009-2013) which will reveal the main challenges that airlines are currently facing. Initially, horizontal and vertical analysis for balance sheets and income statements were conducted. Thereafter, to assess the relationships between various data on balance sheets and income statements, financial ratios were measured and evaluated for the studied period. Ratio analysis measures inter-relationship between different sections of the financial statements and they are taken as guides that are useful in evaluating companies' financial position and operation and making comparison with results in previous years or with others in the same industry.

As a source of information, annual reports for the studied companies are used to calculate set of financial ratios. All the ratios are calculated from the following financial statements and relevant notes to accounts.

- Consolidated Balance Sheet
- Consolidated statements of income
- Consolidated Statement of changes in Equity
- Consolidated statement of Cash

Notice that the financial statements cover five years and all the titles listed above include the word "consolidated" because the statements include the accounts of Turkish Airlines (THY) and Royal Dutch Airlines (KLM) and all subsidiaries in which the companies' ownership interest enables it to exert control.

1.1.6. THESIS OUTLINES

The thesis comprise of three chapters including: background of the study, financial analysis as a vehicle of firm's valuation and analysis, discussion and conclusion. All chapters are shown in figure 1.

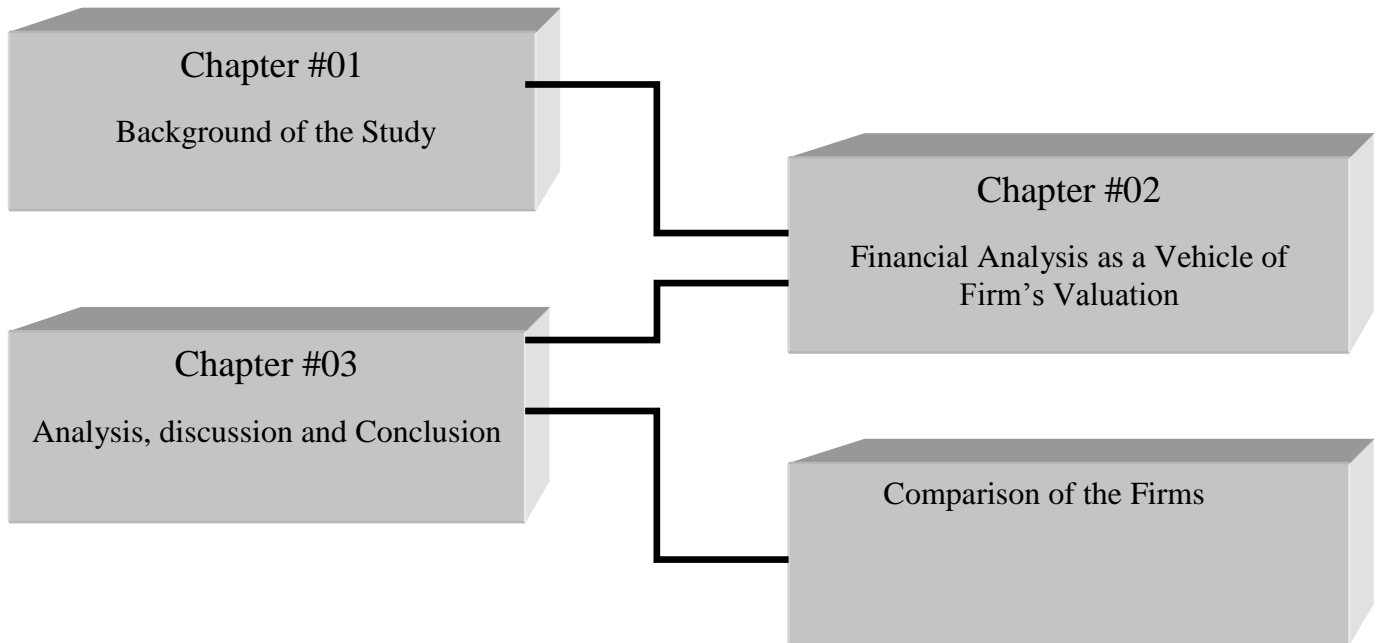


Figure 1: Thesis Outline

1.2. THE AIRLINE INDUSTRY

This section provides a brief overview on the global airline industry, Definition of the industry and general characteristics. It also presents some major development of the airline industry, as a branch of transportation systems that has occurred in the last decades. Finally, it describes the significance and the catalytic nature of air transport/aviation sector for the nation and global economic development through Supporting Gross Domestic Product (GDP), job creation, tourism and facilitation of global trade.

1.2.1. OVERVIEW OF THE INDUSTRY AND ITS MAJOR DEVELOPMENTS

The Airline Industry is companies that provide air transport services for travelling passengers and freight. The industry lease or own its aircraft with which to supply these services and may form partnerships or alliances with other airlines for mutual benefit. Generally, airline companies are recognized with an air operating certificate or license issued by a governmental aviation body. Airlines vary from those with a single aircraft carrying mail or cargo, through full-service international airlines operating hundreds of aircraft. Airline services can be categorized as being intercontinental, intra-continental, domestic, regional, or international, and may be operated as scheduled services or charters.

The airline industry provides service to almost every corner of the globe, and has been an integral part of the creation of a global economy. It provides the only transportation network across worldwide and it is crucial for global business development and tourism enrichment. It is also essential for the fast movement of people and cargo shipments around the world. Air transportation is one of the most important services to offer both significant social and economic benefits by serving tourism and trade, it contributes to economic growth and it also provides jobs and increases tax revenues. The airline industry itself is a major economic force, both in terms of its own operations and its impacts on related industries such as aircraft manufacturing and tourism. Few other industries generate the amount and intensity of attention given to airlines, not only among its participants but from government policy makers, the media, and almost anyone who has an anecdote about a particular air travel experience. On the other hand air transportation improves the quality of people's lives by broadening their leisure and cultural experiences. It gives a broad choice of holiday destinations around the world and is an affordable means to visit distant friends and relatives.

During much of its development, the global airline industry dealt with major technological innovations such as the introduction of jet airplanes for commercial use in the 1950s, followed by the development of wide-body “jumbo jets” in the 1970s. At the same time, airlines were heavily regulated throughout the world, creating an environment in which technological advances and government policy took precedence over profitability and competition. It has only been in the period since the economic deregulation of airlines in the United States in 1978 that questions of cost efficiency, operating profitability and competitive behavior have become the dominant issues facing airline management. With the US leading the way, airline deregulation or at least “liberalization” has now spread too much of the industrialized world, affecting both domestic air travel within each country and, perhaps more importantly, the continuing evolution of a highly competitive international airline industry.

The airline industry supports tourism and international business by providing the world’s only rapid worldwide transportation network. In the year 2013, the global airline industry consists of nearly 1,400 commercial airlines operating more than 25,000 aircraft in commercial service, providing service to almost 4,000 airports. The air transport industry transported approximately 3.1 billion passengers making 36.4 million commercial flights across the globe (ATAG, 2014: 5 aviation benefits). In 2012, the world’s airlines flew almost 31 million scheduled flight departures and carried over 2.97 billion passengers (ATAG, 2014: 5). The annual passenger total is up approximately 5 per cent compared to 2012. The growth of world air travel has averaged approximately 5% per year over the past 30 years (ICAO, 2014: 7), with substantial yearly variations due both to changing economic conditions and differences in economic growth in different regions of the world.

1.2.2. ECONOMIC CHARACTERISTICS OF AIRLINE INDUSTRY

The airline industry is an important sub-sector of transport industry and is limited and constrained by many complex regulations. It is an industry characterized by rapid change, economic fluctuations, innovation and new technology (Peksatici, 2010: 5). Airlines are operated in an extremely dynamic and often highly volatile commercial environment.

During the last two decades, international civil aviation has been subjected to the most profound changes in the history and will continue to be so in the following years. The liberalization of air services, advanced communications technology, the globalization of markets, international alliances and privatization of airlines, airports and air traffic control

services are the major factors challenging the airline business (Fourie and Lubbe, 2006: 98 – 102).

The airline industry is a very particular system. Airlines provide a service, which is to transport a passenger across the world at an agreed price. There is neither physical product given to the consumer, nor inventory created and stored. Airlines also exhibit very particular economics that, over time, have motivated specific management concepts, tools and practices. In the following section, it will be demonstrated some economic characteristics exist in the airline industry.

- The airline industry is highly sensitive to economic fluctuations. Airlines experience a high rate of traffic growth during period of prosperity but when the economy moves into recessionary period, the carriers normally experience substantial excess capacity.
- In many countries these industry have been traditionally state owned. Such companies often have public service obligations (implying requirements to provide some services even where it is not economically viable for them to do so). The result is that the reform of these sectors is often highly politicized.
- Profitability of the industry is generally weak, although, with high levels of depreciation and amortization, cash flow levels tend to be stronger and help stabilize the balance sheet.
- The industry in general tends to have high levels of adjusted debt because of the use of operating leases. This adds an element of costs that are largely fixed and, over the longer term, are sensitive to interest rate movement at the time of renewal.
- The airline industry is high labor intensive, from pilots and flight attendants to personnel responsible for baggage handling, ticketing and loading with highly developed skills that are expensive. These labor costs are mostly fixed and restrict flexibility in adjusting the expense structure when needed. Moreover, most of the labor force is unionized, which further limits operational flexibility.
- Aircraft use high levels of fuels and are energy intensive, with operating profits materially influenced by fuel cost volatility. The airline industry is extremely sensitive to fuel, labor and borrowing costs. Due to the sharp rise in oil and jet fuel prices since 2003 an urgent need for cost cutting is in question. The average crude oil price has increased from \$31 per barrel in 2003 to \$130 per barrel in 2012 (IATA, 2013 annual

review: 14) and oil has always been the biggest challenge and uncertainty for the industry.

- Interest rate levels have significant influence on borrowing costs and leasing costs, which indirectly affect profitability.
- Load factors are keys, so the state of the economy is important to the airline industry. With a high proportion of fixed costs, a slowdown in the volume of passengers quickly translates into lower profitability and makes earnings volatile.
- Many of their costs are sunk and unrecoverable once they are committed.
- Operations are highly seasonal, with stronger results in the third quarter of the year, while the first and fourth quarters are usually weaker. Therefore, earnings through the year are highly volatile. As a result of seasonal operations profit margins are also seasonal and thin. Generally the net profit of an airline is between 1 and 3%. It increases in the summer, when most people take vacations, and decreases during winter (except for holidays). Demand for air transport clearly presents peaks and valleys. Airlines deal with this by shifting customers across the year using discounts and promotions (e.g. double air miles during winter).
- Airlines' revenues come primarily from passengers although companies in the industry may also engage in the transportation of cargo, but this is usually on a much smaller scale
- Barriers to entry into the industry are low because of the ability of the industry to lease aircraft at relatively low rates, particularly older or surplus aircraft. In addition to this the industry is capital intensive requiring large sums of money to operate effectively. The setup costs for an airline are huge (airplanes, hangars, flight simulators) and most capital is financed through loans.
- Airlines are extremely sensitive to volume of traffic (load factor) and profitability quickly falls off as load factor declines.
- The advent of travel websites and other travel distribution channels has led to a substantial increase in discounted and promotional fares.

1.2.3. THE ECONOMIC PERFORMANCE OF AIRLINE INDUSTRIES

Air transport is one of the world's most important industries. Its development and technical service achievements make it one of the major contributors to the advancement of modern societal development. Since the first jet airliner flew in 1949, use of commercial aviation has grown more than seventy-fold (A. Abdelghany and KH. Abdelghany, 2009: 1). The growth in the aviation sector cannot be matched by any other major form of transport due to its technicality and new innovations that is going on in the sector. The above has helped so much in economic and tourist development of the nation and the globe. Demand for air transport services has increased the influence of air transport in the nation and global economy, thereby enhancing rapid movement of passengers, goods and services to the domestic and world market. This in effect helps to generate higher revenue to the economy by way of fast in and out flow of goods and services. The aviation industry plays an important role in the aspect of work and leisure to people around the globe. The sector helps to promote and improve quality of life, living standards of people within the nation. All this helps to generate economic growth and poverty alleviation by way of providing employment opportunities, increasing revenues from taxes. The employment opportunities would be generated through supply chain transformation from the airports. Air transportation is a major industry in its own right and it also provides important inputs into wider economic, political, and social processes. The demand for its services, as with most transport, is a derived one that is driven by the needs and desires to attain some other final objective. Air transport can facilitate, for example, in the economic development of a region or of a particular industry such as tourism, but there has to be a latent demand for the goods and services offered by a region or by an industry. Economies, and the interactions that exist within the globe, domestic and the air transport system, are in a continuous state, although economists' notions of equilibrium have some very useful intellectual content, and validity in the very short-run. In reality the world is dynamic. This dynamism, of which the particular thrust of globalization, is the concern here to has implications for industries such as air transport that service it. But there are also feedback loops, because developments in air transport can shape the form and the speed at which nations' development, globalization and related processes take place. The aviation industry is a vital part of the increasingly globalized world economy, facilitating the growth of international trade, tourism and international investment, and connecting people across continents. Air transport is a major contributor to global economic prosperity. It provides the only rapid worldwide transportation network, which makes it essential for global business and tourism and it plays a vital role in facilitating economic growth, particularly in

developing countries. Air transport system is fully driven by the global economy; it is an important catalyst to the global economy. International Air Transport Association (IATA) noted that air transport industry worldwide directly generated an estimated 58 million jobs in 2013 (IATA, 2013: 17). The efficiency and quality improvements in air passenger services contribute to the growth in government sectors such as hotel, tourism, etc. The free flow of people and information, together with improved air cargo operations, promote trade and improve the efficiency of the overall economy. That is to say that aviation sector imposes significant positive externalities to other industries, contributing to economic and employment growth to the nation.

Oxford Economics analyzed the economic and social benefits of aviation at a global, regional, and national level in over 50 countries to build a comprehensive picture of many benefits of air transports. ATAG has built on that analysis to tell the story of an air transport system that ensures jobs, trade, connectivity, tourism, and vital lifelines to remote communities.

Air transport facilitates world trade, helping countries participate in the global economy by increasing access to international markets and allowing globalization of production. The total value of goods transported by air represents 35% of all international trade (ATAG, 2014: 4). Aviation is indispensable for tourism, which is a major engine of economic growth, particularly in developing economies. Globally, 52% of international tourists travel by air (ATAG, 2014: 4 aviation benefits beyond borders).

The aviation industry itself is a major direct generator of employment and economic activity in airline and airport operations, aircraft maintenance, air traffic management, head offices and activities directly serving air passengers, such as check-in, baggage handling, on-site retail, cargo and catering facilities. Direct impacts also include the activities of civil aerospace manufacturers selling aircraft and components to airlines and related businesses.

In 2013, aviation's total global economic impact (direct, indirect, induced and tourism catalytic) is estimated at \$2.4 trillion, equivalent to 3.4% of world gross domestic product (GDP) (IATA, 2013: 17). These figures do not include other economic benefits of aviation, such as the jobs or economic activity that occur when companies or industries exist because air travel makes them possible, or the intrinsic value that the speed and connectivity of air travel provides. Nor do they include domestic tourism and trade. Including these would increase the employment and global economic impact numbers several-fold. In fact, if air

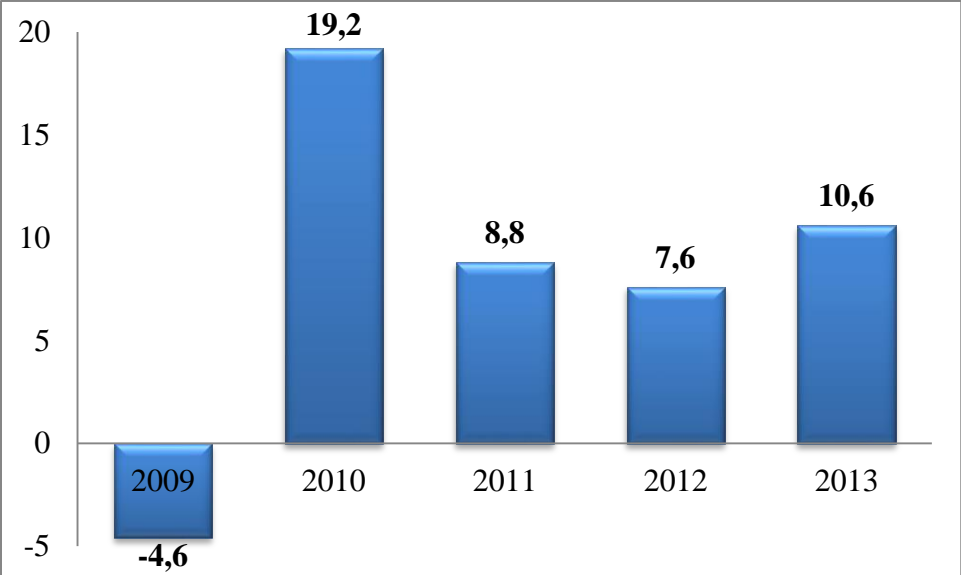
transport were a country, its GDP would rank it 21st in the world, roughly equal to that of Switzerland and more than twice as large as Chile or Singapore.

ACHIEVING IMPROVED PROFITABILITY

Like other business entities, the airline industry must aim to make a profit. With few exceptions (e.g. cargo airlines), the largest share of their turnover is realized by the transport of passengers.

In 2013, airlines saw improved profitability as they continued to claw back ground lost in the global economic recession that began in 2008–2009. Net post tax profit for 2013 was \$10.6 billion, a 1.5% margin on revenues. This was the fourth successive year of profitability, and it builds on the \$6.1 billion profit (0.9% margin) in 2012. Profitability in 2013 was achieved largely on increased demand, the positive impact on cash flow of industry restructuring, and slightly lower than expected fuel costs. Jet fuel averaged just under \$125 a barrel, about \$5 less than in 2012. Figure No.2 shows the industry net profits for the last 5 years.

Figure 2: Airline Industry Net Profits (in billions of dollars)



Source: IATA, 2013: 13 and IATA, 2012: 11.

1.2.4. WORLD'S TOP AIRLINES – 2014

In a gala ceremony at Farnborough International Air show, Skytrax announced the world's Top 100 Airlines in 2014, voted for by airline customers around the world during a 9-month passenger survey. The World's Best Airline award was decided by the votes of close to 19 million travelers from around the world. The World Airline Awards are coveted Quality accolades for the world airline industry and regarded as a global benchmark of Airline Passenger Satisfaction levels. The Awards are not subscriber based or a profit-driven award programmed, and is referred to as the Passengers Choice Awards for the airline industry.

Table 1: World's Top Airlines – 2014

Rank	Airline	2013 Ranking
1	Cathay Pacific Airways	6
2	Qatar Airways	2
3	Singapore Airlines	3
4	Emirates	1
5	Turkish Airlines	9
6	ANA All Nippon Airways	4
7	Garuda Indonesia	8
8	Asiana Airlines	5
9	Etihad Airways	7
10	Lufthansa	11
32	KLM	37

Source: Skytrax, 2014

1.3. INFORMATION BACKGROUND OF THE TWO FIRMS TURKISH AIRLINES (THY) AND ROYAL DUTCH AIRLINES (KLM)

Before starting any financial analysis, the two airline companies will be analyzed in the thesis for providing better understanding. In the following paragraphs they will be briefly introduced for the readers.

Turkish Airlines being one of the fastest growing airlines in the world especially in Europe, and KLM being the oldest business airline in the world still operating under its name, they will be selected as studied companies for this thesis.

1.3.1. TURKISH AIRLINES (THY)



Turkish Airlines is the flag carrier and national airline of Turkey that was established in Ankara on May 1933 with only five airplanes under the name “STATE AIRLINES ADMINISTRATION”, as a department of the Ministry of Defense. In 1955, it was reorganized and operated under special legislation which led it to be renamed Türk Hava Yolları A.O. (Turkish Airlines Co.). Over the years, it has continuously expanded its fleet; in 2003, when the airline operated 65 planes (annual report 2003: 12), a decision was taken to acquire more additional new planes in order to cover the increasing capacity of the company. Since then, Turkish Airlines added new flight destinations and aircrafts to enhance its value. According to the annual report published at the end of 2014, the number of aircraft in the

Turkish Airlines fleet was 261 including 9 cargo aircraft, with an average fleet age of 7.2 years. Turkish Airlines' current expansion process is being governed by its '2008-2023 Fleet Projection Program'. In 2013, the Company ordered 117 aircraft from Airbus and 95 aircraft from Boeing which will all be delivered until 2021. With these additions, Turkish Airlines fleet will reach a total of 439 aircraft.

As for the shareholding structure of the Company; 50.88% are held publicly and 49.12% by the Prime Ministry, Privatization Directorate. The registered share capital of the Incorporation is TL 2 billion. The Company has 12 subsidiaries; 3 are directly owned and 9 are joint ventures.

Turkish Airlines, one of the fastest growing airline companies of Europe has put signature to the record by new routes and joined Star Alliance on April 1st, 2008. Turkish Airlines, with fleet consisted of 179 aircraft (passenger and cargo); organize flights to total 191 points including 151 in international and 40 domestic lines. Thus, Turkish Airlines is a member of the Star Alliance network which was established in 1997. As December 2014, the Star Alliance network offers 18,521 daily flights to 1,321 destinations in 193 countries. By becoming a member of Star Alliance, the world's biggest and most important airline alliance, Turkish Airlines took a major step forward in its strategy of making Turkey the most important junction between Europe and Asia. Passengers from all over the world make their connections conveniently by flying on Turkish Airlines.

In order to keep alive its brand equity, which provides a serious advantage in terms of competition, Turkish Airlines focuses on the investments that support its brand equity such as offering quality, entertainment systems within the aircrafts, comfortable seats, aesthetics and quality of presentation, investments in personnel having high profiles. THY follows the technological innovations and, with its developing and growing fleet, carries out works that also support the training of its employees.

CORPORATE GROWTH

The growth curve of airline companies, operating in advanced markets that are struggling with stagnation and crisis, is fairly static. The growth trouble of European and American airlines are closely related to structural problems rather than difficulties faced in the last couple of years. Aging fleets, high labor costs, increased tax rates are the primary issues in cost management for European and American airlines. All actors in the European Union (EU)

market went through hard times beyond comparison. Consolidation or state aids proved to be a life saver for the industry, where many actors stepped out of the market.

In contrast, Turkish aviation market continues to expand with high growth rates since 2003. In the last decade, passenger penetration in the market (total passengers/population ratio) has almost tripled. Still, Turkey remains underpenetrated compared to the more mature markets indicating its growth potential. In 2013, the market has grown by 13.5% more than doubling the global passenger growth of 5.1% (Turkish Airlines). This was a direct result of the increasing infrastructure and fleet investments which led to more affordable ticket prices and increased connectivity. According to the General Directorate of State Airports Authority, Turkish aviation market will grow by 12% reaching 128 million total passengers in 2014.

The Company has grown steadily with double-digit growth rates and has transformed into one of the largest global network carriers in the world. Moreover, the carrier managed this growth while maintaining strong profitability, having one of the highest EBITDAR margins in the industry. With the world's 4th largest flight network, Turkish Airlines flies to 218 international destinations in 108 countries (fact sheet 2014). This country coverage is greater than any other airline in the world. The Turkish Airlines flight network extends to a profoundly diversified geography. This fact enables a broad income portfolio for the Company. In addition to Europe, Turkish Airlines has also strategic network expansion into the Russia, Central Asia, Far East Asia, Middle East, Africa and North and South America.

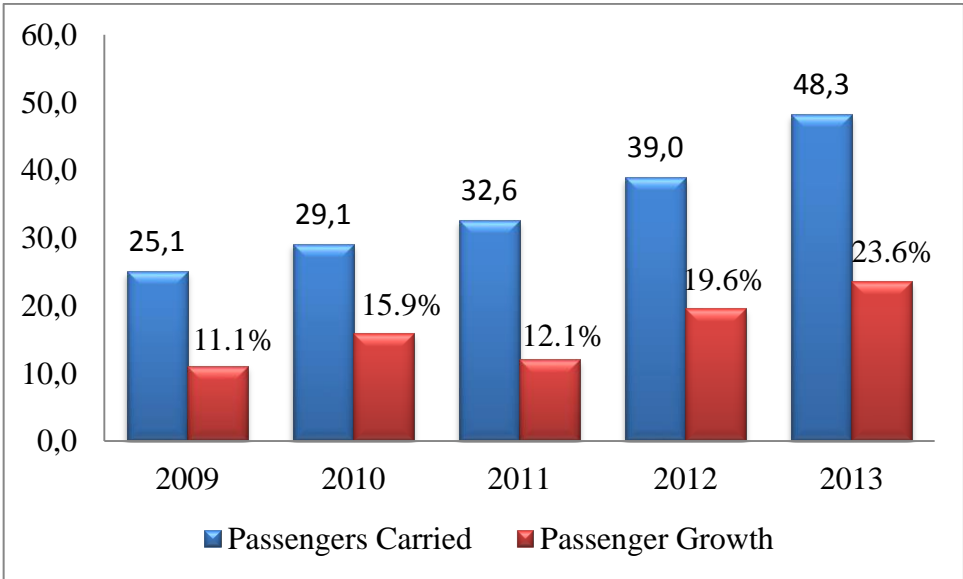
Table 2: Route network as of December 2014

Route Network	
Countries served	108
Number of airports served	264
Destination cities	261
Weekly departure	9,014

Turkish Airlines, with its young fleet, top quality catering, friendly personnel and high security and safety standards, continued its rapid ascent in 2009 as the top preference by passengers. In 2009, Turkish Airlines was the fastest growing airline company in Europe, growing 11.1% and carrying 25.1 million passengers, while the Association of European Airlines saw average passenger numbers fall by 5.8% and global commerce shrank dramatically. Operating a fleet of 132 aircraft, Turkish Airlines has displayed its business

success through its network, charter and Hadj-Umrah operations. Over the previous year the Company has increased 39 million passenger numbers by 23.6% and carried 48.3 million passengers in 2013. The number of passengers increases by 26.1% on the domestic routes and by 21.9% of international routes. According to AEA (Association of European Airlines) data Turkish Airline increased its market share to 12.8% successfully and has taken second place among European carriers as regards to air passenger traffic.

Figure 3: THY passenger growth from 2009 up to 2013. Amounts are in million.



Reference: The above figures were taken from Turkish Airlines’ website

AWARDS

Skytrax, the acknowledged name associated with air travel excellence in 21st century by providing unique products to the global aviation industry through professional Audit and Service Benchmarking programs for airlines, airline alliances, airports and related air transport product and service suppliers across the globe, has released its latest ratings. With no outside sponsorship, advertising or influence, it is the most respected global airline passenger survey firm in the industry.

In 2007, Turkish Airlines was ranked as a four star airline by Skytrax. While keeping its 4-star airline title again in 2008, Turkish Airlines was also named “The Best Airline in Southern Europe”. In 2010, Turkish Airlines continued to be the: “Best Airline in Southern Europe”; and “Best Catering in Economy Class” with the in-flight service provided by Turkish Do &Co

In 2011, 2012, 2013 and 2014 four years in a row, Turkish Airlines was chosen as the winner of the two categories by Skytrax Best Airline in Europe and Best Airline in Southern Europe

The 2014 year's awards were based on the results of over 18 million passenger surveys, with more than 105 nationalities participating and covering 245 airlines. Turkish Airlines has scored a resounding success in the 2014 Skytrax World Airline Awards, with air travelers once again recognizing the airline as the “Best Airline in Europe”, for the fourth year running.

1.3.2. ROYAL DUTCH AIRLINES (KLM)



Koninklijke Luchtvaart Maatschappij N.V. (Royal Dutch Airlines), known by its initials KLM, is the flag carrier airline of the Netherlands which was founded on 7 October, 1919 to serve Netherlands and its colonies. As of 2013, KLM operated scheduled passenger and cargo services to more than 138 destinations worldwide with 114 fleets. It is the oldest airline in the world still operating under its original name.

In the Netherlands, KLM comprises the core of the KLM Group which further includes the wholly-owned subsidiaries KLM Cityhopper, transavia.com and Martinair. KLM is a leader in the airline industry and offers reliable operations and customer-oriented products resulting from its policy of enthusiasm and sustainable innovation.

The merger of KLM with Air France in May 2004 formed the Air France-KLM Group, which is incorporated under French law with headquarters at Paris and Amsterdam. Both Air France and KLM continue to fly under their distinct brand names as subsidiaries of the group. Air France and KLM are part of the Sky Team alliance, the second largest in the world behind only Star Alliance. Since May 2004, Air France and KLM Royal Dutch Airlines have become the largest European airline group: one group, two airlines, and three businesses. Each airline has retained its individual identity, trade name and brand. The three core businesses are Passenger Business, Cargo and Engineering & Maintenance. Both airlines run their own operations from their respective hubs Paris-Charles de Gaulle and Amsterdam-Schiphol.

KLM participates in the industry's leading trans-Atlantic joint venture with Air France, Delta Air Lines and Alitalia. With approximately 250 daily trans-Atlantic flights and a fleet of around 150 aircraft, the joint venture between AIR FRANCE-KLM, Alitalia and Delta Air Lines provides customers with the benefits of a vast route network offering more frequent flights, competitive fares and harmonized services on all trans-Atlantic flights.

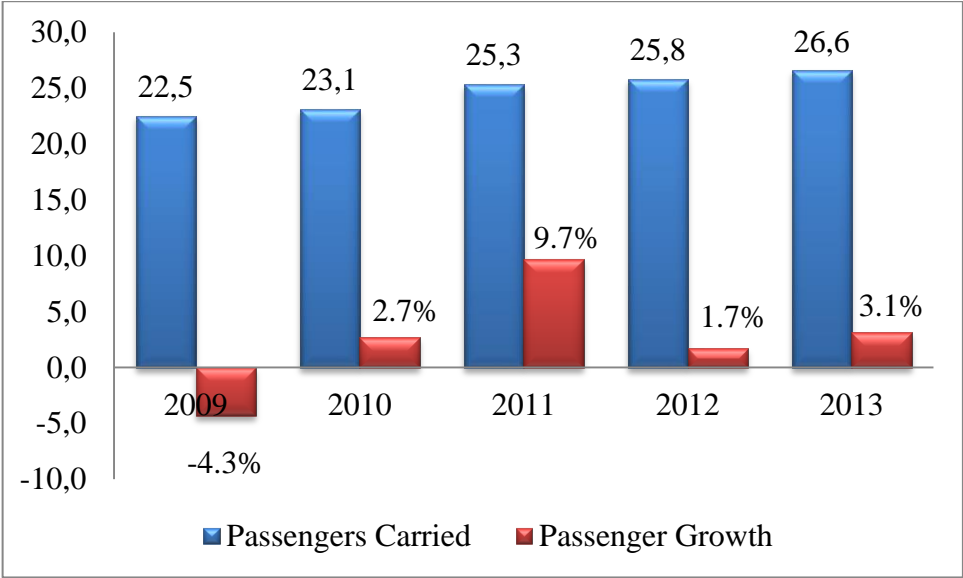
CORPORATE GROWTH

When KLM merged with Air France in 2004, its share in the international market also grew, which was certainly due in part to the high quality of the airport at Schiphol. Despite the crisis years of 2008 and 2009, which subdued growth in the international airline industry and also affect the growth of KLM, demand for air transportation is now increasing worldwide. KLM wants to continue to play its part in this development and, with Air France and its SkyTeam partners, to continue to be a global player. The growth in demand is demonstrated by the recent increase in air transportation to China, Taiwan and Hong Kong. AIR FRANCE KLM is Europe's largest provider of air transportation in this sector. It is vital for this growth to be accommodated at KLM's home base Schiphol, because, as in any other sector, stagnation would mean the irretrievable loss of market share. The competition is ferocious.

Guided by the economic importance and tourist potential of a region, KLM is permanently seeking destinations that contribute to its results. As the company reported its 2014 annual report, KLM welcomes more than 70,000 passengers, carries 3,000 tons of cargo and completes more than 700 flights every day. KLM serves 135 destinations from Schiphol, and the Cooperation with KLM's partners adds a further 40 destinations. Of these 175 destinations in total, 96 are located in Europe and 79 on other continents. AIR FRANCE

KLM and joint venture partner Delta Air Lines together offer more destinations worldwide than any other airline groups. A five years ago, in the fiscal year 2009, KLM and its partners Operated 151 destinations.

Figure 4: KLM passenger growth from 2009 up to 2013. Amounts are in million.



Reference: Figures were taken from annual and public reports of KLM

CHAPTER TWO: FINANCIAL ANALYSIS AS A VEHICLE OF FIRM'S VALUATION

2.1. THE ROLE OF FINANCIAL ANALYSIS IN INFORMATIONAL SUPPORT

Financial analysis is the process of identifying the financial strength and weaknesses of the firm by properly establishing relationship between the items of the balance sheet and the income statement (Pandey, 2009: 518). The information pertaining to the financial statements is of great importance through which interpretation and analysis is made. It is through the process of financial analysis that the key performance indicators, such as, *liquidity, solvency, and profitability* as well as the *efficiency* of operations of a business entity may be ascertained, while short term and long term prospects of a business may be evaluated. Thus, identifying the weakness, the intent is to arrive at recommendations as well as forecasts for the future of a business entity. Financial analysis focuses on the financial statements, as they are a disclosure of a financial performance of a business entity. A Financial Statement is an organized collection of data according to logical and consistent accounting procedures. Its purpose is to convey an understanding of some financial aspects of a business firm. It may show assets position at a moment of time as in the case of balance sheet, or may reveal a series of activities over a given period of times, as in the case of an income statement.

Since there is recurring need to evaluate the past performance, present financial position, the position of liquidity and to assist in forecasting the future prospects of the organization, various financial statements are to be examined in order that the forecast on the earnings may be made and the progress of the company are ascertained. It must be noted that financial analysis is a continuous process being applicable to every business to evaluate its past performance and current financial position. It is useful in various situations to provide managers the information that is needed for critical decisions. The process of financial analysis provides the information about the ability of a business entity to earn income while sustaining both short term and long term growth.

Analysis of financial statements is of interest to lenders, security analysts, managers and others (Chandra, 1995: 172). Trade creditors are interested in the firm's ability to meet their claims. Their analysis will therefore, confine to the evaluation of the firm's liquidity position. The suppliers are concerned with the firm's solvency and survival. They analyze the firm's profitability over time. Long term creditors place more emphasis on the firm's solvency and profitability. The investors are more concerned about the firm's earnings. So they concentrate on the analysis of the firm's present and future profitability as well all earning ability and risk

(Sina and Matubber, 1998: 179 – 189). Financial analysis helps these various parties which interest in a company's activities to obtain financial information required to them. The main purpose of financial analysis is to estimate current financial conditions and define actions necessary to conduct work on improvement or preserving of these conditions. Financial analysis also summarizes a firm's business activities in the past, at present and in the near future. Its main function is to identify financial performance of a company, reveal weaknesses, potential sources of problem occurrence in its further plans and to find out strengths on which the firm can rely. Financial performance of a company, being one of the major business characteristics, defines competitiveness, potential of the business, economic interests of the company's management and reliability of present or future contractors. Therefore, the secondary goal of analysis is to reveal financial condition of the company to external users.

2.1.1. MAIN TYPES OF FINANCIAL ANALYSIS

Financial statements give complete information about assets, liabilities, equity, reserves, expenses and profit and loss of an enterprise. They are not readily understandable to interested parties like creditors, shareholders, investors etc. Thus, various techniques are employed for analyzing and interpreting the financial statements. They are briefly mentioned herein.

A. On the basis of material used.

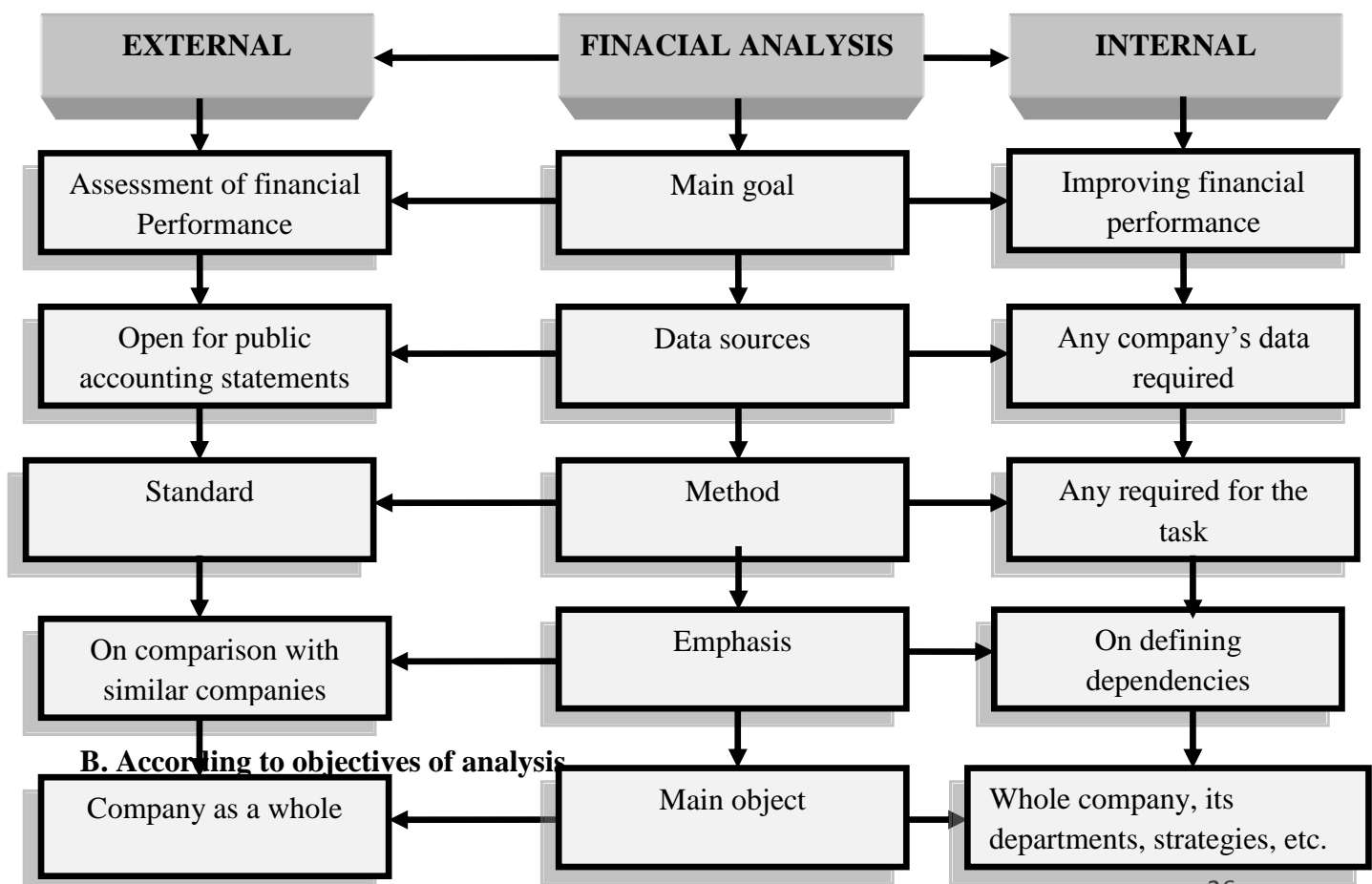
1. External Analysis

Analysis of financial statements may be carried out on the basis of published information. i.e., information made available in the annual report of the enterprise. Such analyses are usually carried out by those who do not have access to the detailed accounting records of the company i.e., Banks, Creditors, etc. An external analyst does not have access to internal financial data and, hence, has to carry out so-called external financial analysis, when initiative does not belong to a company's management, but to a third party. The defining a credit worthiness and investment possibilities by an investor, may serve purposes of an external financial analysis. In similar way, financial liquidity or solvency can be of interest for a bank. To make a better decision, potential business partners wish to know maximum available information about a firm and amount of risk involved in respect of investments profitability and possible gains and losses. External financial analysis is based on published accounting statements and aimed on prediction of a possible bankruptcy, assessment of business performance and financial sustainability of a company.

2. Internal Analysis

Analysis may also be based on detailed information available within the company which is not available to the outsiders; such analysis is called internal analysis. This type of analysis is of a detailed one and is carried out on behalf of the management for the purpose of providing necessary information for decision making, such analysis emphasizes on the performance appraisal and assessing the profitability of different activities. Internal financial analysis (also known as managerial financial analysis) is necessary for meeting the own requirements of a company. It is aimed on determination of liquidity or results estimation of a last fiscal period. Usually the output of internal analysis is a set of administrative decisions combination of various measures intended for optimization of certain issue within the business. The internal analysis is typically performed inside a company by its financial department and constantly revised because of changes in macro and microeconomic environment. Due to the nature of data sources using for the internal analysis (internal accounting books and reports), its results are always precise. This thesis will focus on conducting external analysis and further mentioning of “financial analysis” in the text will mean only “external financial analysis”

Figure 5: Classification of types of financial analysis



Short term analysis is mainly concerned with the working capital analysis. In the short run, a company must have ample funds readily available to meet its current needs and sufficient borrowing capacity to meet the contingencies. In short term analysis the current assets and current liabilities are analyzed and liquidity is determined.

2. Long Term Analysis

In the long term a company must earn a minimum amount sufficient to maintain a reasonable rate of return on the investment to provide for the necessary growth and development of the company, and to meet the cost of capital. Financial planning is also desirable for the continued success of a company, thus in the long term analysis the stability and the earning potentiality of the company is analyzed example, fixed assets, long term debt structure and the ownership interest is analyzed.

C. According to the Methods of analysis

Financial statement analysis should focus primarily on isolating information useful for making a particular decision. The information required can take many forms but usually involves comparisons, such as comparing changes in the same item for the same company over a number of years, comparing key relationships within the same year, or comparing the operations of several different companies in the same industry (Edmonds et al., 2012: 676 – 681). Correct application of financial analysis allows answering many questions concerning “financial health” of a business. This section discusses three categories of analysis methods: horizontal, vertical, and ratio analysis.

Financial analysis has its specific set of tools along with particular way of their application that defines methodology of the analysis. Main objectives of financial analysis specify spheres of finances where its methods suit best. The main objectives of financial analysis are:

- Making “snapshot” of financial efficiency of a company at a moment of research;
- Revealing tendencies and patterns in a company’s development for a period;
- Defining weaknesses that negatively influence financial performance;
- Revealing reserves which a company can use for improvement of its financial situation;
- Make conclusions and suggestions for improving difficult financial situation.

To successfully fulfill these objectives and therefore to reach main goals of the thesis, a specific set of methods should be used. The basic methods of financial analysis are: horizontal, vertical, and ratio analysis. Most of these methods utilize financial statements available for public use as a data source.

1. Horizontal Analysis

Horizontal analysis, also called trend analysis, refers to studying the behavior of individual financial statement items over several accounting periods. These periods may be several quarters within the same fiscal year or they may be several different years. The analysis of a given item may focus on trends in the absolute dollar amount of the item or trends in percentages. For example, a user may observe that revenue increased from one period to the next by \$42 million (an absolute dollar amount) or that it increased by a percentage such as 15 percent.

Absolute Amounts

The absolute amounts of particular financial statement items have many uses. Various national economic statistics, such as gross domestic product and the amount spent to replace productive capacity are derived by combining absolute amounts reported by businesses. Financial statement users with expertise in particular industries might evaluate amounts reported for research and development costs to judge whether a company is spending excessively or conservatively. Users are particularly concerned with how amounts change over time. For example, a user might compare a pharmaceutical company's revenue before and after the patent expired on one of its drugs. Comparing only absolute amounts has drawbacks, however, because materiality levels differ from company to company or even from year to year for a given company.

Percentage Analysis

Percentage analysis involves computing the percentage relationship between two amounts. In horizontal percentage analysis, a financial statement item is expressed as a percentage of the previous balance for the same item. Percentage analysis sidesteps the materiality problems of comparing different size companies by measuring changes in percentages rather than absolute amounts. Each change is converted to a percentage of the base year.

2. Vertical Analysis.

Analysis of financial data based on relationship among items in a single period of financial statement is called vertical analysis. From a single balance sheet or Income statement relationships of various items may be established. For example, various assets can be expressed as percentage of total assets. Statements containing such analysis are also called as common size statements. The common size income statement is more useful in analyzing the operating results and costs during the year. It shows each element of cost as a percentage of sales. Similarly common size balance sheet show fixed assets as a percentage of total assets. Although vertical analysis suggests examining only one period, it is useful to compare common size income statements for several years. The main principal scheme of horizontal and vertical analysis is shown in table 2 and 3, where “0” means previous period, and “1” – the current.

Table 3: Horizontal Analysis Method of Financial Analysis.

VALUE	Year 0	Year 1	Absolute change (Δ)	Relative change (*100)
A	A_0	A_1	$A_1 - A_0$	A_1 / A_0
B	B_0	B_1	$B_1 - B_0$	B_1 / B_0
C	C_0	C_1	$C_1 - C_0$	C_1 / C_0
$\sum(abc)$	$A_0 + B_0 + C_0$	$A_1 + B_1 + C_1$	$\sum(abc)_1 - \sum(abc)_0$	$\sum(abc)_1 / \sum(abc)_0$
D	D_0	D_1	$D_1 - D_0$	D_1 / D_0
E	E_0	E_1	$E_1 - E_0$	E_1 / E_0
$\sum(de)$	$D_0 + E_0$	$D_1 + E_1$	$\sum(de)_1 - \sum(de)_0$	$\sum(de)_1 / \sum(de)_0$

A simple balance sheet:

Assets ($\sum(abc)$) = Liabilities +
Shareholder's equity ($\sum(de)$)

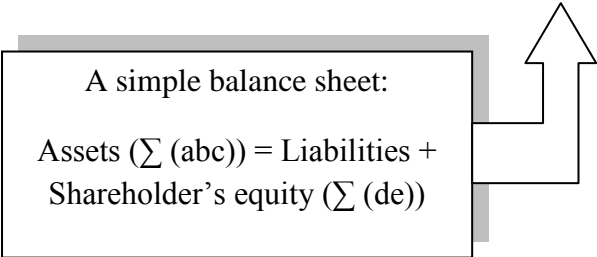


Table 4: Vertical Analysis Method of Financial Analysis

VALUE	Year 0	Year 1
A	$A_0 / \sum(abc)_0$	$A_1 / \sum(abc)_1$
B	$B_0 / \sum(abc)_0$	$B_1 / \sum(abc)_1$
C	$C_0 / \sum(abc)_0$	$C_1 / \sum(abc)_1$
$\sum(abc)$	1	1
D	$D_0 / \sum(de)_0$	$D_1 / \sum(de)_1$
E	$E_0 / \sum(de)_0$	$E_1 / \sum(de)_1$
$\sum(de)$	1	1

3. Ratio Analysis

The most popular way to analyze the financial statements is computing ratios. It is an important and widely used tool in the world practices of financial statements analysis because of its relative simplicity and availability of data sources and it is also the main method for the thesis. The method develops a meaningful relationship between the individual items or group of items of balance sheets and income statements; it highlights the key performance indicators, such as, *liquidity, solvency and profitability* of a business entity. The tool of ratio analysis performs in a way that it makes the process of comprehension of financial statements simpler, at the same time, it reveals a lot about the changes in the financial condition of a business entity.

Ratio analysis studies levels and changes of relative measurements of financial performances. When using the ratio analysis one can tell how profitable a business is; to show if it has enough capital to meet its obligations and even suggest whether its shareholders satisfied by an increasing value of the company or not. Ratio analysis can also help to confirm whether a company is doing better this year than it was last year; and it can tell how a firm is performing comparing with similar firms in industry. This method is based on a correct interpretation of calculated values. However, it has some limitations. The problem is to choose a proper ratio that suits best to a goal of analysis. The proper application of a ratio depends on correct economical and financial meaning of that ratio. To be useful, both the meaning and limitations of a chosen ratio have to be understood.

Meaningful ratio analysis must conform to the following elements:

- 1) The viewpoint of the analysis taken;
- 2) The objectives of the analysis;
- 3) The potential standards of comparison.

2.2. FINANCIAL RATIOS: THEORITICAL DISCUSSION

Financial analysis offers a system of appraisal and evaluation of a firm's performance and operations; it is the analysis of the financial statement of an enterprise. The analysis of financial statement can be best done by various yardsticks of which, the important is known as ratio or percentage analysis. Ratio is a numerical or an arithmetical relation between two figures. It is expressed when one figure is divided by another. Accounting ratios show inter-relationship which exist among various accounting data. Accounting ratio can be expressed in various ways such as, a pure ratio, a rate or a percentage. Ratio analysis is certainly a very admirable device because it is simple and it has a predictive value. Managements and other users thus, rely substantially on the financial ratios based on accounting data for making assessments and predictions of past performance, present position and probable future potentials. One important way for diagnosing the financial health is to measure the profitability, liquidity, activity and solvency and the level of the bankruptcy of enterprise.

In this section, after having described ratio analysis, it will be briefly discussed how researchers used the ratio analysis and results they had concluded after using the method as a tool for financial performance analysis.

Financial ratios are the simplest tools for evaluating the financial performance of the firm (LIN, Wen-Cheng et al., 2005: 467 – 476). One can employ financial ratios to determine a firm's liquidity, profitability, solvency, capital structure, and assets turnover.

Hannan and Shaheed (1979: 207 – 255) used financial ratios to show the financial position and performance analysis of Bangladesh Shilpa Bank. They showed that techniques of financial analysis can be used in the evaluation of financial position and performance of financial institution as well as non financial institutions even Development Financial Institutions (DFI).

Mina & Taleb (1995: 43 – 65) summarized that the analysis and interpretation of financial statements are generally aimed at determining the financial position of a firm.

Financial ratio was used as an analytical technique for assessing the performance of the concern. Jahur and Mohiuddin (1995: 245 – 255) used financial ratios to measure operational performance of limited company. They used profitability, liquidity, activity and capital structure ratios to measure operational performance of limited companies they had assessed.

Altman (1968: 589 - 609) used financial ratios with Z- Score Model to predict corporate bankruptcy. He found that the bankruptcy model has an accuracy rate of 93% and is very successful in predicting failed and non-failed firms. Beaver's (1966) univariate analysis led the way to a multivariate analysis by Edward Altman, who used multiple discriminate analyses (MDA) in his effort to find a bankruptcy model. He selected 33 publicly traded manufacturing bankrupt companies between 1946 and 1965 and matched them to 33 firms on a random basis for a stratified sample (assets and industry). The results of the MDA exercise yielded an equation; he called the Z-Score that correctly classified 94% of the bankrupt companies and 97% of the non-bankrupt companies one year prior to bankruptcy. These percentages dropped when trying to predict bankruptcy two or more years before it occurred (Chuvakhin & Gertmenian, 2003: 7 - 17). Krishan Chaitanya (2005) used Z model to measure the financial distress of Industrial Development Bank of India (IDBI) and conclude that IDBI is likely to become insolvent in the years to come.

Sina and Matubber (1998: 179 – 189) used financial ratios to test the financial strengths and weaknesses of Khulna Newsprint Mills Ltd. they found that due to lack of planning and control of working capital, operational inefficiency, obsolete store, ineffective credit policy, increased cost of raw materials, labor and overhead, the position of the company was not good.

Jahur and Parveen (1996: 173 – 184) used Altman's MDA model to conclude the bankruptcy position of Chittagong Steel Mills Ltd. They found that absences of realistic goals, strict government regulations are the main reasons for the lowest level of bankruptcy.

Ohlson (1980: 61 – 80) he employed financial ratios to predict a firm's crisis. He found that there are four factors affecting a firm's vulnerability. These factors are the firm's scale, financial structure, performance and liquidity.

Financial statements, by themselves, do not provide a lot of information about how well a company performs year to year or in comparison to other businesses in its industry. One of the reasons why is difficult to make comparisons is that companies rarely have exactly the same revenue. Another reason is that companies have varying financing structures. Ratios and other performance measures and techniques have been developed to make financial information comparable from company to company. These tools form three broad categories: estimation of operating performance, evaluation of financial performance and defining level of financial risk. Operating performance deals with efficiency of management. In other words, it is important to know if a company uses its assets in an efficient and profitable manner. Financial performance deals with issues related to a company's financial structure and ability to meet its financial obligations. Analysis of financial risk is important to banks, suppliers, and investors. The general objective of financial analysis is to evaluate the effectiveness in each of these areas.

The information contained in the main financial statements has major significance to various interested parties who regularly need to have relative measures of the company's business efficiency. Financial analysis conducted for the need of third parties is external by its nature and often called "analysis of financial statements". The analysis of financial statements is based on the use of ratios also known as relative values. Ratio analysis involves methods of calculating and interpreting financial ratios to analyze and monitor the firm's performance. The only data sources to ratio analysis are the firm's financial statements. (Gitman and Zutter, 2010: 67)

There are as many different financial ratios as there are possible combinations of items appearing on the balance sheet, income statement and cash flow statement, and their application is defined from an analyst point of view. Financial management practitioners use various approaches depending on the goal of analysis or business issue. Despite of the number of ratios, they all cohere through their classification.

Frank Fabozzi and Pamela Peterson in their "Financial Management and Analysis" propose following classification of financial ratios according to the way they are constructed. They define four types of ratios:

- Coverage ratios. A coverage ratio is a measure of a firm's ability to "cover" certain financial obligations. The denominator is an obligation and the numerator is the amount of the funds available to satisfy that obligation;

- Return ratios. A return ratio indicates a net benefit gained from particular investment of resources or any other similar activity. The numerator is the net result of an operation and the denominator is the resources spent for that operation;
- Turnover ratios. A turnover ratio is a measure of how much a firm gets out of its assets. It compares the gross benefit from an activity with the resources employed in it;
- Component percentage. A component percentage is the ratio of one amount in a financial statement, such as sales, to the total of amounts in that financial statement. (Fabozzi and Peterson, 2003: 722)

Nevertheless, ratio analysis is not just the calculation of a given ratio. Ratios, alone, are not sufficient to understand a company's past performance or to forecast future perspectives in business. Most important is the interpretation of the ratio value. However it is not an easy work to do and there is no single correct value for a ratio. Correct conclusion, that the value of a particular ratio is too high, too low, or just right depends on perspective of the analyst and on company's strategy. A financial ratio is meaningful only when it is compared with some standard, a norm, such as an industry trend, ratio trend, or a planned management objective. This is called benchmarking and it can be used as a measure. According to David Vance, benchmarking "involves analyzing the financial statements of the best companies in an industry and using their financial ratios as a basis for evaluation of a company's performance". (Vance, 2003: 49)

As a result, to make correct conclusions on ratio analysis, two types of ratio comparisons should be made: cross-sectional approach and trend-analyzing method. Cross-sectional analysis involves comparison of different firms' financial ratios over the same period in time. It usually concerns two or more companies in similar lines of business. One of the most popular forms of cross-sectional analysis compares a company's ratios to industry averages published by statistical agencies. In trend analysis, ratios are compared over a periods, typically years. Year-to-year comparisons can highlight trends and point up possible need for action. Trend analysis works best with three to five years of ratios. Certainly, the most informative approach to ratio analysis combines both cross-sectional and trend analyses. A combined view makes it possible to assess the trend in the behavior of the ratio in relation to the trend for the industry.

Financial statement analysis of operating performance and financial condition goes along with the four directions where financial ratios can be calculated:

- Liquidity
- Profitability
- Efficiency or turnover
- Financial leverage

There are several ratios revealing each of the four aspects of operating performance and financial condition and more details about it will follow in the next section.

2.2.1. LIQUIDITY MEASUREMENTS

Liquidity ratios are the ratios that measure the ability of a company to meet its short term debt obligations. Liquidity is a pre-requisite for the very survival of an enterprise. They show the number of times the short term debt obligations are covered by the cash and liquid assets. If the value is greater than 1, it means the short term obligations are fully covered. Generally, the higher the liquidity ratios are, the higher the margin of safety that the company possesses to meet its current liabilities. Most common examples of liquidity ratios include current ratio, acid test ratio (also known as quick ratio), cash ratio, cash flow from operation ratio and working capital ratio.

The liquidity of a firm is measured by its ability to satisfy its short-term obligations as they come due. (Gitman and Zutter, 2010: 71) Liquidity also stands for ability of a company to convert its assets into cash quickly and with lower costs as possible. Such liquid assets are necessary to cover any “financial emergencies” and play as a buffer in company’s operations.

Current Ratio: The current assets consist of cash and assets that can easily be turned into cash and the current liabilities consist of payments that a company expects to make in the near future. Thus, the ratio of the current assets to the current liabilities measures the margin of liquidity. It is known as the current ratio.

$$\text{Current Ratios} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

The meaning of the current ratio is the following: it is usually better when it is higher – between 1 and 2 (sometimes 1-3). Rapid decreases in the current ratio sometimes may indicate problems.

Quick Ratio: Differences in structure of assets may require calculating the quick ratio. Some assets are more liquid than others are. For example, inventories have relatively low liquidity since selling of them may require lowering prices. On the other side, cash, short-term securities, and bills that customers have not yet paid (receivables), are more liquid:

$$\text{Quick Ratios} = \frac{\text{Cash} + \text{Marketable Securities} + \text{Net Receivables}}{\text{Current Liabilities}}$$

Usually, it is recommended to have the Quick Ratio higher than 1

Cash Ratio (Absolute liquidity ratio): The most liquid assets are the company's of cash and financial instruments. These assets have an absolute liquidity and allow redeeming all obligations in no time. The recommended value of this ratio is 0.2-0.5.

$$\text{Cash Ratios} = \frac{\text{Cash} + \text{Short-term investment}}{\text{Current Liabilities}}$$

Another way to measure a company's ability to cover short-term obligations is the Net Working Capital-To-Sales Ratio, which compares net working capital (current assets minus current liabilities) with sales:

$$\text{Net working capital to sale} = \frac{\text{Current Assets} - \text{Current Liabilities}}{\text{Sales}}$$

Operating Cash Flow Ratio is focused on the ability of a company's operations to generate the resources needed to repay its current liabilities:

$$\text{Operating Cash Flow Ratios} = \frac{\text{Cash flow from operations}}{\text{Current liabilities}}$$

These measures of liquidity are just indicators of a problem financial situation and aimed to attract attention of an involved party. They are no substitutes for a detailed financial plan ensuring that a company can pay its bills. Liquidity ratios also have a negative characteristic. Because of short-term assets and liabilities are easily changed, measures of liquidity can rapidly become outdated.

2.2.2. BALANCE SHEET AND LIQUIDITY

Liquidity of a company can be estimated not only by calculation of liquidity ratios, but also through learning of so-called “balance sheet liquidity”. This method is widely used in Russian financial analysis practices, because balance sheet serves as a primary information source. The analysis consists of comparison of assets grouped by the level of their liquidity and posted in ascending order, with liabilities, grouped by terms of their due dates in the same order. Depending on liquidity level, i.e. speed of transformation into the money; assets are divided into the four following groups (Slabinskaya et al., 2014: 1859-1862):

A1 - Most easily convertible (liquid) assets. All money resources of a company and short-term financial investments (securities) are included in this group. These assets have absolute liquidity. The A1 resources are most mobile and can be “injected” in financial cycle in any moment of time whereas other types of assets can be only added with a certain time gap. Thus, the more A1 assets a company has the higher degree of probability that all urgent financial obligations will be covered as soon as possible if critical event occurred. Insignificant amount of money and securities does not always mean that company is insolvent. Sometimes cash assets can be sent to accounts within a few days and some types of assets can be easily turned into cash.

A2 - Liquid assets. It is accounts receivable expecting within 12 months after accounting date.

A3 - Slow realizable assets. This part of the current assets includes stocks, the value added tax on acquired values and accounts receivable expecting later than 12 months after date of transaction and other operating assets.

A4 – Slow realizable assets. These are the fixed assets.

Liabilities of the balance sheet are also grouped according to their due dates:

L1 – The most accrued liabilities. It is the accounts payable.

L2 – Short-term liabilities. These are the short-term loan proceeds, other short-term liabilities, and dividends payable.

L3 - Long-term liabilities. This group consists of the long-term credits, loan proceeds, and deferred incomes and reserves of forthcoming costs and payments.

L4 – Shareholder’s equity: It includes the capital and reserves minus losses.

For definition of the balance sheet liquidity, it is necessary to compare values of the resulted groups of assets and liabilities in pairs. A balance sheet is considered as “absolutely liquid” if all four following events are fulfilled at the same time.

$$A1 \geq L1; A2 \geq L2; A3 \geq L3; A4 \leq L4.$$

If first three inequalities in the system are accomplished, then the fourth inequality fulfills automatically. In case when one or some inequalities are not fulfilled, liquidity of the balance may differ to some extent from absolute liquidity. Typically, lack of liquidity in one group of balance sheet accounts is compensated from another group of assets or liabilities that has excesses of it.

2.2.3. PROFITABILITY RATIOS

Profitability ratios measure a company’s ability to generate earnings relative to sales, assets and equity. These ratios assess the ability of a company to generate earnings, profits and cash flows relative to some metric, often the amount of money invested. They highlight how effectively the profitability of a company is being managed. Different profitability ratios provide different useful insights into the financial health and performance of a company. For example, gross profit and net profit ratios tell how well the company is managing its expenses. Return on capital employed (ROCE) tells how well the company is using capital employed to generate returns. Return on investment tells whether the company is generating enough profits for its shareholders.

Profitability ratios help to measure how well a company is managing its expenses. These measurements allow evaluating the company’s profits with respect to a given level of sales, a certain level of assets, or the owner’s investment. It is related to the effectiveness with which management has employed both the total assets and the net assets as recorded on the balance sheet. These ratios are usually created by relating net profit, defined in a variety of ways, to the resources utilized in generating that profit.

Gross Profit Margin: This ratio measures the percentage of sales money remaining after the firm has paid for its goods. The higher is the gross profit margin, is better. The gross profit margin ratio is calculated as follows:

$$\text{Gross Profit Margin} = \frac{\text{Sales} - \text{Cost of goods sold}}{\text{Sales}} = \frac{\text{Gross profit}}{\text{Sales}}$$

In general, a company's gross profit margin should be stable. It should not fluctuate much from one period to another, unless the industry it is in has been undergoing drastic changes, which will affect the costs of goods sold or pricing policies.

Operating Profit Margin: It measures the percentage of each monetary unit from sales remaining after all costs and expenses other than interest, taxes, and preferred stock dividends are deducted (Gitman and Zutter, 2010: 80). If a company's margin is increasing, it is earning more per 1 monetary unit of sales. A high operating profit margin is preferred:

$$\text{Operating Profit Margin} = \frac{\text{Operating Profits}}{\text{Sales}}$$

Net Profit Margin: The net profit margin measures the percentage of each monetary unit from sales remaining after all costs and expenses, including interest, taxes, and preferred stock dividends, have been deducted. The net profit margin is calculated as follows:

$$\text{Net Profit Margin} = \frac{\text{Earnings available for common stockholders}}{\text{Sales}}$$

Earnings per Share (EPS): It represents the number of monetary units earned during the period on behalf of each outstanding share of common stock (Gitman and Zutter, 2010: 81) and calculates as follows:

$$\text{EPS} = \frac{\text{Earnings available for common stockholders}}{\text{Number of shares of common stock outstanding}}$$

Return on Assets (ROA): A company is efficient if it can generate an adequate return while using the minimum amount of assets. Efficiently working company does not require too much cash for everyday operations and can shift its excesses to investments in new spheres. Consequently, the ROA is considered a critical ratio for determining a company's overall level of operating efficiency and it shows how much profit was earned on the total capital used to make that profit.

$$\text{Return on Assets} = \frac{\text{Net profits}}{\text{Total assets}}$$

Return on Assets before Interests and Taxes (ROABIT): This ratio is similar with the one from above, but has a difference. It gives result that is more meaningful after eliminating both interest and taxes from the net profits and use earnings before interest and taxes (EBIT). It is useful in elimination any significant unusual or nonrecurring income and expense items. In addition, it utilizes an “average assets” value in the denominator:

$$\text{Return on Assets before Interest and Taxes} = \frac{\text{EBIT}}{\text{Average assets}}$$

Return on Equity (ROE): It is another very important measure of a company's profitability that reveals how much profit it generates with the money shareholders have invested.

$$\text{Return on Equity} = \frac{\text{Net profits}}{\text{Shareholder's equity}}$$

Return on Capital Employed (ROCE). This ratio indicates the efficiency and profitability of a company's capital investments.

$$\text{Return on Capital Employed} = \frac{\text{EBIT}}{\text{Total assets – Current liabilities}}$$

2.2.4. EVALUATION OF EFFICIENCY

Asset management (Activity) ratios compare the assets of a company to its sales revenue. Analysis of asset management ratios tells how efficiently and effectively a company is using its assets in the generation of revenues. They indicate the ability of a company to translate its assets into the sales. Asset management ratios are computed for different assets. Common examples of asset turnover ratios include fixed asset turnover, inventory turnover, accounts payable turnover ratio, accounts receivable turnover ratio, and cash conversion cycle. The higher the asset turnover ratios, the more sales the company is generating from its assets. Low asset turnover ratios mean that the company is not managing its assets wisely. They may also

indicate that the assets are obsolete. Companies with low asset turnover ratios are likely to be operating below their full capacity.

This is another set of ratios to estimate how efficiently a company uses its working capital. Efficiency (or activity) ratios measure the speed with which various accounts are converted into sales or cash – inflows or outflows. During the analysis of financial statements, it is important to look beyond measures of liquidity and to evaluate the efficiency of specific current accounts. Several ratios are available from the real analysis practices for measuring the performance of the most important elements of working capital: inventory, accounts receivable, and accounts payable.

Inventory Turnover: generally measures the efficiency of inventory. The resulting turnover is meaningful only when it is compared with similar companies in the same industry or to the past data. It is calculated as follows:

$$\text{Inventory Turnover} = \frac{\text{Cost of goods sold}}{\text{Average inventory}}$$

Average Collection Period: This ratio represents the approximate amount of time that it takes a company to receive payments owed, in terms of receivables, from its customers and clients:

$$\text{Average Collection Period} = \frac{\text{Average accounts receivable}}{\text{Average sales per day}}$$

The average collection period is meaningful only in relation to the company’s credit terms.

Total Assets Turnover: It measures a company's efficiency at using its assets in generating sales or revenue - the higher the number the better. It also indicates pricing strategy: companies with low profit margins tend to have high asset turnover, while those with high profit margins have low asset turnover:

$$\text{Total assets Turnover} = \frac{\text{Sales}}{\text{Total assets}}$$

Accounts Payable Turnover: The ratio that shows to potential investors how many times per period a company pays its average payable amount.

$$\text{Accounts Payable Turnover} = \frac{\text{Cost of goods sold}}{\text{Average accounts payable}}$$

Accounts Receivable Turnover: This is ratio represents the number of times the amount of accounts receivable is collected throughout the year.

$$\text{Accounts Receivable Turnover} = \frac{\text{Sales}}{\text{Average accounts receivable}}$$

Net Working Capital Turnover: This ratio measures a company's net sales from the working capital generated.

$$\text{Net Working Capital Turnover} = \frac{\text{Sales}}{\text{Net working capital}}$$

In business analysis and valuation, one can find a supplementary way to evaluate the efficiency of a company’s working capital management. There are three following ratios: Days in Receivables, Days in Inventory, and Days in Payables.

$$\text{Days in Receivables} = \frac{\text{Average accounts receivable}}{\text{Average sales}} \times 365$$

$$\text{Days in Inventory} = \frac{\text{Average Inventory}}{\text{Average Cost of sales}} \times 365$$

$$\text{Days in Payables} = \frac{\text{Average accounts Payable}}{\text{Average Cost of sales}} \times 365$$

The Days in Receivables ratio provides an estimate of the number of days, on average, what it takes for customers to pay their account (if for a company, how many days are needed to collect their revenues). The Days in Payables shows a company's average payable period. It is the indicator of how long a company is taking to pay its trade creditors. The Days in Inventory gives an idea of how long it takes a company to turn their inventory into sales while production process.

2.2.5. LEVERAGE RATIOS

Financial leverage ratios (debt ratios) indicate the ability of a company to repay principal amount of its debts, pay interest on its borrowings, and to meet its other financial obligations. They also give insights into the mix of equity and debt a company is using. They give indications about the financial health of a company. Companies need to carefully manage their financial leverage ratios to keep their financial risk at acceptable level. Careful management of financial leverage ratios is also important when seeking loans from banks and financial institutions. Favorable ratios can help the company to negotiate a favorable interest rate. The long-term solvency of a company can be measured by the use of solvency ratios named debt to total assets, the times interest earned and fixed charge coverage ratio.

When a company borrows money, it agrees to make a series of fixed payments in the future. Because their shareholders get only what is left after the debt holders have been paid, the debt is said to create financial leverage. In extreme cases, if crisis times come, a company may be unable to pay its debts. Financial leverage enables a company to have an asset base larger than its equity. A company can finance its assets with equity or with debt. Usual practice is expanding the equity through borrowings and the creation of other liabilities like accounts payable, accrued liabilities, and deferred taxes. Financial leverage increases the company's ROE as long as the cost of the liabilities is less than the return from investing these funds. While a company's shareholders can potentially benefit from financial leverage, it can also increase their risk.

Contrasting with equity, liabilities have predefined payment terms, and the company may face risk of financial distress if it fails to meet these obligations. There are some ratios to evaluate the degree of risk coming from a financial leverage. There are two types of financial leverage ratios:

- Component percentages
- Coverage ratios.

Component percentages compare a company's debt with either its total capital (debt plus equity) or its equity capital. Coverage ratios reflect an ability to satisfy fixed financial obligations, such as interest, principal repayment, or lease payments.

Total Debt to Assets Ratio: This component ratio is also-called "Debt Ratio" and measures the proportion of total assets financed by company's creditors. The ratio is calculated as follows:

$$\text{Debt Ratio} = \frac{\text{Total liabilities}}{\text{Total Assets}}$$

The higher Total Debt to Assets Ratio, the greater degree of indebtedness and more financial leverage a company has.

Debt to Equity Ratio: The another component ratio that is able to reveal how a company finances its operations with debt relative to the book value of its shareholders equity:

$$\text{Debt to Equity Ratio} = \frac{\text{Total liabilities}}{\text{Average book value of shareholder's equity}}$$

Assets to Equity (Equity Multiplier): It is also the component measure of financial leverage. It shows how a company uses debt to finance its assets:

$$\text{Equity Multiplier} = \frac{\text{Average total assets}}{\text{Average shareholder's equity}}$$

Gearing Ratio: It is a measure of financial leverage, representing the degree to which a company's activities are funded by owner's funds in opposition to creditor's funds:

$$\text{Gearing Ratio} = \frac{\text{Long-term liabilities}}{\text{Equity} + \text{Long-term liabilities}} \times 100$$

Times Interest-Covered Ratio: The first coverage ratio, which provides the information about how well a company can cover or meet the interest payments associated with its debt. The ratio compares the funds available to pay interest (EBIT) with the interest expense:

$$\text{Times Interest – Covered Ratio} = \frac{\text{EBIT}}{\text{Interest Expense}}$$

The greater the interest coverage ratio, the better is ability to pay interest expense.

Long-term Debt to Total Assets: The ratio measures a share of company's total assets, which is financed by long-term sources. The higher this value is better. The formula is the following:

$$\text{Long-term Debt to Total Assets} = \frac{\text{Long-term Liabilities}}{\text{Total assets}}$$

Long-term Debt to Fixed Assets: This ratio shows which part of the fixed asset is created by long-term financing.

$$\text{Long-term Debt to Fixed Assets} = \frac{\text{Long-term Liabilities}}{\text{Fixed assets}}$$

Financial Leverage: This measure is opposite to the Equity Multiplier Ratio and shows dependency of a company from external sources of financing.

$$\text{Financial Leverage} = \frac{1}{\text{Equity Multiplier}}$$

The lower this ratio, the higher risk of insolvency a company has.

2.2.6. LIMITATIONS ON USING FINANCIAL RATIOS

Financial ratios have certain limitations in their use and are not meant to be applied as definitive answers. They are usually used to provide additional details in the determination of the results of financial and managerial decisions. They can provide clues to the company's performance or financial situation. However, on their own, they cannot explain whether performance is good or bad. As for the external financial analysis, ratios also play a role of basic indicators, showing just an overview of studying business entity. Ratios have to be interpreted carefully. Lawrence J. Gitman and Chad j. Zutter in their "Principles of Managerial Finance" point out some cautions about using ratios in financial analysis. They defined six of them (Gitman and Zutter, 2010: 70)

- Ratios with large deviations from the norm only indicate symptoms of a problem. It is essential always to carry out additional analysis based on internal data to isolate the causes of the problem. Ratio analysis just directs attention to potential weak spots. It does not provide conclusive evidence and only shows the existence of a problem;
- A single ratio does not provide enough information sufficient to judge the overall performance of a firm. Only a group of ratios can practically play key role in it;
- The ratio comparison should be made using ratios calculated with financial statements dated at the same point in time. Otherwise, the effects of seasonality may produce incorrect conclusions.
- The use of audited financial statements for ratio analysis is preferable. Using an audited financial statement guarantees a certain level of trust both for analyst and for the end-user. If the statements have not been audited, the data contained in them may not reflect true financial situation;
- The financial data being compared should have been developed in the same way. The use of differing accounting practices is especially relative to inventory and depreciation and can distort the results of ratio analysis. This limitation is very important for the thesis. It narrows the possibility for comparison of results of Russian forest product companies with European analogues since the analysis is performed on the different data basis. It is true, that the differences of accounting policies may distort intercompany comparisons;
- Results can be distorted by inflation, which can cause the book values of inventory and depreciable assets to differ greatly from their true (replacement) values. Additionally, inventory costs and depreciation write-offs can differ from their true

values, thereby distorting profits. Without adjustment, inflation tends to cause older firms (older assets) to appear more efficient and profitable than newer firms (newer assets).

Ratio analysis is a useful tool, but a person who deals with it has to be always aware of these limitations and make adjustments as necessary and whenever possible. First, the ratio analysis is not just a mechanical process, as it seems to be. It involves an accurate results interpretation. For instance, a correct conclusion about financial ratio value is impossible without analysis of economical situation both in the industry and in the country. Knowing of environment where studied companies operate helps to make better conclusions for an analyst. Analysis of financial ratios can provide useful insights about company's operations, but preferably, it should be used together with other methods such as potential bankruptcy prediction, liquidity of a balance sheet, evaluation of profit changes and its composition and studying of structure of assets and liabilities.

2.3. SOURCE OF INFORMATION

Financial analysis (hence, its results) depends largely on the quality of data it uses. The presence of uniform system of data collection about company's property status, financial results and business activities is required as obligatory criteria for quality of the analysis. Such system does exist and financial analysts use widely public accounting statements. One of primary goals of financial accounting includes providing of complete and trustworthy information about economic activity, necessary both for internal (executives, shareholders, partners and proprietors of organization), and the external users (analysts, investors, creditors and other users of financial statements). The accounting has been developed to accumulate, maintain, and provide financial information regarding internal business transactions. (Jagels and Coltman, 2003: 5) Thus, accounting statements can be named a permanent asset in communication between company and all involved parties because they provide credible channel of the information about financial performance. That is why quality requirements for financial statements are high.

2.3.1. BASICS OF FINANCIAL STATEMENTS

Financial reporting system of a country utilizes its specially determined accounting statements and rules of their application. Regulation and use of financial reports is coordinated by national or (and) international accounting standards. There are four main financial statements:

- A balance sheet;
- An income statement;
- Cash flow statement;
- Statement of shareholder's equity.

Balance sheet shows what a company owns and what it owes at the certain moment of time. It provides details about company's assets, liabilities and shareholders' equity. Assets are things that a company owns that have value. Assets include physical property and things that nonmaterial but nevertheless exist and have value, such as trademarks and patents. In addition, cash itself is an asset. In a balance sheet, assets are generally listed based on how quickly they can be converted (current and noncurrent assets) into cash. Liabilities are amounts that a company owes to others. This also includes obligations to provide goods or services to customers in the future. Liabilities are generally listed based on their due dates (long-term and short-term). Shareholders' equity is the value that would be left if a company sold all of its assets and paid off all of its liabilities. In other words, it is a net worth of a company. It belongs to the shareholders, or to the owners of the company. Balance sheet is based on accounting equation: $ASSETS = LIABILITIES + SHAREHOLDERS' EQUITY$.

Income statement is a report that shows how much revenue a company earned over specific period. An income statement also shows the costs and expenses associated with earning that revenue. The end line of the statement usually shows the company's net earnings or losses. Income statements also report earnings per share for joint-stock companies.

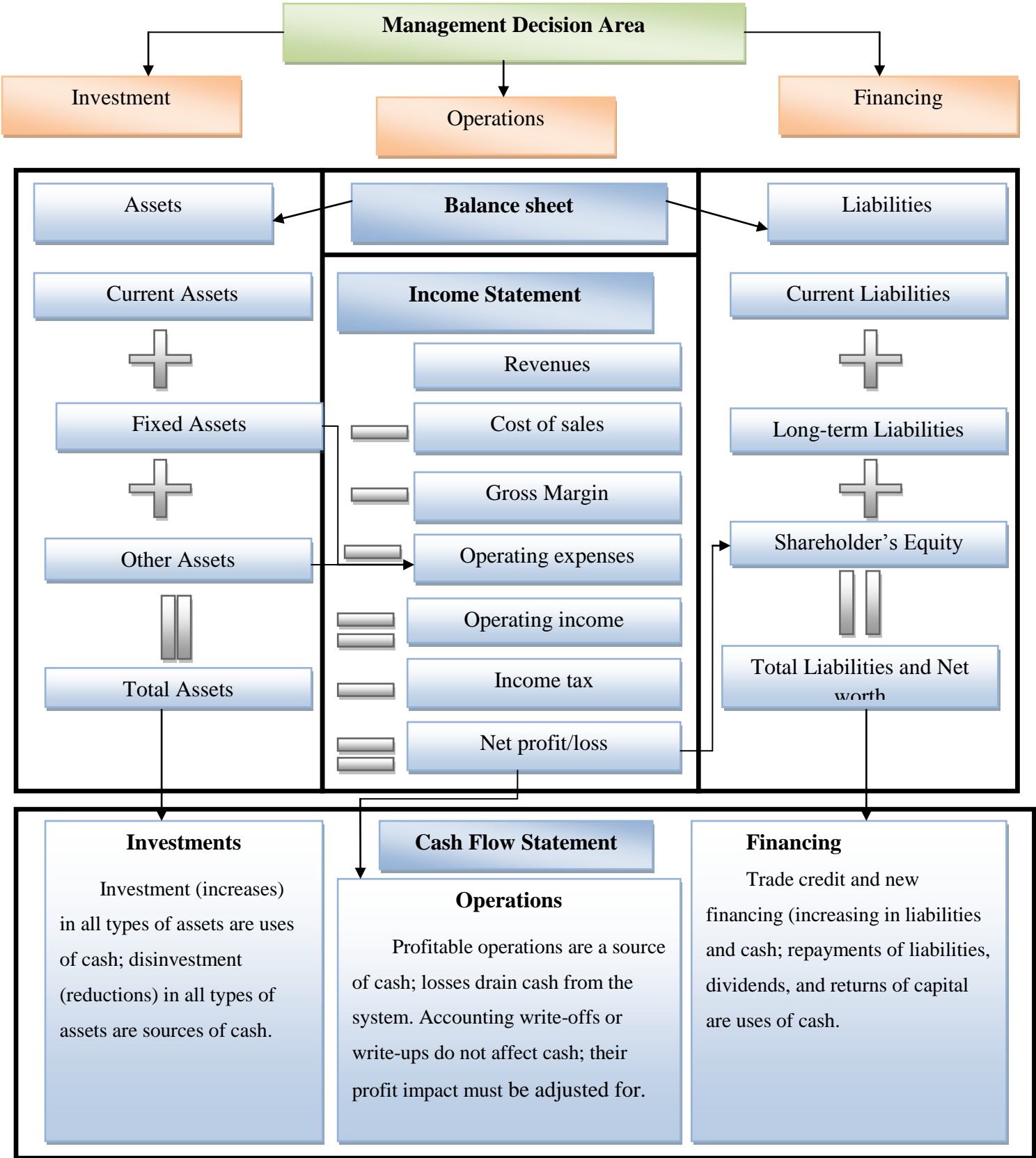
Cash flow statement reports a company's inflows and outflows of cash. This statement shows whether the company generated cash. Generally, cash flow statements are divided into three main parts. Each part reviews the cash flow from one of three types of activities:

- 1) Operating activities;
- 2) Investing activities; and

3) Financing activities.

The fourth financial statement – statement of shareholders' equity (it may also have other names according to national standards) – shows changes in the interests of the company's shareholders over time. The main idea of financial statements is to provide information about financial position (balance sheet), performance (income statement), and changes in financial position (cash flow statement) of a company. (Greuning et al., 2011: 4) In addition, Erich Helfert in his "Financial Analysis: Tools and Techniques" brings up the general picture of a company's financial reporting system. There are three main "branches" of a company's activities: Investments, Main operations and Financing. As Figure 5 shows, all three financial reports reflect the interconnection within a business organization, helping to visualize their coverage and relationship as an integrated whole. The idea of the scheme is that all three financial statements cover three informational dimensions of management by overlapping and supporting each other.

Figure 6: Generalized overview of a financial reporting system.



Reference: Generalized overview of a financial reporting system. (Helfert, 2001: 40 – 45)

Financial reporting system has certain attributes that make the information provided in financial statements useful to users. They are called qualitative characteristics:

- Relevance;
- Reliability;
- Comparability;
- Accessibility.

Relevant information influences economic decisions created by users, helping them to evaluate past, present, and future events or to confirm or correct their past evaluations. (Greuning et al., 2011: 5). Reliable information is free from material errors. Comparable information is presented in a consistent manner over time and in a consistent manner between entities to enable users to make significant comparisons. Accessibility attribute stands for ability of information to be understandable by users who have a basic knowledge of business, economic activities, and accounting. These characteristics are fundamental and despite real variations among the nations, persist in all accounting standards and approaches around the globe.

2.3.2. INTERNATIONAL APPROACHES TO FINANCIAL STATEMENTS

Accounting and reporting practices, regardless of national differences, during their historical development, have been highly consistent. The reason is that all these practices were intended to accomplish the same goals. With the impact of industrial revolution and the growth of various forms of businesses in the 19th century, many countries tried to bring order to the variety of practices by “either introducing legislation that set out accounting rules for businesses or providing a general framework for their conduct”. (Hussey and Ong, 2005: 22). An essential part of this legislation was the disclosure of financial information by organizations to various groups. However, the term “accounting standard” appeared only in 1970s. Nowadays, the diversity of accounting systems has become less than significant, because the systems of the more dominant economic leaders became the preferred sets of practices for companies oriented in a business activity in those nations (Zeff, 1978: 56 – 63).

In the age of globalization, a demand for uniformity of accounting standards has emerged considerably. Comparability of financial information is the aim of implementing universal accounting rules. The move to unification has started due to the increasing influence of the International Accounting Standards Board (IASB). Recently, major developed economies, for example, the European Union, China, Brazil and Australia have adopted the International

Financial Reporting Standards (IFRS) for their accounting systems (IAS PLUS, 2007). Other countries have also declared their intentions to adapt their national standards (GAAP) with international requirements, and some still have not decided on their aims. Several nations have partially adopted IFRS for companies listed on domestic stock market and banks. In the United States, there are still barriers on the way of harmonization of accounting standards with IFRS.

The work for convergence of national accounting standards is conducted through the following four directions:

- Procedural matters – to specify how accounting records are have to be kept and how transactions are to be recognized in the records;
- Recognition – to specify what will be accepted as an economic transaction for financial accounting and reporting purposes;
- Measurements – to specify how revenues, expenses, gains, losses, assets, and liabilities should be measured in the financial statements;
- Disclosure – to specify the content and presentation of information in financial statements. (Hussey and Ong, 2005: 26).

Although, consolidation of national accounting standards is still important differences among these standards are often significant. This happens mainly due to opinions difference of those who develop standards, in regard of recognition and measurement norms. Other problems are connected sometimes with technical difficulties and political issues. The negative consequence consists in possibility to examine a set of financial statements of a company in one country but be unable to compare it with a similar business in another country. “This is because the financial statements had been drawn up according to different accounting and reporting requirements”. (Hussey and Ong, 2005: 27) However, big players on international markets – multinational corporations, have already overcome comparability problems of financial information. It has become natural that all major players on the global market keep their financial records both in national and international formats.

2.3.3. RELATIONSHIP BETWEEN FINANCIAL ANALYSIS AND AUDITING

Financial auditing represents an entrepreneurial activity of auditors in independent and unbiased verification of accounting statements. As known from the history of economics, a company's owner has just recently ceased to be identified as its administration. Separation of interests of management and investors caused development of the audit. Consequently, independent auditors eliminate problem of discrepancy of interests of those who creates financial statements and those who uses them, leading eventually to accessibility of financial information. The audit also diminishes possibility of an incorrect decision-making, based on unreliable information that can entail negative economic consequences for a company.

Likewise, auditor activities remove problem associated with necessity for an end-user to have a special knowledge for estimation of reliability of financial statements. The degree of reliability cannot be easily evaluated by the majority of end-users, because of their limited access to accounting books and other internal information. That is why an auditor's conclusion can ensure the required level of confidence in a financial statement. It is true as well for financial analysis. For an external analyst, use of financial reports signed by an auditor means getting trustworthy results.

2.4. IFRS ADOPTION IN THE EUROPEAN UNION

The European Union is not a single jurisdiction but, rather, an economic and political partnership between 27 countries that together cover much of the continent of Europe. The 27 European countries with three additional Europe countries together form the European Economic Area (EEA). The EU is one of the largest economies in the world. Its ongoing economic strength depends, in part, on the efficient flow of capital. Efficient markets rely on transparent and high quality financial information to assist decision-making by capital providers and demonstrate the extent to which management has discharged its stewardship obligations. A common financial language is essential to achieving those ends.

The international standard-setting process began several decades ago as an effort by industrialized nations to create standards that could be used by developing and smaller nations unable to establish their own accounting standards. But as the business world became more global, regulators, investors, large companies and auditing firms began to realize the importance of having common standards in all areas of the financial reporting chain. In the last decades, due to the growth of international flows of capital and properties, the process of harmonization and the reduction of borders between states and financial markets in Europe

were taking place. The increase of multinational firm's movements, political and economic interactions between the states made the necessity of common standards of financial reporting obvious. It was too costly for the companies and investors to understand and to adopt the standards of each national market they wanted to enter. Financial statements were wished to become more transparent so that users could get the necessary information easier and faster.

In a survey conducted in late 2007 by the International Federation of Accountants (IFAC), a large majority of accounting leaders from around the world agreed that a single set of international standards is important for economic growth. Of the 143 leaders from 91 countries who responded, 90% reported that a single set of international financial reporting standards was "very important" or "important" for economic growth in their countries (IFRS, 2011: 1). Recently, more than 120 nations and reporting jurisdictions permit or require IFRS for domestic listed companies (Guggiola, 2010: 99)

Many developing countries and countries with economies in transition strive to mobilize financial resources from domestic and international sources to attain their economic and social development goals. The availability of relevant information on potential investment targets has a bearing on efforts to mobilize investment for financing economic and social development. Such information plays an important role in making critical investment decisions and conducting risk assessment. It also contributes to improved investor confidence and decreased cost of capital. Over the years, attracting financing needed for economic development has become more competitive. Economic resources have become more mobile across borders. Enterprises that provide potential investors with reliable and comparable financial statements are more likely to attract domestic and international investment.

Recognizing the significant influence that corporate reporting has on investment decisions, developing countries and countries with economies in transition are attaching greater importance to transparency in corporate accounting and reporting. They are making efforts to strengthen the various components of the accounting infrastructure in their respective jurisdictions so that financial resources can be mobilized and used more efficiently. However, different countries have been using different national accounting standards, making it difficult and costly to compare investment opportunities in different countries. In addition, the faster pace of globalization, the growing interdependence of international financial markets and the increased mobility of capital have added to the pressure and demand for the

harmonization of accounting and financial reporting frameworks and related standards around the world.

Following a series of accounting scandals, the need for a global set of high-quality financial reporting standards has long been apparent. The process of international convergence towards a global set of standards started in 1973 when 16 professional accountancy bodies from Australia, Canada, France, Germany, Japan, Mexico, the Netherlands, the United Kingdom and the United States of America agreed to form the International Accounting Standards Committee (IASC), which in 2001 was reorganized into the International Accounting Standards Board (IASB) (UNCTAD, 2008). The IASB develops global standards and related interpretations that are collectively known as international financial reporting standards (IFRS).

The process gained speed when the International Organization of Securities Commissions (IOSCO) endorsed the IASC standards for international listings in May 2000 (IOSCO, 2000). IOSCO has recommended that its members allow multinational issuers to use 30 IASC standards, as supplemented by reconciliation, disclosure and interpretation where necessary to address outstanding substantive issues at a national or regional level. It was further facilitated by a regulation approved in the European Union in 2002 required the preparation of consolidated (group) accounts of listed companies domiciled in the European Union in accordance with endorsed IFRS (The E.U. Regulation No.1606/2002) . Since then, many more countries have announced their plans to transition to IFRS, in some instances extending the scope of application beyond group accounts to legal entities and incorporating IFRS into their national regulatory frameworks.

As of the beginning of 2005, the global corporate financial reporting landscape has been transformed in a major way – an unprecedented number of countries and enterprises around the world adopted international financial reporting standards (IFRS) as basis for the preparation of financial statements. All member States of the European Union have adopted IFRS endorsed in the European Union for the preparation of consolidated financial statements of listed companies in their respective jurisdictions (UNCTAD, 2008). The implementation of IFRS in the European Union and other states is the largest accounting experiment in history of accounting so far. The adoption of the same accounting standards by more than one hundred countries has never happened before. This big step towards global integration made International Financial Reporting Standards the most widely recognized accounting system all

over the world. This decision was aimed at enhancing the competitiveness of the European capital markets by establishing a single set of homogeneous, “investor oriented” and internationally recognized accounting standards. The benefits of a common set of high-quality financial reporting standards are very significant. The adoption of International Financial Reporting Standards (IFRS) is based on the fact that the accounting quality should be improved in terms of financial reporting, even though As a consequence, higher quality of financial information is expected in Europe, after the entities have adopted them.

The European Financial Reporting Advisory Group (EFRAG) was established in 2001 with the encouragement of the European Commission to provide input into the development of IFRS issued by the IASB and to provide the European Commission with technical expertise and advice on accounting matters. (EFRAG, 2013)

EFRAG will provide advice to the European Commission on all issues relating to the application of IFRS in the EU. In close consultation with the European Commission, EFRAG will participate in the early phases of debate on all issues related to the standard setting process. EFRAG’s activities are hence aimed at ensuring that European views on the development of financial reporting are properly and clearly articulated in the international standard-setting process.

EFRAG wishes to be instrumental, through its proactive work, in influencing future standard setting developments by engaging with European constituents and providing timely and effective input to the early phases of the IASB’s work. However, that effort needs to be strategic and directed to ensure Europe continues to play a leadership role in international debates about the shape of IFRS. It is now time for EFRAG to provide a sharp focus on improving financial reporting.

2.4.1. THE IMPLEMENTATION OF IFRS IN TURKEY

Worldwide studies in the field of accounting have tried to present fair and useful information on accounting applications and reports for many years. National accounting standards, developed by national accounting standard boards or committees of developed countries, have particularly served this purpose. Under the leadership of these countries and also through the participation of representatives of certain developing countries, the International Accounting Standards Committee (IASC) was established in 1973 as it was mentioned in the previous section, followed by the development and implementation of International Accounting Standards (IAS). In addition, IAS has been accepted by many

countries as a base for the local accounting standards that will be developed. In recent years, the concept of “International Accounting Standards” has changed into “International Financial Reporting Standards” (IFRS) as a result of the continuing studies in this field.

Since the 1990s, there have been attempts to develop accounting principles and policies applicable for all Turkish entities in accordance with global standards (Yalkın, V. Demir and D. Demir, 2008: 279 – 294). Considering the EU integration process and globalization, synchronization with IAS/IFRS principles and the application of these standards have become inevitable for Turkey. Thus, various boards have been established in Turkey and have performed numerous studies in order to develop national accounting standards in compliance with the Board (TMUDESK). TMUDESK was established in 1994 and continued its activities until the Turkish Accounting Standards Board (TASB) was created. Following TMUDESK, some official organizations have prepared legal arrangements in relation to their activity fields. These arrangements include: Communiqués for Accounting Application Regulations issued by the Banking Regulation and Supervision Agency (BRSA), Communiqué Serial: XI, No.: 25 “Communiqué for Accounting Standards in Capital Market ” issued by Capital Market Board (CMB) and Turkish Accounting Standards (TAS=IAS, TFRS=IFRS), which are harmonized with IFRS, issued by TASB.

The latest establishment for accounting standards in Turkey is the TASB. It was established in 1999 (Akyüz et al., 2007: 58). It is responsible for the development of accounting standards in Turkey. The establishment of TASB as the sole authority of accounting regulation in Turkey resulted in the cessation of TMUDESK. TASB has translated IAS/IFRS and issued TAS/Turkish Financial Reporting Standards (TFRS) congruent with them.

As one of the EU candidate countries, banks and firms in Turkey that are registered with the Istanbul Stock Exchange have been preparing their financial statements according to International Financial Reporting Standards (IFRS) since January 1, 2005 in order to be consistent with European Union legislation. EU requires IFRS to be applied in all listed companies in EU exchange market when they prepare their financial statements commencing from January 1st, 2005 (Pwc, 2006: 1). A more recent report states that effective from January 1st, 2008, all listed companies in Turkey were permitted to prepare their financial statements in accordance with the EU endorsed IFRS (Pwc, 2011: 193). Moreover, Turkey’s official regulator, Turkey Accounting Standards Board (TASB) that controls the determination and

application of TAS has accepted a harmonization (uniformity) with IFRS in order to achieve international acceptance by translating the IFRS into Turkish, which is required for every firm from 2008 (Akyüz, Bulca and Üç, 2007: 303).

2.4.2. APPLICATION OF IFRS IN NETHERLANDS

As mentioned in the previous section, the EU IAS Regulation requires application of IFRS as adopted by the EU for the consolidated financial statements of European companies whose securities trade in a regulated securities market starting in 2005. The EU IAS Regulation gives member states the option to require or permit IFRSs as adopted by the EU in separate company financial statements (statutory accounts) and/or in the financial statements of companies whose securities do not trade on a regulated securities market.

The European IAS regulation applies not only to the 28 EU Member States but also to the three members of the European Economic Area (EEA) - Iceland, Liechtenstein, and Norway.

The Netherlands is an EU Member State. Consequently, Dutch companies listed in an EU/EEA securities market follow IFRSs since 2005 (IASP LUS, 2014). The European Commission (EC) periodically issues a document which summarizes the use of options of the IAS Regulation by European Union Member States.

CHAPTER THREE: ANALYSIS, DISCUSSION AND CONCLUSION

This chapter deals with financial analysis of the studied companies. It starts with studying of structure and changes that occurred in financial reports during the analyzed period by doing horizontal and vertical analysis. It continues analyzing financial data of the studied companies in the means of ratio analysis.

3.1. DATA COLLECTION

Main data for the thesis are the annual financial reports of Turkish Airlines (THY) and Royal Dutch Airlines (KLM) companies from the period 2009 to 2013. In order to make comparative financial statement analysis, it is selected and used for the analysis the four main financial statements for the studied companies such as; balance sheets, income statement, cash flow statement and statement of shareholder's equity.

3.2. DATA ANALYSIS

In the study it is used the model of financial statement analysis of airline companies. It indicates the different steps such Selection of financial report, horizontal and vertical analysis, ratio analysis, comparison among studied companies, interpretations, graphics and tables and finally declaration of best one among both companies.

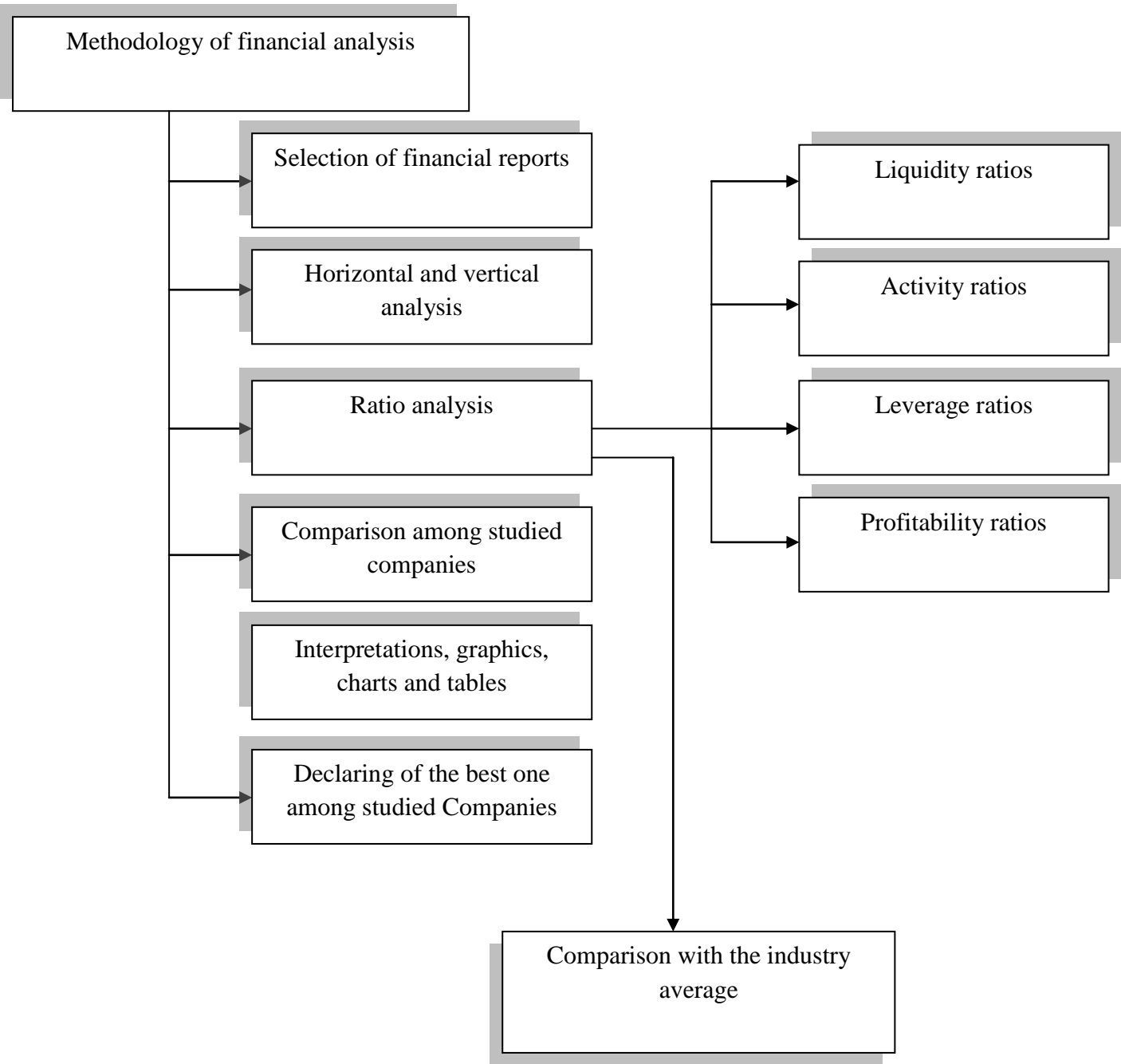
As a first step of the methodology, it is selected the audited consolidated financial statements of the studied companied which comes from the annual report they have publically published. As in common, the audited financial statements includes: Balance sheet, income statement, cash flow statement and statement of shareholder's equity. The studied period is five years; from 2009 up to 2013.

In the second step, items in the balance sheet and income statement are horizontally and vertically analyzed. In order to focus on trends and changes in the financial statement that has occurred over time, horizontal analysis approach is employed. Differently, for the purpose to show relative annual changes within one year, a vertical analysis approach is used.

The third step of the methodology identifies the suitable ratios for financial statement analysis. Ratios that will be used in the analysis are including: liquidity ratio, Activity ratio, profitability ratio and Leverage ratio. All types of ratio are most important for how well a company to generate its assets, liquidity, revenue, expense, shareholder equity profit or loss etc.

In the Forth step of the model, it will be made a comparison among the studied companied alongside the industry average about liquidity position asset management condition, debt coverage facilities and profitability. This step will determine each company’s current consolidated financial position. Different kinds of graphs were included in the analysis to make the analysis more precise and understandable. It will also commanded why a company better than another company and also discuss why not those companies is not good position compare to the industry. And finally, in terms of all analyzed areas, the best company is demonstrated among the two Airline companies in the conclusion section.

Figure 7: Methodology of Financial Analysis



3.3. HORIZONTAL ANALYSIS

Horizontal analysis is examining and evaluation the changes in the items in the financial statements prepared on different dates. This method of analysis is also known as trend analysis allows the assessment of relative changes in different items over time. It also indicates the behavior of revenues, expenses, and other line items of financial statements over the course of time.

To perform horizontal analysis of a financial statement for a given accounting period, the value of each line item at the end of or for the *preceding* accounting period is subtracted from its value at the end of or for the *given* accounting period. The figures obtained from this subtraction are presented in absolute change column. Percentage changes are then calculated by dividing absolute change in value of each line item by its value at the end of or for the *preceding* accounting period

This section builds the horizontal analysis upon THY's and KLM's balance sheet and income statement. It looks at the change in the key areas of both statements.

3.3.1. THY'S AND KLM'S BALANCE SHEET

THY's total assets were rising during the analyzed period, that is, THY's total balance sheet was growing rapidly at a pace between 24.23% and 35.24%. In contrast to THY, KLM indicated less convincing development, even shrinking the balance sheet by 5.41%, 7.34% and 2.33% between accounting periods 2010 – 2011, 2011 – 2012 and 2012 – 2103 respectively. THY's non-current assets has experienced an increase through the analyzed period (from 23.99% up to 40.20%), while its current assets rose in the analyzed periods 2010, 2011 and 2013 and declined in the period 2012. The decrease in the current assets in 2012 was mainly connected to the decrease in components of cash and cash equivalent and other current assets.

Alterations in the structure of THY's assets were connected with the significant change of following components:

- Trade receivables which surprisingly rose from ₺445,381,881 to ₺1,148,090,163.
- Investment accounted for using equity method which increased an average 28.93 (from ₺152,052,556 up to ₺389,674,199).
- Tangible assets which contains property, plant and equipment of the company has increased constantly from ₺4,811,019,050 to ₺17,162,416,670. This increase was the

result of expansion program of the company to support its fleet with new aircraft purchases. THY's fleet had grown 258% to 233 aircraft in 2013 compared to previous years.

Looking at the equity and liabilities side of the balance sheet, it can be noted that THY's total shareholder's equity was rising between 2009 and 2013. This corresponds with THY's profits gained during the analyzed period, which were retained as reserves and were not paid out as dividends and It also corresponds to the increase in capital shares.

Another striking item is a sharp increase in current liabilities by an average increase of 37% during the analyzed period, which must have a negative influence on THY's liquidity. The portion of long-term financial debt to be paid off in short-term risen 37% ₺866,011,394 to ₺1,188,220,823 at the end of the studied period, other financial liabilities by 39%, trade payables by 59%, short-term provisions for employee benefits and passenger flight liabilities rose by 98% and 54% respectively. On the other hand, THY's long-term liabilities has significantly increased through analyzed period by average of 41%.

A close look onto balance sheet explains that THY's total assets had increased an average of 32% from 2010 up to 2013 while its total liabilities increased an average of 39% which was slightly above the assets' average.

Table 5: Presents horizontal trends of THY's balance sheet during the analyzed period

THY BALANCE SHEET - HORIZONTAL ANALYSIS				
All amounts are in TL	2010	2011	2012	2013
	%			
Current assets	25	17	-4	16
None-current assets	24	72	21	40
Total Assets	24	54	14	35
Total Equity	9	20	20	29
Current Liabilities	30	56	15	47
None-current liabilities	37	82	11	33
Total Liabilities	35	73	12	38

Compared to THY, which was doing relatively fine judged by the horizontal development of its balance sheet, KLM was doing obviously worse. The company's total assets rose in the first analyzed period and were declining through next three years (2011-2013). An unexpected drop in KLM's non-current assets especially in the component of property, plant and equipment was mainly caused by sale redundant assets to recover the recurring losses in 2009 and 2012.

The change in the assets structure was affected, mainly, by change of fixed assets. Alterations in the structure of assets were connected with the change of following components:

- Property, plant and equipment decreased from €4,632 to €3,999 or 14%.
- Derivative financial instruments were decreased an average of 3% during the analyzed period.
- Other financial assets also decreased an average of 6%.
- Trade and other receivable component in current assets is also experience a decrease which averaged 3 from 2009 to 2013.
- Cash and cash equivalent of KLM declined in the period 2011 and 2013. The percentage of decrease was 14% and 21% respectively. This decrease was mainly caused by operating losses and redemption of financial lease liabilities and loans of the company.

KLM's shareholder's equity had increased during 2010 and 2013 by 20% and 7% respectively as a result of the net results for these fiscal years and the large positive movements in the value of fuel hedge derivatives that are reported in "Other Comprehensive Income", part of the equity. In spite of this, equity had declined during 2009, 2011 and 2012, which were connected with net losses incurred in the years 2009 and 2012 and negative movements in the value of fuel hedge derivatives that are reported in "Other Comprehensive Income", part of the equity during 2011.

An interesting event happened to KLM's liability components. The company strived to manage its financial debts and loan by redeeming large amount of these liabilities during the analyzed period. KLM's total liabilities decreased from €8,559 to €7,998 or 7% from 2009 up to 2013.

The most significant reduction in sources of finance (company's equity and liabilities) is seen in the following rates:

- Financial lease obligations under long-term liabilities decreased from €2,002 to €1,683 or 16% and financial lease obligations under current liabilities decreased from €451 to €263 or 42%
- Derivative financial instruments decreased from €312 to 167 or 46% while those under current liabilities decreased from €279 to €68 or 76%
- Other financial liabilities decreased a percentage of 28%
- Deferred income and deferred income tax liabilities were decreased 29% and 73% respectively.
- Other provisions reported under current liabilities were decreased 76%.

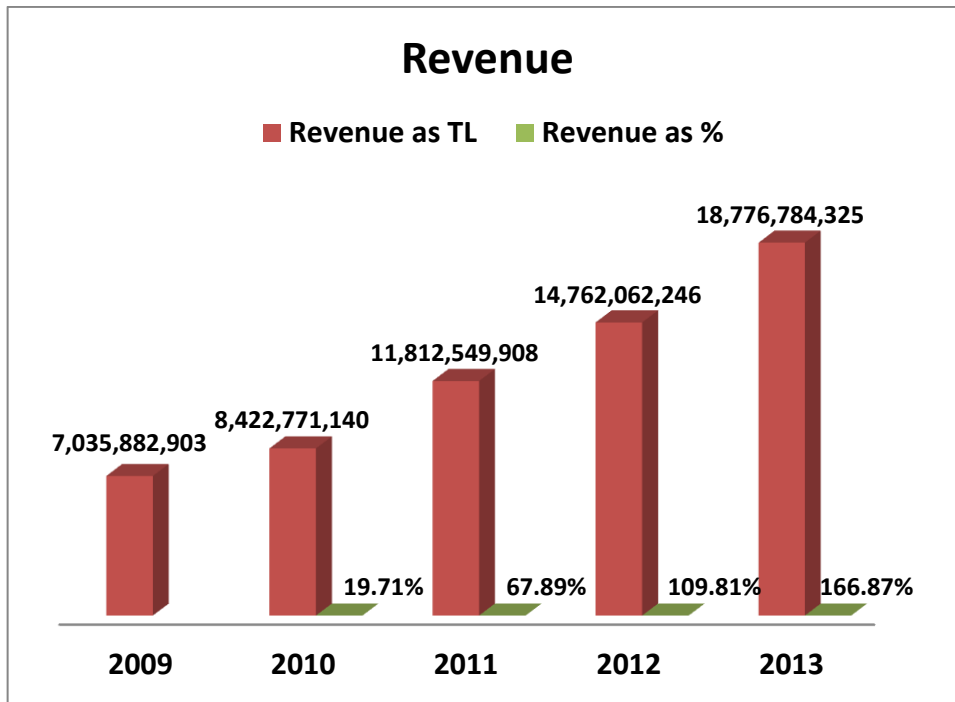
Table 6: Presents horizontal trends of KLM's balance sheet during the analyzed period

KLM BALANCE SHEET - HORIZONTAL ANALYSIS				
All amounts are in €	2010	2011	2012	2013
	%			
Current assets	14	-24	4	-3
None-current assets	0.60	2	-11	-2
Total Assets	4	-5	-7	-2
Total Equity	20	-5	-41	7
Current Liabilities	2	-10	4	5
None-current liabilities	-1	-2	3	-10
Total Liabilities	-18	-6	3	-4

3.3.2. THY'S AND KLM'S INCOME STATEMENTS

In 2013, the total revenues resulting from passenger and cargo reported by Turkish Airlines were increased by 27% compared to the 2012. When the past four years are taken into the consideration, total revenue was increasing rapidly. The percentage of increase from the period 2009 up to 2013 is 167%. During the same period, KLM was experienced 30% increase in its total revenue. Increase in THY's revenues is backed up by increase in its market share. According to the company's annual report published in 2013 (THY's annual report, 2013: 15), Turkish Airline increased its market share to 12.8% successfully and has taken second place among European carriers as regards to air passenger traffic.

Figure 8: Horizontal trends of THY revenue form 2009 – 2013.

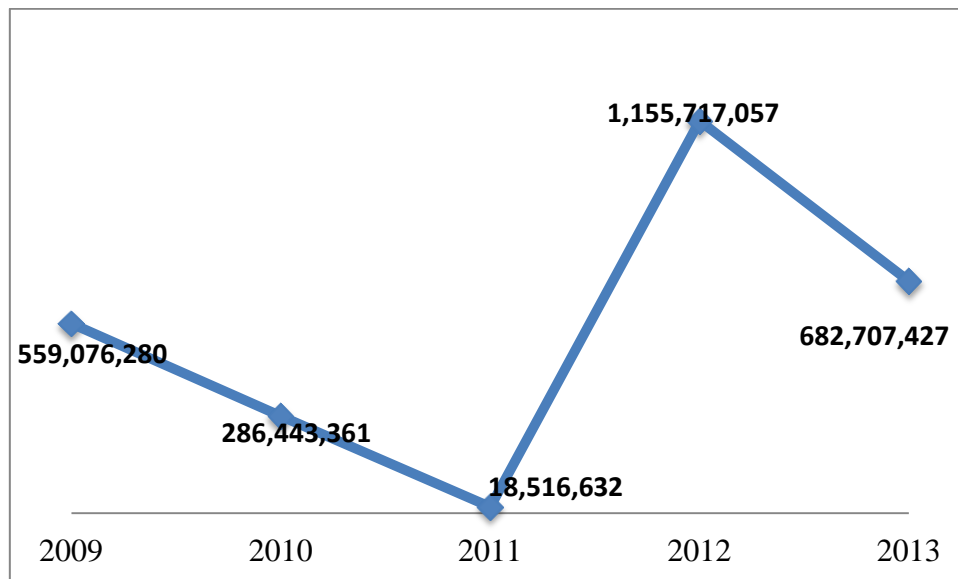


The horizontal trends of the cost of sales indicate an incremental change which faster than the sales revenue during the analyzed period with the exception of the period 2012. Operating costs show general increase parallel to the increase in the total revenue through the selected period. Between 2009 and 2013, Turkish airlines' total operating costs increased 122%. Having analyzed the whole period, comparison of revenues' and operating costs' incremental changes indicate efficiency growth of main operations. The base for this statement is significant increase in operating profit from ₺723,890,442 to ₺1,240,031,464 or by 71%. But, the excessive growth of cost of sales and the increasing operating costs had a negative effect on company's operating income and net profits for the year in the period 2010 and 2011.

If we look net profit for the year, Turkish Airlines had reported a positive amounts through the analyzed period regardless economic crisis occurred in 2009 and significant fuel and exchange rate fluctuations. But in the period 2011, company's net profit shows a value less than the previous year (2010). The reduction in net profit was caused by a significant increase in operating expenses (43%) during this year mainly due to increase in fuel costs. At the end of the analyzed period, THY gained net profit at the level of ₺682,707,427 (decrease by 41% in comparison with previous year), but when the hole period is analyzed, net profit increased by 22%. Decrease in net profit at the end of the

analyzed period (2013) is caused by less value lira against dollar. In the annual report of Turkish airlines published in 2013, the company reported foreign exchange losses amounted ₺223,079,056 while the company reported ₺96,486,559 as foreign exchange loss in 2012.

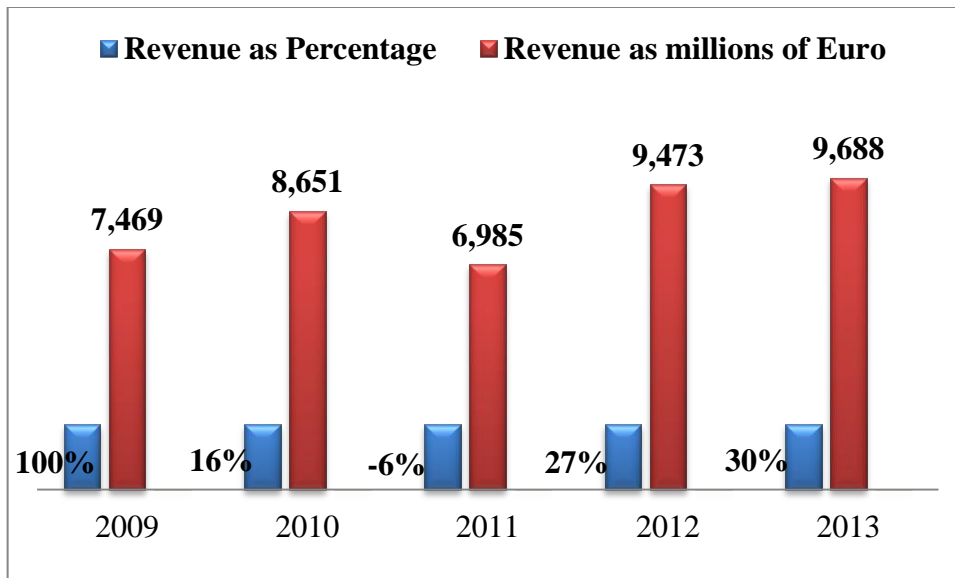
Figure 9: Net profit for the year for Turkish Airlines from 2009 up to 2013. All amounts are in Turkish Lira.



Regarding KLM, the horizontal analysis of its income statement discloses an excessive volatility. In contrast to THY, total revenue of the company increased in the first analyzed period (2010), but unfortunately total revenue declined in the next accounting period and then it started to increase in the period of 2012 and 2013. At the end of the analyzed period, company's total revenue is only increased by 30% compared to 2009. KLM was highly impacted by the global economic crisis which started in the year 2008 and only slightly reduced in strength towards the end of the fiscal year 2009. As the company reported in its annual report of 2009, it was a difficult time for the aviation sector as a whole and especially for KLM which had suffered a setback of at least two years. Increasing fuel costs, the continued instability in the Middle East, financial problems occurred in Spain and Greece in 2012, the increasing unemployment in euro zone and economic weakness spreading to northern Europe were considerable impacts affected KLM operations. Giving consideration to operating costs, it had increased 18% to €9,248 million compared to 2009. Fuel costs and employee costs are the two main factors caused the increase in operating costs during the analyzed period. To limit the impact of these factors the company has been trying to achieve cost management. At the end of the

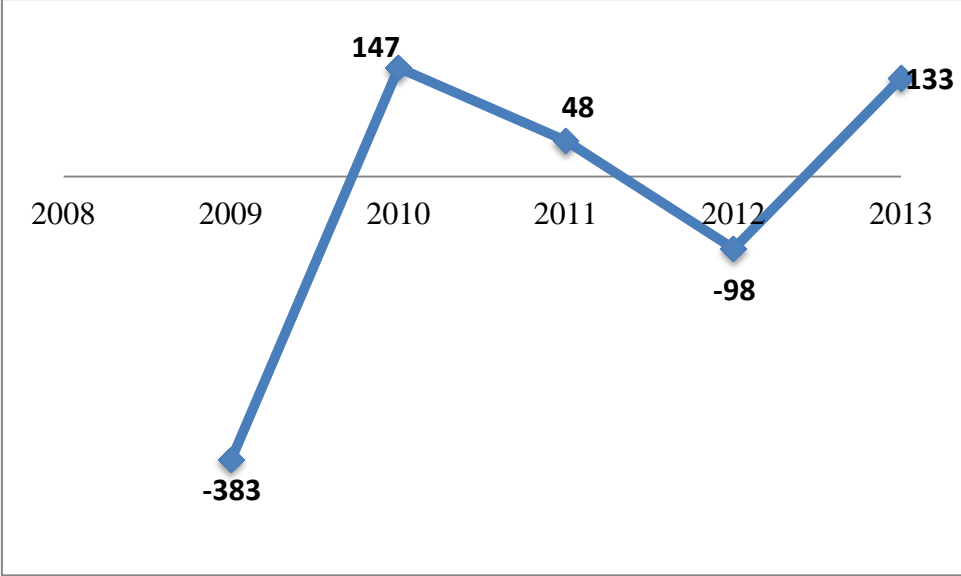
analyzed period; the year 2013, KLM succeeded to save €118 million of its operating cost (1.26%) compared to the previous year 2012.

Figure 10: Horizontal trends KLM revenue from 2009 - 2013



KLM had reported a positive operating profit or “income from current operation” as it usually presents its financial reports during the analyzed period except in the year 2009. In this year the company reported net loss amounted €285 million. As it was mentioned above, the negative result of income from current operations was caused by drop in revenue for the year due to economic crisis affected the operation of airline aviation. The company gained the highest amount of income from current operation in the period 2010 which is €383 million. This great result came after KLM earned a revenue which 16% higher than the revenue in the last year by increasing its capacity. Likewise operating profit, KLM had reported net loss for the periods 2009 and 2012. Beside the economic crises, book value losses for assets sold, increase in net cost of financial debt and high income tax levied in the Netherlands on salaries were other factors caused company’s net loss for the mentioned periods.

Figure 11: Net profit for the year for KLM from 2009 up to 2013. All amounts are in millions of Euro.



3.4. VERTICAL ANALYSIS

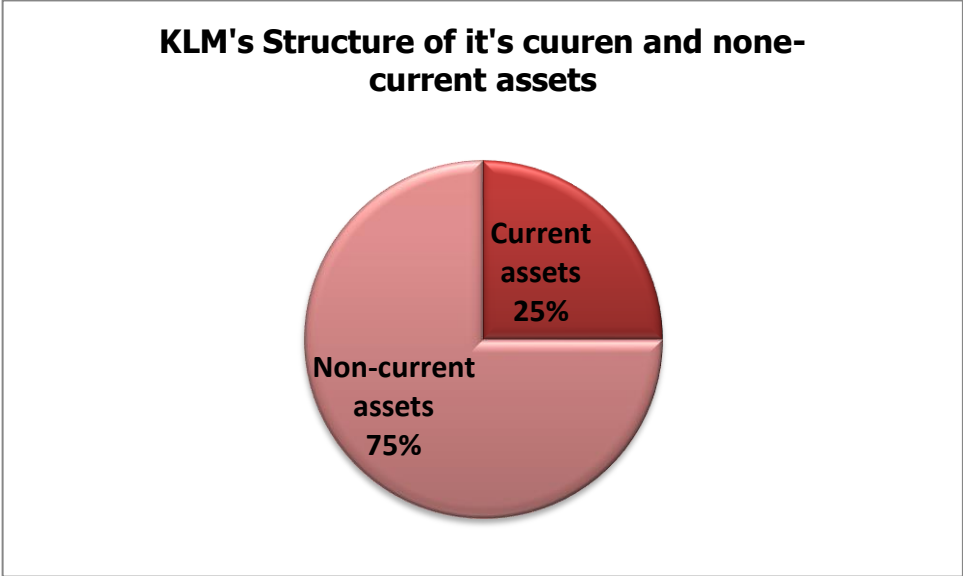
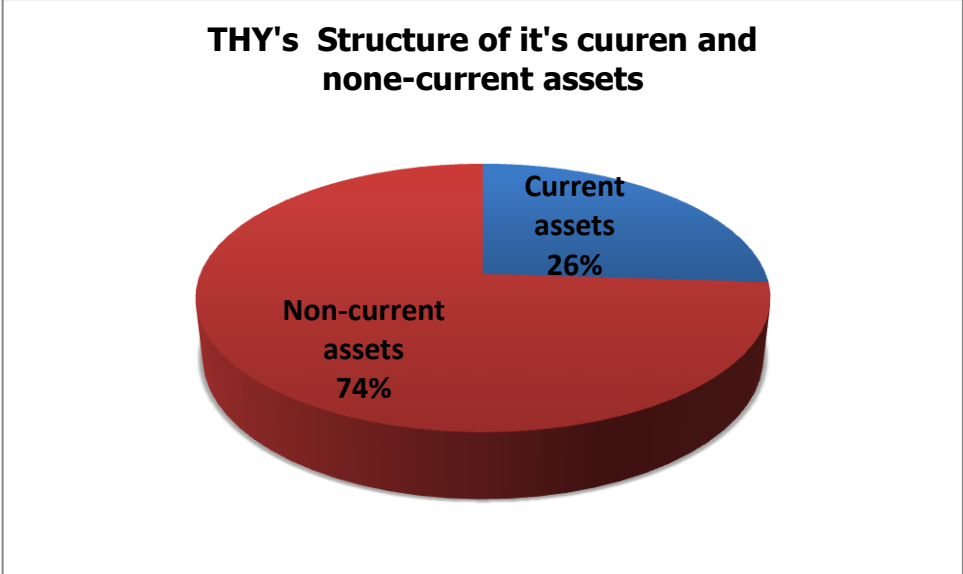
By definition, vertical analysis of financial statements is a technique in which the relationship between items in the same financial statement is identified by expressing all amounts as percentage of a total amount. This method compares different items to a single item in the same accounting period.

This thesis employs the vertical analysis upon THY’s and KLM’s balance sheets. When applying this method on the balance sheet, all of the three major category accounts, that is, assets, liabilities and equity are compared to the total assets. All of the balance sheet items are presented as proportion of total assets. It is also useful to present accounts in the balance sheet as proportion of current assets, long-term assets, current liabilities and long-term liabilities. Vertical analysis of an income statement (also called a common size income statement) involves converting each income statement component to a percentage of sales.

3.4.1. THY’S AND KLM’S BALANCE SHEET

The vertical analysis of THY’s and KLM’s balance sheet shows that their structure of current assets and non-current assets are slightly similar if we take average vertical analysis of the analyzed period. None-current assets make some three quarters and current assets some quarter of total assets.

Figure 12: Shows average proportion of current and non-current assets to the total assets of the studied companies from 2009 up to 2013.



The proportion of current and non-current assets to the total assets for KLM did not experience significant change during the analyzed period. The range for this proportion was 28% and 22%. Compared to THY, the proportion was high in first two periods and then began to decline in the last three periods.

It also obvious at first sight that KLM’s current assets are lower than its current liabilities through the analyzed period which indicates that company’s current assets are not enough to meet short-term financial commitments. In contrast, THY’s current assets are greater than its short-term liabilities in the first analyzed three periods, but in the periods 2012 and 2013, short-term liabilities were more than current liabilities. The ratio of non-current liabilities to total liabilities and equity were almost same for both companies at the end of the analyzed period. There is a decrease in non-current liabilities for THY and KLM in 2013 compared to the previous year 2012.

Figure 13: THY’s current assets compared to its current liabilities. All amounts are in billions of Turkish Lira.

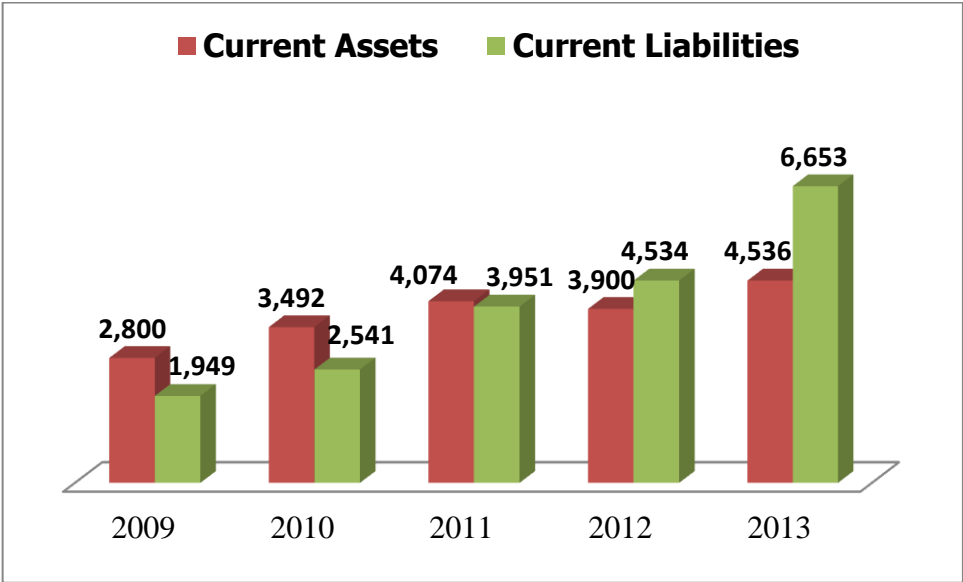
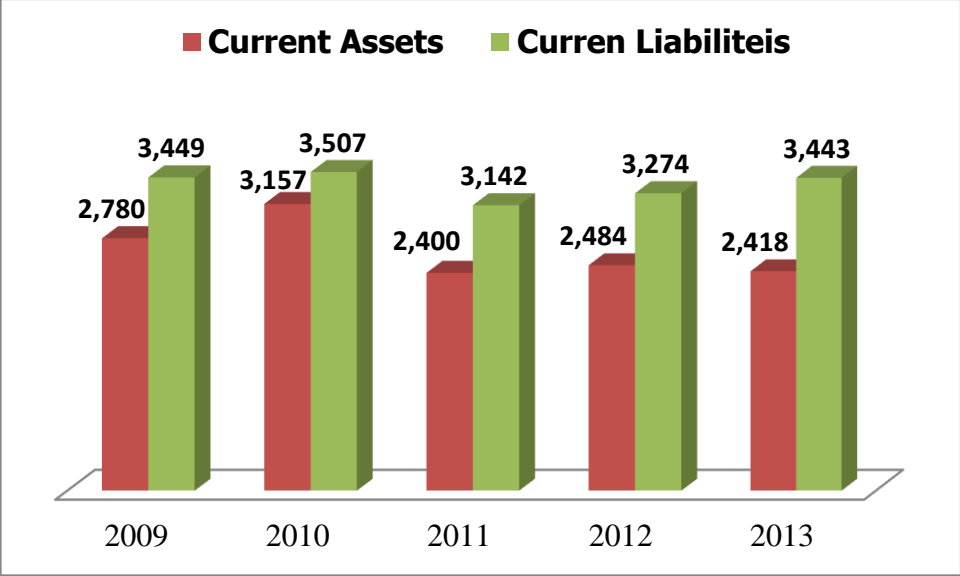


Figure 14: KLM’s current assets compared to its current liabilities. All amounts are in millions of Euro.



An important account for vertical analysis is that of cash and cash equivalent item, which provides company’s ability to meet its day to day activities and to pay its short-term obligations. Turkish Airlines’ cash and cash equivalent proportion to current assets is 30% and proportion to the total assets is 5% at the end of the analyzed period. These rates represent a low proportion compared to 2009 which the amount of cash and cash equivalent that THY held was 39% to current assets and 13% to the total assets. Regarding KLM, cash and cash equivalent is 40% to current assets and 10% to the total assets at the end of the analyzed period. In 2009, these proportions were the same. As it mentioned earlier KLM was affected by economic crisis in 2009. So, to make recovery KLM had started to apply an approach to control its cash and costs.

The percentage of THY’s trade receivables in the current asset section was increasing through the period. The vertical analysis made in the account shows percentages of 16% for 2009, 17% for 2010, 19% for 2011, and 20% and 25% for 2012 and 2013 respectively. The increasing proportion of this account is connected to the increasing capacity (increase in market share and total revenue) of the company. The proportion of KLM’s trade receivable to current assets was slightly constant. It declined in 2010 and then increased and remained constant through last periods.

Comparing THY's and KLM's total equity, that is, shareholder's capital, reserves and retained earnings reveals that both companies had failed to increase the share of equity on total assets. The proportion of total equity reported in THY financial statement to the total assets during the analyzed period decreased from 40% to 27% while KLM's total equity decreased from 21% to 17% in the same period. On the other hand, if we compare the share of equity on total assets between two companies, we find that shareholder's of THY have more equity on total assets than the shareholder's of KLM have on company's total assets.

3.4.2. THY'S AND KLM'S INCOME STATEMENT

Vertical analysis of THY's income statement discloses that cost of sales increased as a percentage of sales from 74% to 82% during the analyzed period. Operating expenses and income taxes, however, decreased in relation to sales at the same period while operating profit, income before income tax and net profit for the year decreased as a proportion to sales revenue from 2009 to 2013. The main reason caused this reduction was increase in cost of sale and financial expenses as a percentage of sales during the analyzed period.

Table 7: Presents vertical analysis of THY's income statement

	2009	2010	2011	2012	2013
Accounts	%	%	%	%	%
Sales revenue	100.00	100.00	100.00	100.00	100.00
Cost of sales (-)	73.91	78.98	82.99	79.37	81.51
GROSS PROFIT / (LOSS)	26.09	21.02	17.01	20.63	18.49
Marketing. sales and distribution expenses (-)	11.46	11.65	10.88	10.76	10.37
Administrative expenses (-)	3.78	3.88	3.09	2.52	2.32
Other operating expenses (-)	1.85	1.45	3.36	0.79	0.43
Total Operating Expenses (-)	17.09	16.98	17.33	14.06	13.12
Other operating income	1.30	1.68	1.36	1.16	1
OPERATING PROFIT / (LOSS)	10.30	5.72	1.04	7.72	6.60
Income From Investment Activities				3.31	0.70
Share of investments' profit/ (loss) accounted for using the equity method	0.18	0.44	0.09	0.04	0.58
Financial income	2.46	0.86	2.24	0.60	0.27
Financial expenses (-)	2.45	1.81	2.13	2.29	3.01
PROFIT / (LOSS) BEFORE TAX	10.47	4.34	1.24	9.38	5.14
Tax (expense) / income	2.53	1	1	2	2
PROFIT / (LOSS) FOR THE YEAR	7.95	3.40	0.2	7.83	3.64

Regarding KLM, vertical analysis of its income statement reveals that the percentage of operating expenses to the revenue decreased during the analyzed period from 105% to 95%. Although KLM had strived to save more expenses to increase its operating income it seems that the proportion of operating expenses to the revenue is still very high. Income from current operation which is operating income developed from loss of 4% to 3% income as percentage of sales from 2009 to 2013. Compared to Turkish Airlines, the ratio of operating income to the revenue is considerably low. The proportion of Income before tax and net profit for the year to the revenue were also increased during the period but in small rate compared to Turkish Airlines.

Table 8: Presents vertical analysis of KLM's income statement.

	2009	2010	2011	2012	2013
Accounts	%	%	%	%	%
Revenues	100	100	100	100	100
Expenses					
External expenses (-)	67.91	65.21	66.24	68.15	65.41
Employee compensation and benefit expense (-)	29.41	24.89	23.44	25.26	24.81
Depreciation and amortization (-)	7.31	6.23	5.87	5.46	5.23
TOTAL EXPENSES	104.63	96.33	95.55	98.87	95.45
Other income and expenses	0.82	0.75	0.52	0.27	1.43
Income from current operations	-3.82	4.43	3.94	0.86	3.11
Other non-current income and expenses	1.22	0.90	0.04	1.00	0.53
Income from operating activities	-5.03	3.53	3.89	-0.15	2.58
Gross cost of financial dept (-)	2.21	1.88	1.78	2	1.62
Income from cash and cash equivalents	0.90	0.5	0.42	0.31	0.31
Net cost of financial dept	-1.31	-1.39	1.36	1.35	1.31
Other financial income and expenses	0.21	0.45	1.60	0.25	0.70
Pre- tax income	-6.56	1.69	0.93	-1.25	1.97
Income tax (expense)/benefit	1.53	0.01	0.31	0.33	0.50
Net result after taxation of consolidated companies	-5.03	1.68	0.62	-0.92	1.48
Share of results of equity shareholdings	0.09	0.02	0.07	0.12	0.10
PROFIT / (LOSS) FOR THE YEAR	-5.13	1.70	0.69	-1.03	1.37

3.5. RATIO ANALYSIS

According to Atrill and McLaney (2006: 68), financial analysis using the financial ratios provides a quick and relatively simple means of assessing the financial health of a business. The ratio is also helpful when comparing the financial health of different businesses. By calculating a relatively small number of ratios, it is possible to build up a good picture of position and performance of a business. Merely calculating a ratio will not indicate very much the position or performance of a business. It would not be possible to deduce from financial performance without comparison whether this particular level of performance was good, bad or indifferent. It is only when we compare this ratio with some 'benchmark' that the information can be interpreted and evaluated.

Various ratios are used by managers and investors to analyze and forecast the profitability and efficiency of a company. Listed in this section are the key ratios for airline industry used for the financial analysis.

- Liquidity ratios
- Debt to equity ratios
- Return on assets
- Return on equity
- Asset turnover ratio
- Revenue Passenger Kilometer (RPK)
- Available Seat Kilometer (ASK)
- Load factor

For comparison purpose, this thesis will use the financial ratios to compare the financial information of Turkish Airlines and Royal Dutch Airline alongside industry average. Industry average was calculated using the financial statements of 10 of the largest state airline companies in Europe by total scheduled and chartered passengers (Wikipedia).

Table 9: List 10 of the largest airline companies in Europe

Airline	Country/ Region
Aegean Airlines	Greece
Aeroflot	Russia
Air France – KLM group	France and Netherlands
British Airways	Britain
Finn air	Finland
Lufthansa	Germany
Norwegian	Norway
Ryan air	Ireland
SAS group	Scandinavian
Turkish Airlines	Turkey

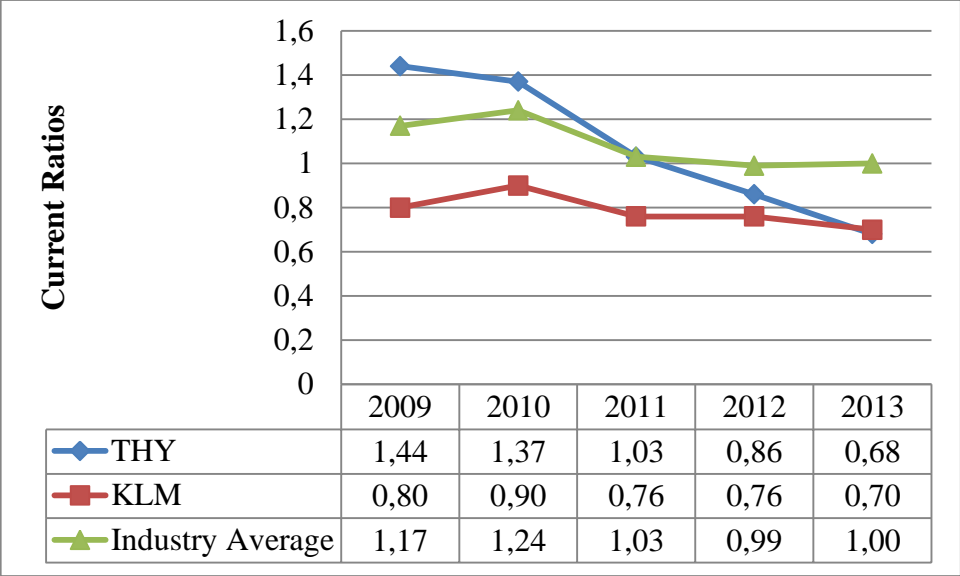
3.5.1. LIQUIDITY RATIOS

Liquidity ratios are ratios that show how the assets of a business are safe in terms of liquidity. A company's ability to turn short-term assets into cash to cover debts is of the utmost importance when creditors are seeking payment. Bankruptcy analysts and mortgage originators frequently use the liquidity ratios to determine whether a company will be able to continue as going concern.

I. CURRENT RATIOS:

The current ratio compares the liquid assets, that is, cash and other assets turning into cash soon, with the current liabilities. The higher the ratio, the more liquid the business is considered to be. As liquidity is vital to the survival of a business, a higher current ratio is usually preferred to a lower one.

Figure 15: Current Ratio for Studied companies and industry average (2009 – 2013)

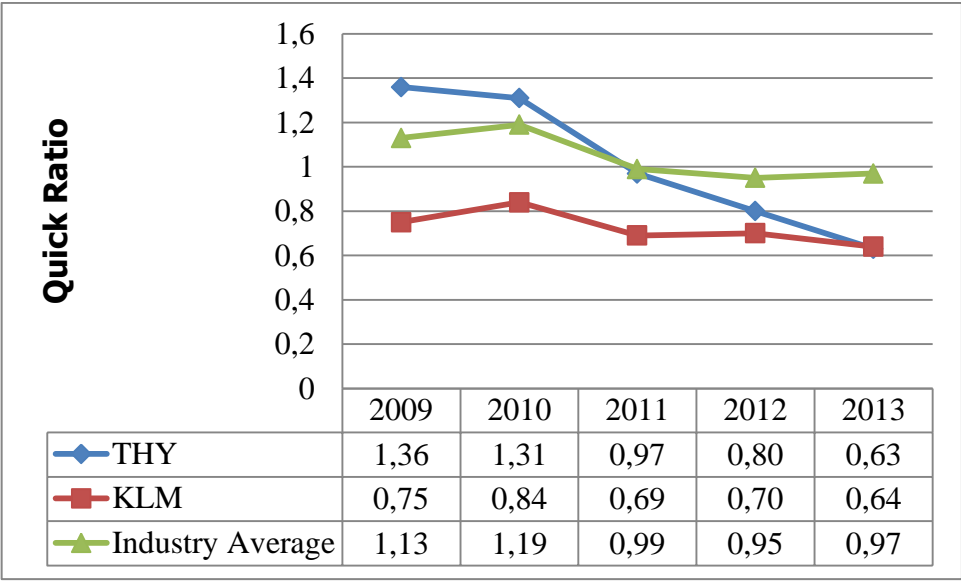


Looking at the graph above, it is obvious that THY has considerably high current ratio than KLM and industry average in the first two analyzed periods, but this ratio has experienced a drop in the next three periods until it reaches the lowest level compared to KLM and industry average. In contrast to THY, the current ratio of KLM was below the industry average through the analyzed period which means that the short-term liabilities of KLM constantly exceeded its current assets. This shows that KLM had low liquidity, which can be deemed as negative during the whole period.

II. QUICK RATIO

An indicator of company’s short-term liquidity, quick ratio measures company’s ability to meet its short-term obligations with its most liquid assets. For this purpose, the ratio excludes inventories from current assets. Quick ratio is considered a more reliable test of short-term solvency than current ratio because it shows the ability of the business to pay short term debts immediately.

Figure 16: Quick Ratio for Studied companies and industry average (2009 – 2013)



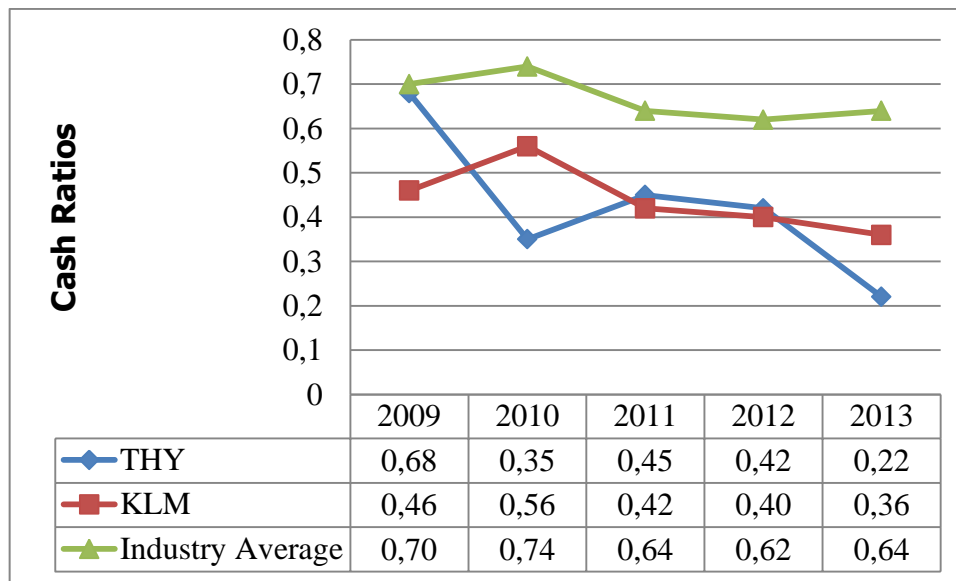
By examining ratio values for the quick ratio calculated for the studied companies, as well as differences between them, it can conclude that THY had a high ratio in the period of 2009 and 2010 compared to its rival and industry average. This indicated that Turkish Airlines has mostly invested in highly liquid assets including cash, short-term investments and accounts receivables that can readily be converted to cash during the mentioned period. In the last three periods, the company was also good in terms of quick ratio compared to KLM, but at the end of the period, quick ratio for THY declined and reached a low level compared to KLM and industry average.

Conversely, the value of quick ratio for KLM had maintained a rate less than the industry average through the analyzed period, but at the end of the period this ratio was good compared to THY.

III. CASH RATIO

In addition to computing current and quick ratio, some analysts also compute cash ratio or absolute liquid ratio to test the liquidity of the business. The cash ratio is much more restrictive than the current ratio or quick ratio because no other current assets can be used to pay off current debt--only cash and cash equivalent assets. This is why many creditors look at the cash ratio. They want to see if a company maintains adequate cash balances to pay off all of their current debts as they come due.

Figure 17: Cash Ratio for Studied companies and industry average (2009 – 2013)



By analyzing cash ratio, both companies had maintained low cash ratio below the industry average during the analyzed period. Turkish Airline’s cash ratio was high in 2009 compared to KLM but in the period 2010, cash ratio shifted from 0.68 down to 0.35. Cash ratio for THY begun to improve in the periods 2011 and 2012 and it was slightly high than the cash ratio of KLM, but it deteriorated significantly at the end of the analyzed period.

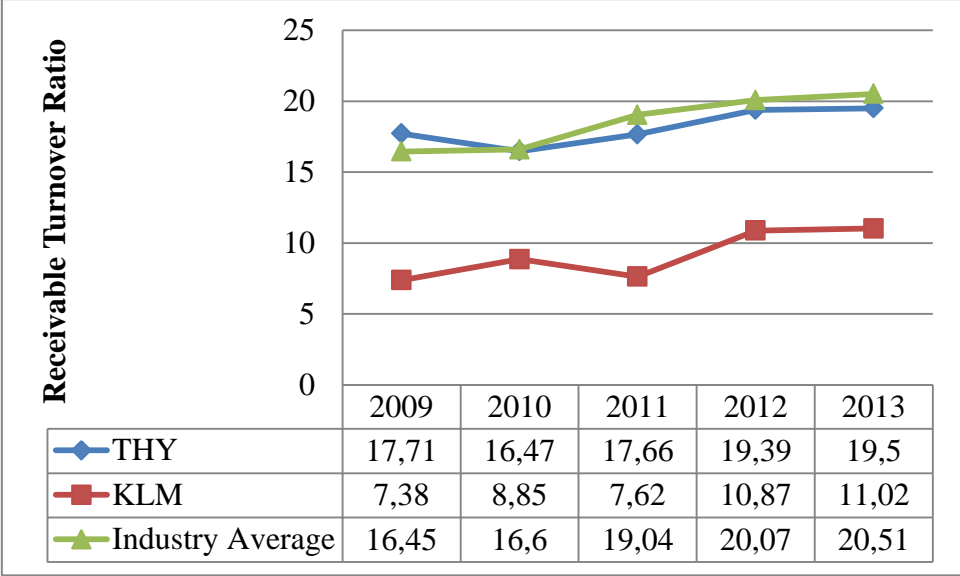
3.5.2. ACTIVITY RATIOS

Activity ratios measure company’s sales per another asset account—the most common asset accounts used are accounts receivable, inventory, total assets, current assets and fixed assets. Activity ratios measure the efficiency of the company in using its resources. Since most companies invest heavily in accounts receivable or inventory, these accounts are used in the denominator of the most popular activity ratios.

I. RECEIVABLE TURNOVER RATIO

Accounts receivable is the total amount of money due to a company for products or services sold on an open credit account. When it comes to receivable turnover ratio, it's an efficiency ratio or activity ratio that measures how many times a business can turn its accounts receivable into cash during a period. In other words, the accounts receivable turnover ratio measures how many times a business can collect its average accounts receivable during the year.

Figure 18: Receivable Turnover Ratio for Studied companies and industry average (2009 – 2013)



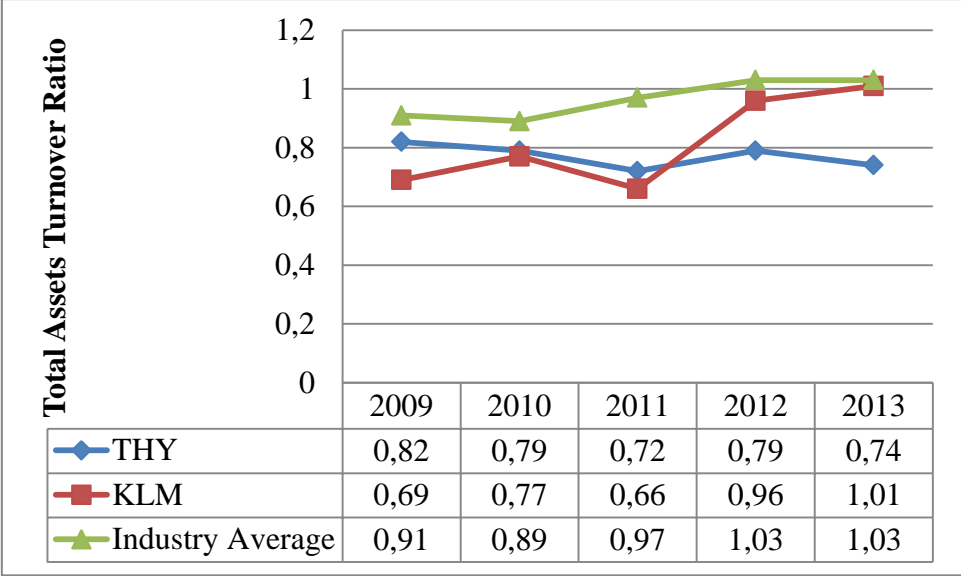
As we can see in the above graph, KLM’s receivable turnover shows less value compared to the turnover of THY and industry average from 2009 up to 2013. This means that KLM collects its receivable an average time less than its rival and industry average. Apparently, Turkish Airlines’ turnover was favorable in the first analyzed period, but in the rest of the period, it was slightly below the industry average.

Since almost all of the airlines’ revenue were generated by passenger ticket sales, the difference between THY and KLM may be explained by their different arrangements with credit card acquires, who tend to keep the collected money as long as possible to minimize their liability to credit card holders.

II. TOTAL ASSETS TURNOVER RATIO

The asset turnover ratio is an efficiency ratio that measures a company's ability to generate sales from its assets by comparing net sales with its total assets. In other words, this ratio shows how efficiently a company can use its assets to generate sales.

Figure 19: Total Asset Turnover Ratio for Studied companies and industry average (2009 – 2013)

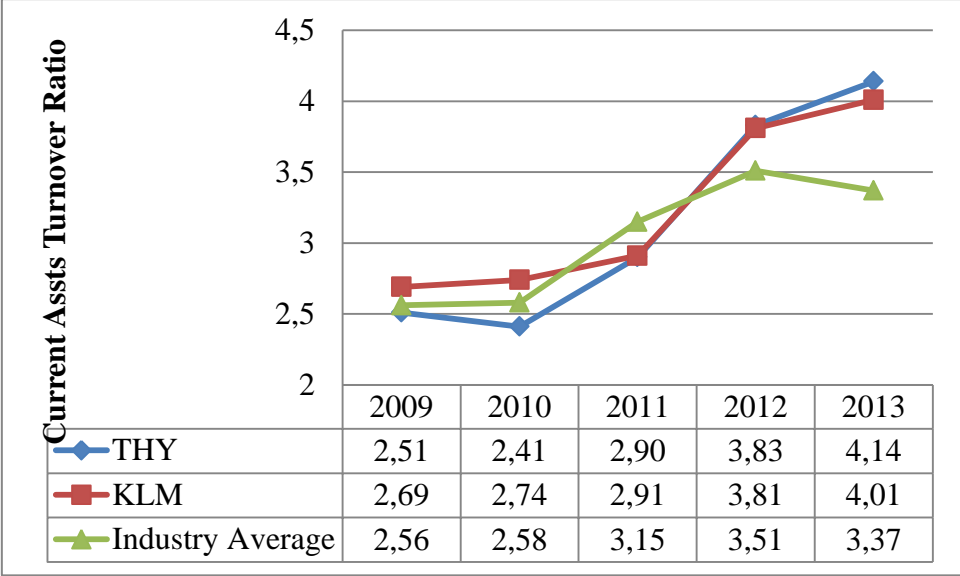


Similar to the above analysis, both airlines maintained a total asset turnover ratio less than the industry average through the analyzed period. This indicates that both companies are not using their assets as efficiently as some of the companies in the industry use. Although, THY’s turnover was below the industry average, it was good in the first analyzed three period compared to KLM. Unfortunately, the efficiency use of its assets dropped in the last two analyzed periods compared to KLM.

III. CURRENT ASSETS TURNOVER RATIO

Current Assets Turnover Ratio indicates that the current assets are turned over in the form of sales more number of times. A high current assets turnover ratio indicates the capability of the organization to achieve maximum sales with the minimum investment in current assets. Higher the current ratio better will be the situation.

Figure 20: Current Asset Turnover Ratio for Studied companies and industry average (2009 – 2013)

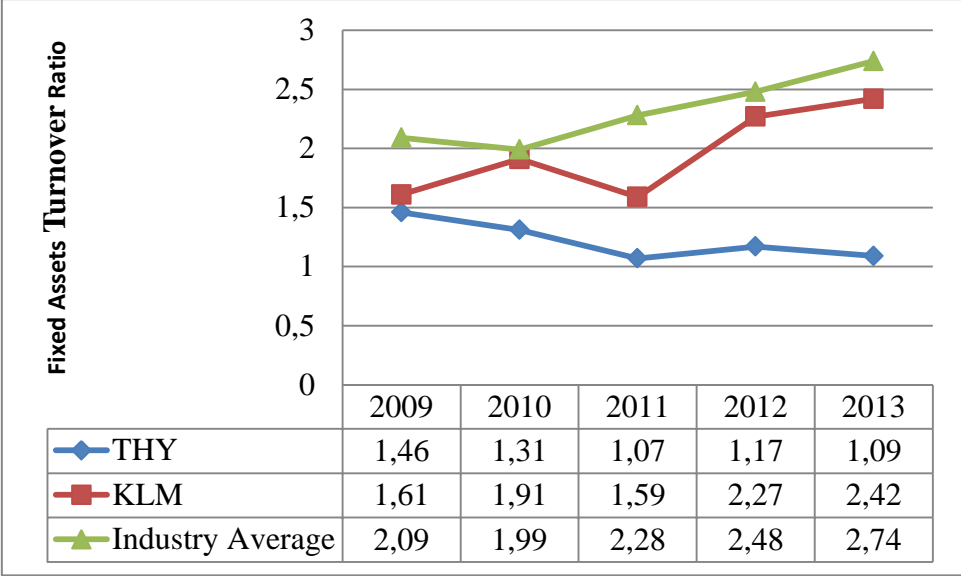


In this analysis, KLM had a high current asset turnover in 2009 and 2010 compared to THY and industry average. In 2011, the company’s turnover shows a value high than THY but less than the industry average. At the end of the analyzed period, although the current asset turnover ratio for KLM increased compared to the previous years, it maintained a value less than the turnover of THY, but it was still good according to the industry average. Looking at the current asset turnover ratio for THY, it was fluctuating across the analyzed period. The company maintained the lowest turnover ratio in the analysis for the first analyzed three periods compared to KLM and industry average. Fortunately, the turnover ratio for the last two periods shows favorable value.

IV. FIXED ASSETS TURNOVER RATIO

Fixed assets turnover ratio is an activity ratio that measures how successfully a company is utilizing its fixed assets in generating revenue. It calculates the dollars of revenue earned per one dollar of investment in fixed assets. A higher fixed asset turnover ratio is generally better. However, there might be situations when a high fixed asset turnover ratio might not necessarily mean efficient use of fixed assets.

Figure 21: Fixed Asset Turnover Ratio for Studied companies and industry average (2009 – 2013)



The above figure outlines both airlines had a turnover below industry average during the analyzed period. By comparing Turkish Airlines to Royal Dutch Airlines, fixed asset turnover for Turkish Airlines was decreasing through the period and maintained a level below its rival. This does not mean that KLM has most efficiently used fixed assets. Lower book value of fixed assets means smaller denominator in the ratio and hence higher fixed asset turnover ratio. There might be difference in capital intensity requirements of the industry.

As it was mentioned in the horizontal analysis, fixed assets for KLM has been decreasing during the analyzed period which shows the relatively slow renewal and purchase plans for its fixed assets. Unlike KLM, Turkish Airlines has been increasing its fixed assets in response to the expansion of its operations and increasing capacity in its service.

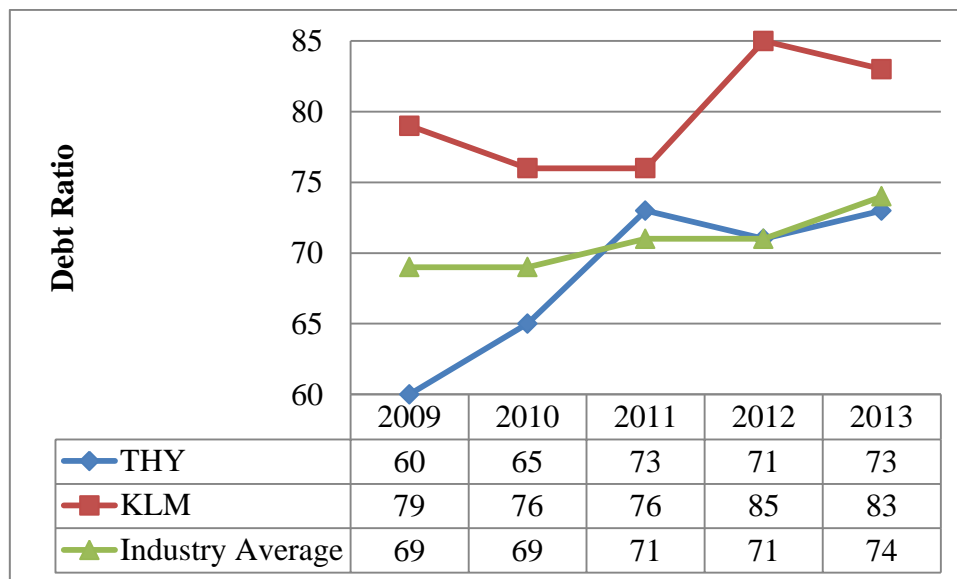
3.5.3. LEVERAGE RATIOS

It indicates the relationship between contribution to financing the business made by the owners of the business and the amount contributed by others, in the form of loans. The level of gearing has an important effect on the degree of risk associated with a business. When a business borrows, it takes commitment to pay interest charges and make capital repayment at the end of the agreement. When the borrowing is heavy, this can be a significant financial burden.

I. DEBT RATIO

The debt ratio compares a company's total debt to its total assets, which is used to gain a general idea as to the amount of leverage being used by a company. A low percentage means that the company is less dependent on leverage, i.e., money borrowed from and/or owed to others. The lower the percentage, the less leverage a company is using and the stronger its equity position. In general, the higher the ratio, the more risk that company is considered to have taken on.

Figure 22: Debt Ratio for Studied companies and industry average (2009 – 2013)

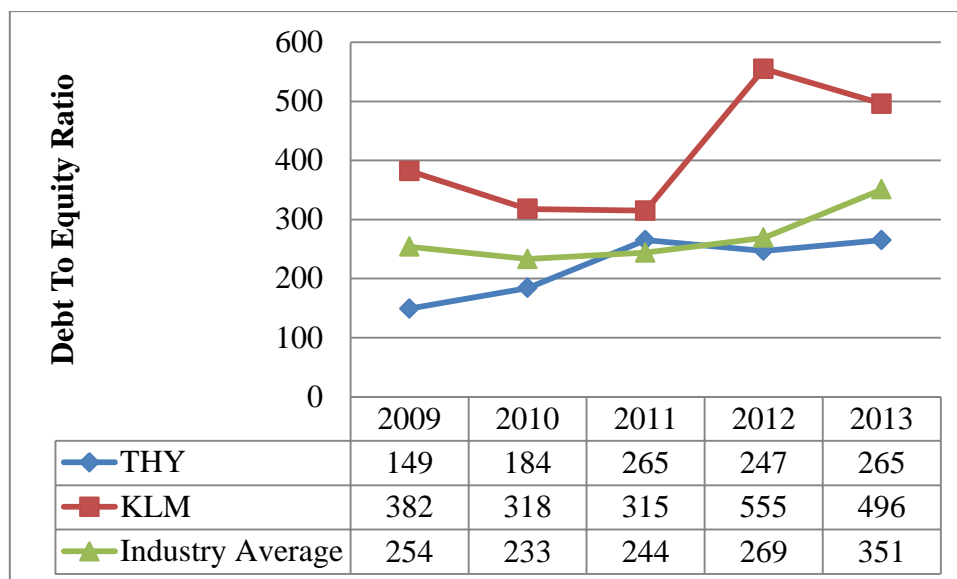


KLM has comparatively higher debt portion relative to the equity than THY and industry average. This indicates that the company has been aggressive in financing its growth with debt which can result in volatile earnings as a result of the additional interest expense. Considering THY, the company managed to keep the portion of its debt to the equity low rate compared to its rival and industry average during the analyzed period except 2011, which debt portion reached slightly above the industry average.

II. DEBT TO EQUITY RATIO

The debt to equity ratio is a financial, liquidity ratio that compares a company's total debt to total equity. The debt to equity ratio shows the percentage of company financing that comes from creditors and investors. A higher debt to equity ratio indicates that more creditor financing is used than investor financing (shareholders).

Figure 23: Debt to equity Ratio for Studied companies and industry average (2009 – 2013)

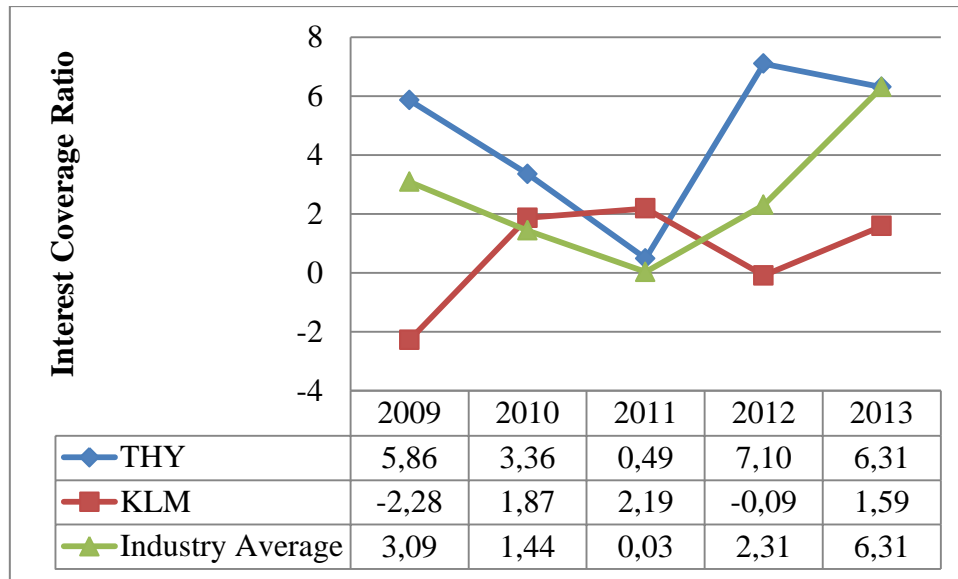


As usual, airline companies lease aircraft from leasing companies which financially creates liability and obligation to the firms. According to the values of aircraft, liabilities resulted from lease agreement may cause a burden to the balance sheet. Referring to this, the above figure shows that KLM has higher values of debt to equity ratio than THY and industry average during the analyzed period which is unfavorable. Conversely, debt to equity ratio for THY was favorable in the analyzed period except 2011.

III. INTEREST COVERAGE RATIO

The interest coverage ratio measures the amount of profit available to cover interest payable. The lower the level of profit coverage, the greater the risk to lenders that interest payments will not be met, and the greater the risk to the stakeholders that the lenders will take action against the business to recover the interest due.

Figure 24: Interest coverage Ratio for Studied companies and industry average (2009 – 2013)



During the analyzed period, THY had a positive interest cover ratio which is higher than KLM and industry average except 2011. In this year the company's ratio shows less value compared to KLM but the company was still able to earn profit that may cover interest payable. KLM's situation was different. In general, company's ratio was poor against its competitor in the most of the period. In the periods 2009 and 2012, KLM had a negative interest cover ratio which basically indicates that the company was not able to earn a profit even to cover its basic interest payments.

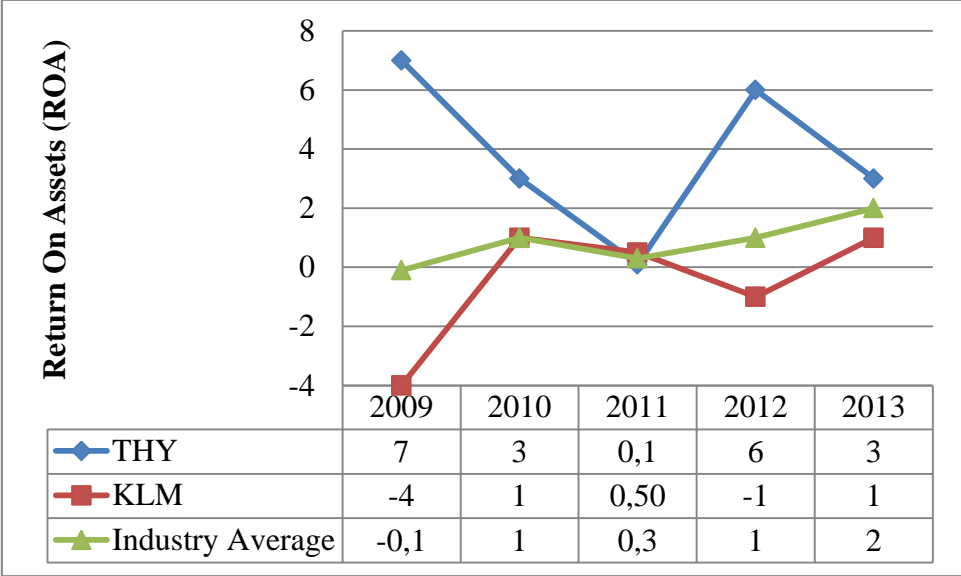
3.5.4. PROFITABILITY RATIOS

Every firm is most concerned with its profitability. One of the most frequently used tools of financial ratio analysis is profitability ratios which are used to determine the company's bottom line. Profitability ratios provide an insight to the degree of success in creating wealth or business's owners. Therefore, profitability measures are important to the company managers and owners alike.

I. RETURN ON ASSETS (ROA)

The Return on Assets ratio is an important profitability ratio because it measures the efficiency with which the company is managing its investment in assets and using them to generate profit. It measures the amount of profit earned relative to the firm's level of investment in total assets. The return on assets ratio is related to the asset management category of financial ratios.

Figure 25: Return on Asset for Studied companies and industry average (2009 – 2013)



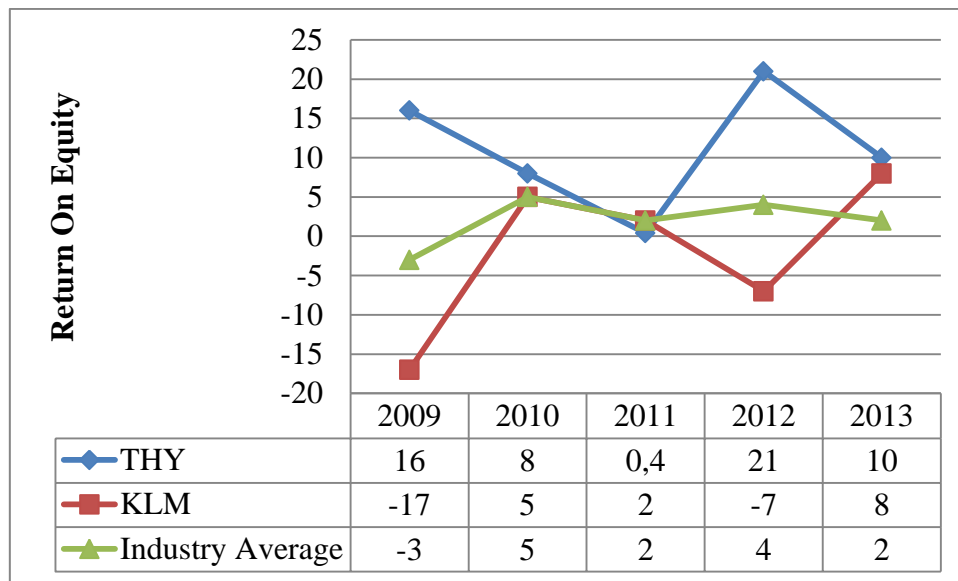
Having analyzed the return on asset (ROA) for selected companies, THY had the highest value for this ratio compared to KLM and industry average with the only exception year 2011 when the ratio for ROA reached under the value of KLM and industry average. This unfavorable condition happened due to excessive increment in operating expenses mainly in fuel costs.

Regarding KLM, its return on asset was negative in the years 2009 and 2012 due to negative operation results reported by the company during these periods. Having analyzed ROA for KLM during other periods, although the company had gained a positive value for this ratio, it shows a low rate compared to THY.

II. RETURN ON EQUITY (ROE)

The Return on Equity ratio is perhaps the most important of all the financial ratios to investors in the company. It measures the return on the money the investors have put into the company. This is the ratio potential investors look at when deciding whether or not to invest in the company.

Figure 26: Return on Equity for Studied companies and industry average (2009 – 2013)

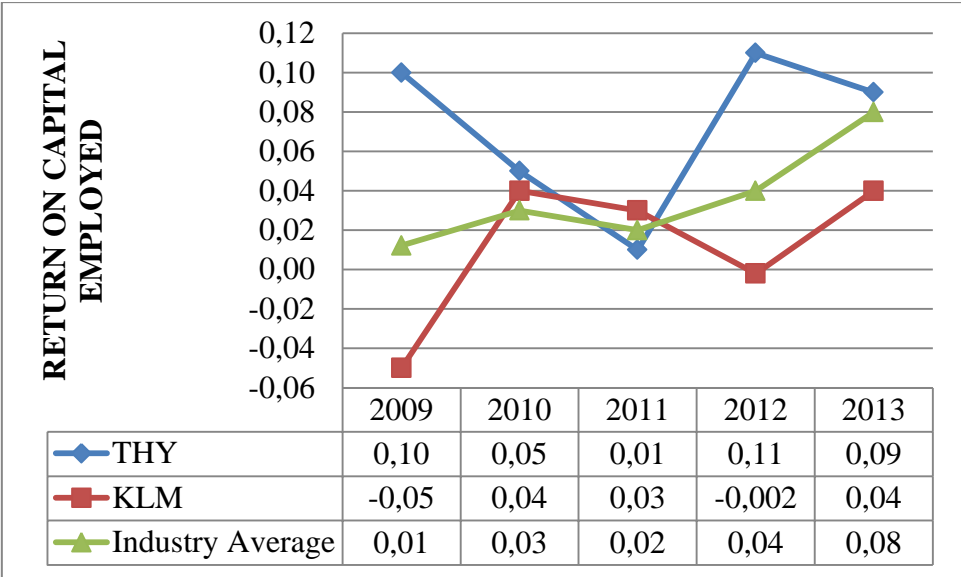


Similar to the previous analysis, THY is again in a favorable condition in terms of company's return on equity ratio compared to KLM and industry average with the exception of 2011. KLM had low value for return on equity during the analyzed period compared to Turkish Airlines except 2011.

III. RETURN ON CAPITAL EMPLOYED (ROCE)

ROCE is a fundamental measure of business performance. This ratio expresses the relationship between net profit generated during a period and long capital invested in the business during that period. The profit figure used is the net profit before interest and taxation, because the ratio attempts to measure the returns to all suppliers of long-term finance before any deduction for interest payable to lenders, or payments of dividend to shareholders.

Figure 27: Return on Capital Employed for Studied companies and industry average (2009 – 2013)



ROCE enables to analyze and compare THY and KLM without the impact of local taxations, which may be quite different in Turkey and Netherlands, and without the impact of any dividend payments and the cost of financing the long-term capital. On the other hand, ROCE considers long-term debt as a part of capital. Thus, ROCE reveals how THY and KLM truly economized on their overall capital.

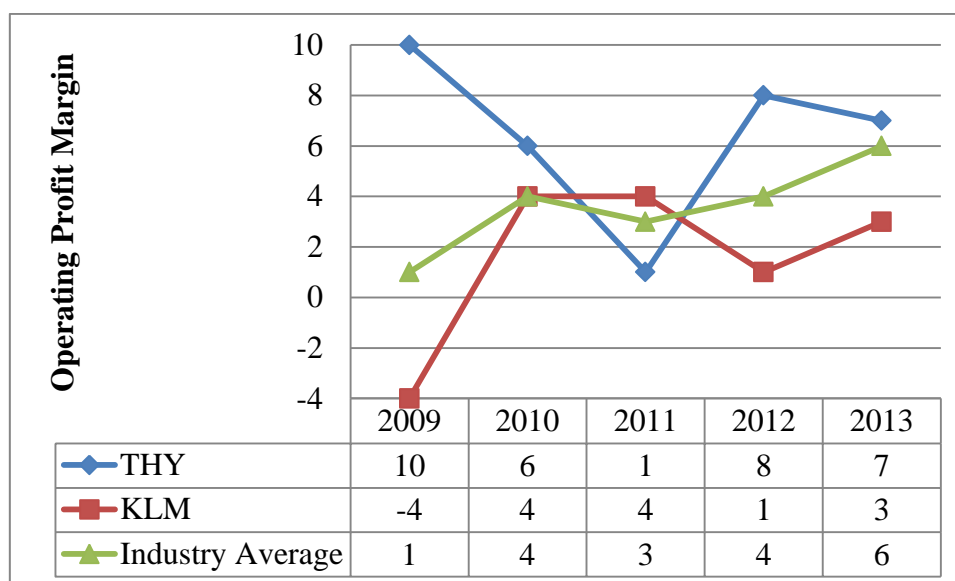
Comparing THY to KLM, the company gets favorable ROCE ratio which is even better than the industry average through period with the only exception of the period 2011. The high value of ROCE is a result of improving revenue and increasing capacity of the firm. However, the performance significantly weakened in 2011. The reason was the fact that the incremental change of cost of sales and operating cost were excessive and higher than the incremental change of revenue.

Regarding KLM, its ROCE was negative in the periods 2009 and 2012 due to negative result from operations. The company was not able to generate any profit during those periods due to economic crisis and increase in operating costs. However, the company tried to improve its earnings in the years 2010 and 2011 and maintained a ratio higher than the industry average in those periods. But at the end of the analyzed period, although the value of ROCE was favorable when to compare to 2012, it was unfavorable when to compare THY and industry average.

IV. OPERATING PROFIT MARGIN

The operating margin ratio, also known as the operating profit margin, is a profitability ratio that measures what percentage of total revenues is made up by operating income. In other words, the operating margin ratio demonstrates how much revenues are left over after all the variable or operating costs have been paid. Conversely, this ratio shows what proportion of revenues is available to cover non-operating costs like interest expense.

Figure 28: Operating profit margin for studied companies and industry average (2009 – 2013)



It can be seen that THY performed consistently better than KLM in the period subject to the analysis except in 2011. The increasing capacity and expansion plans for the firm supported to grow its sales while cost of sales and operating costs were experiencing an incremental change more than the incremental change of sales. This excessive increase in costs caused a decline in operating profits compared to 2009, which the company's operating profit was the highest. The increase in THY costs was mainly due to increase in fuel and financial costs.

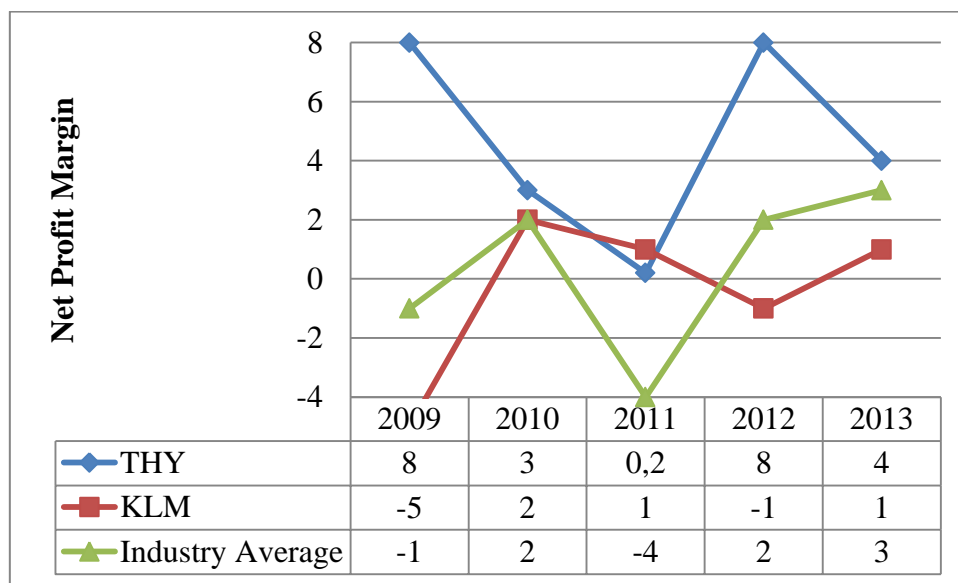
KLM, on contrary, clearly struggled to manage and control its operating costs in the entire analyzed period. Although KLM typically tried to raise its revenue, but it was growing a small rate which cannot result a favorable operating profit compared to THY. In 2009, operating costs were in excess of sales revenue. Therefore, the ratio for net operating profit was negative and unfavorable.

V. NET PROFIT MARGIN

When doing a simple profitability ratio analysis, net profit margin is the most often margin ratio used. The net profit margin shows how much of each sales dollar shows up as net income after all expenses are paid.

Net profit margin measures and compares THY and KLM from the prospective of their overall economic gains and sales activities and it shows the influence of other financial and miscellaneous activities.

Figure 29: Net profit margin for studied companies and industry average (2009 – 2013)



The analysis made above presents that net profit margin for THY was considerably better compared to the KLM and industry average. The only exception was in 2011, when the ratio for net profits declined below KLM but it was still good compared to industry average. At the end of analyzed period, net profit margin was low compared to 2012 due to the effect of non operating activities especially financial expenses.

Having analyzed KLM, the situation was similar to the other profitability ratio. Net profits margin was low compared to THY. In the periods 2009 and 2012, this profitability ratio was negative due to the losses reported by the company.

3.6. SPECIFIC RATIOS FOR AIRLINES

In addition to an analysis of the financial ratios, there are a number of airline specific ratios that illustrate the health and viability of each carrier. A selection of these important ratios is presented below:

Turkish Airlines (THY)

SPECIAL RATIOS	2009	2010	2011	2012	2013
Available Seat Kilometer (millions)	56,574	65,100	81,193	96,124	116,433
Revenue Passenger Kilometer (millions)	40,130	47,950	58,933	74.400	92.000
Passenger Load Factor (%)	70.9	73.7	72.6	77.4	79.0

Source: Turkish Airlines' Annual Reports

Royal Dutch Airlines (KLM)

SPECIAL RATIOS	2009	2010	2011	2012	2013
Available Seat Kilometer (millions)	90,168	92,064	76,189	100,727	103,793
Revenue Passenger Kilometer (millions)	74,129	76,974	65,218	86,281	89,039
Load Factor (%)	82.2	83.6	85.6	85.7	85.8

Source: KLM's Annual Reports

3.6.1. REVENUE PASSENGER KILOMETER

A revenue passenger Kilometer (RPK) is a measure of passenger traffic, calculated as the number of revenue passengers multiplied by the total distance flown. Revenue passenger miles can be considered the basic amount of "production" that an airline creates. The revenue passenger miles can be compared to the available seat kilometer over an airline's system to determine the overall passenger load factor. The RPK for THY increased to 92.0 million for 2013, up from 40.1 million. KLM recognized an improvement in RPK from 74.1 million in 2009 to 89.0 in 2013.

3.6.2. AVAILABLE SEAT KILOMETER

This is a measure of total passenger capacity, calculated by multiplying the total number of seats available by the total distance flown. This statistic reflects the overall capacity each airline has in the marketplace, and reinforces how large a player THY is (ASK of 116.4 million in 2013, up from 56.6 million, an improvement of 106%). KLM is expanding slightly; its ASK in 2013 was 103.8 million up from 90.2 million, an improvement of 15%.

3.6.3. LOAD FACTOR

The load factor is a measure of total capacity utilization, calculated as the proportion of total available seat miles occupied by revenue passengers. Essentially, this measure indicates how full, on average, each of the airlines' planes is. Like empty hotel rooms at the end of the night, vacant seats on an airline in flight represent a lost opportunity; this lost revenue can never be recovered. Both THY and KLM have an average load factor of between 71% - 79% and 82% - 86% respectively. The load factor increased for both airlines compared to the previous year specially load factor for THY was increasing more. KLM has the highest load factor compared to THY which confirms that KLM has the highest asset utilization rates as can be seen in fixed asset turnover ratio.

COMPARISON OF THE TWO FIRMS

From the brief explanation and illustrations of five years, financial statements of THY and KLM have been used to analyze the financial performance and their trend for each year under this study (2009 - 2013). One of the main points to understand about the financial analysis is that all the information that would be conclusive judgment about what is going on in the companies is found from the annual reports and financial statements of the studied companies.

At this final part of the thesis, to complete evaluation of the results of financial analysis, short summaries will be presented for the studied airline companies. It partly supplements the previous section where results of financial analysis techniques have been interpreted for each studied indicator.

From the common size analysis of balance sheet, Turkish airlines being one of the fastest growing airline companies, have demonstrated quite good result of balance sheet analysis in this thesis. At the end of the analyzed period, company's total assets increased by 35% according to its balance sheet. This was connected perhaps with an expansion of economic activities especially company's expansion process in its fleet projection program. Generally, the airline industry is highly capital-intensive, requiring investing large portion of its capital in non-current assets especially in the form of fleet and aircrafts. In this case, THY's non-current assets increased by 40% during the analyzed period. There was a growing trend in current-assets of the company through the selected period. The company's total shareholder's equity generally was increasing from 2009 up to 2013 which is relative to profits gained by the company during the analyzed period and increase in capital share. Liabilities of the company were increasing during the period. At the end of period, liabilities increased by 38% which is may have a negative impact on company's liquidity. A close look onto balance sheet shows that THY's balance is relatively solid and improving.

In contrast, KLM balance sheet was obviously worse. KLM balance sheet discloses that its total assets were depleting due to repeating losses in the periods 2009 and 2012, mainly its cash and cash equivalent were dangerously decreasing at the end of the analyzed period. . Company's non-current assets decreased significantly especially in the component of property, plant and equipment which is mainly caused by sale redundant assets to recover the recurring losses in 2009 and 2012. The reduction in fixed assets shows that there is no more investment on fixed assets. The shareholder's equity component of KLM balance sheet has

experienced increase in the periods 2010 and 2013 as a result of the net profits that KLM earned from its operations during these fiscal years. However, this component has experienced decline during most of the analyzed period due to recurring losses. In spite of KLM's assets and shareholder's equity, the company strived to manage its financial debts and loan by redeeming large amount of these liabilities during the analyzed period. At the end of the analyzed period, the company succeeded to reduce its liabilities by 4% which will have a positive effect on company's liquidity.

From the common size analysis of Income Statement, THY income statement points out extreme improvement in revenues, that is, the growth in demand for company's travel. The company's revenue was increasing through the analyzed period due to increase in its capacity and network growth. On the other hand, THY's costs were increasing rapidly especially fuel costs and financial expenses. Regardless economic crisis occurred in 2009 and significant fuel and exchange rate fluctuations, the company maintained to report a positive result in its net profits during the analyzed period and to avoiding losses and volatility.

Regarding KLM, the common size analysis of its income statement discloses an excessive volatility. In contrast to THY, the increase in KLM's revenue was unsteady. KLM was highly impacted by the global economic crisis which started in the year 2008 and only slightly reduced in strength towards the end of the fiscal year 2009. Giving consideration to operating costs, it had increased 18% to €9,248 million compared to 2009. Fuel costs and employee costs are the two main factors caused the increase in operating costs during the analyzed period. Despite THY, the company had been suffering recurring losses which affected profitability and improvement of company's earnings.

From the ratios analysis, the liquidity ratio (quick ratios, cash ratio & current ratios) of THY was good; this shows that the company has a good position when compared to KLM and industry average during the first three analyzed periods. This shows that the ability to pay for the current liability was good. But at the end of the analyzed period, company's liquidity was at risk. KLM was suffering low liquidity during the analyzed period. Company's current liabilities constantly exceeded its current assets.

Both airlines' liquidity was substantially burdened with aircraft leasing payments, debt repayments and interest payments. Debt and interest payments may be considered as both airlines' major economic issue.

The profitability ratio (Net profit margin, profit margin, ROA, ROE, ROCE) of THY was good compared to KLM and industry average through the analyzed period. Increase in company's revenue and positive results from operations supported to improve company's profitability. However, the profitability of the company was slightly low in 2011. The reason was the fact that the incremental change of cost of sales and operating cost were excessive and high. Regarding KLM, its profitability condition was bad during the analyzed period. The company was not able to generate any profit during 2009 and 2012 periods due to economic crisis and increase in operating costs.

Efficiency measured by average settlements periods for receivable discovered low ratio for both airlines compared to industry average. In average, both airlines can collect their receivables slower than those in the airlines industry can do. By comparing THY to KLM, THY is faster in terms of receivable collection. On the other hand, efficiency measured by sales revenue to capital employed especially total assets and fixed assets indicates low efficiency typical for capital- intensive industries. Both airlines have a ratio less than the industry average. In fixed assets efficiency, KLM seems that it has a ratio higher than THY but this result is due to the increase in THY's fixed assets during the analyzed period in respond to its rapid expansion.

In debt ratio, both THY and KLM indicated a great portion in long-term debt in their overall capital structure. The portion was higher than their own equity – reaching the gearing ratio values over 60 – 80%. This situation can be considered risky and expensive, since substantial long-term debt induces substantial interest payment burden. By making comparison between THT and KLM, KLM is riskier and carries high debt ratio.

Regarding the airlines' ability to cover their current interest payments by their profits, measured by interest coverage ratio, THY had a positive interest coverage ratio than KLM and industry average in the most of the period.

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APPENDIXES

Appendix A: THY Balance Sheet

THY Consolidated Balance sheet					
All amounts are expressed in Turkish Lira	2009	2010	2011	2012	2013
Assets					
Cash and Cash Equivalents	1,096,111,869	813,936,552	1,549,524,710	1,355,542,536	1,338,983,835
Financial Assets	222,298,370	84,070,372	213,899,678	551,820,443	107,053,696
Trade Receivables	445,381,881	577,622,814	760,396,929	777,402,622	1,148,090,163
Other Receivables	743,393,375	1,649,525,777	811,695,889	754,126,100	1,380,785,753
Inventories	148,995,932	172,076,283	251,785,807	259,199,763	342,324,371
Other Current Assets	143,673,757	194,545,702	206,751,785	201,669,965	218,297,251
Non-current assets held for sale	0	0	279,472,200	0	0
Total Current Assets	2,799,855,184	3,491,777,500	4,073,526,998	3,899,761,429	4,535,535,069
Other Receivables	664,360,128	214,636,988	583,806,507	1,553,830,754	2,680,608,826
Financial Assets	1,750,943	1,750,943	1,767,872	2,049,244	2,452,721
Investments Accounted for Using the Equity Method	152,052,556	193,562,028	294,960,592	269,069,545	389,674,199
Investment Property	48,810,000	49,570,000	54,720,000	57,985,000	76,320,000
Tangible Assets	4,811,019,050	6,443,437,235	11,092,594,872	12,693,339,589	17,162,416,670
Intangible Assets	10,669,612	33,099,101	46,962,939	51,183,767	140,091,961
Other Non-current Assets	83,571,954	221,052,190	256,607,349	253,683,135	412,242,181
Total Non-current Assets	5,772,234,243	7,157,108,485	12,331,420,131	14,881,141,034	20,863,806,558
TOTAL ASSETS	8,572,089,427	10,648,885,985	16,404,947,129	18,780,902,463	25,399,341,627
Liabilities and Equity					
Financial debt	412,266,841	493,120,594	790,159,337	866,011,394	1,188,220,823
Other financial liabilities	46,078,943	63,750,323	158,483,592	192,700,698	267,757,503
Trade payables	560,801,478	735,874,026	1,001,609,621	912,324,274	1,451,181,580
Other payables	156,633,381	162,798,563	216,512,852	153,494,125	114,181,687
Current tax liabilities	2,419,544	0	5,368,643	0	0
Provisions	7,287,354	20,480,602	26,224,798	35,516,181	29,819,212
Employee benefit obligations	54,734,480	102,214,757	251,298,892	188,123,923	372,714,591
Passenger flight liabilities	586,525,279	673,843,879	1,076,598,617	1,668,475,819	2,562,506,267
Other current liabilities	122,496,012	288,736,810	425,154,056	517,021,124	666,374,168
Total Current Liabilities	1,949,243,312	2,540,819,554	3,951,410,408	4,533,667,538	6,652,755,831
Financial debt	2,575,899,283	3,684,958,785	7,122,723,496	7,800,982,204	10,364,269,509
Other payables	8,941,613	9,831,914	11,439,394	15,659,634	30,917,704
Provision for retirement pay liability	151,875,562	170,505,529	191,632,448	234,019,405	249,604,088
Deferred tax liability	362,243,105	435,385,525	574,679,843	744,083,660	1,104,597,152
Other non-current liabilities	79,006,326	59,977,694	54,133,899	47,446,433	34,704,987
Total Non-current Liabilities	3,177,965,889	4,360,659,447	7,954,609,080	8,842,191,336	11,784,093,440
Total Liabilities	5,127,209,201	6,901,479,001	11,906,019,488	13,375,858,874	18,436,849,271
Equity Attributable to Shareholders of Parent	3,444,880,226	3,747,406,984	4,498,927,641	5,405,043,589	6,962,490,356
TOTAL LIABILITIES AND EQUITY	8,572,089,427	10,648,885,985	16,404,947,129	18,780,902,463	25,399,339,627

APPENDIX B: THY Income Statement

THY Consolidated Income Statement					
All amounts are expressed in Turkish Lira	2009	2010	2011	2012	2013
Accounts					
Sales revenue	7,035,882,903	8,422,771,140	11,812,549,908	14,762,062,246	18,776,784,325
Cost of sales (-)	5,200,371,472	6,652,115,477	9,803,269,512	11,716,974,068	15,304,655,417
GROSS PROFIT / (LOSS)	1,835,511,431	1,770,655,663	2,009,280,396	3,045,088,178	3,472,128,908
Marketing, sales and distribution expenses (-)	806,503,413	980,877,520	1,284,859,256	1,588,790,893	1,947,304,294
Administrative expenses (-)	266,173,785	327,017,860	365,283,678	371,529,589	434,976,154
Other operating income	91,136,104	141,579,534	160,190,646	170,551,907	230,555,047
Other operating expenses (-)	130,079,895	122,151,211	396,680,737	115,962,720	80,372,043
OPERATING PROFIT / (LOSS)	723,890,442	482,188,606	122,647,371	1,139,356,883	1,240,031,464
Income From Investment Activities				488,674,809	131,813,063
Share of investments' profit/ (loss) accounted for using the equity method	12,813,703	36,800,970	10,074,016	5,961,253	108,973,512
Financial income	172,982,144	72,851,263	264,238,277	88,516,891	50,145,542
Financial expenses (-)	172,708,672	152,549,546	251,070,672	337,397,405	565,719,326
PROFIT / (LOSS) BEFORE TAX	736,977,617	365,689,353	145,888,992	1,385,112,431	965,244,255
Tax (expense) / income	177,901,337	79,245,992	127,372,360	229,395,374	282,536,828
PROFIT / (LOSS) FOR THE YEAR	559,076,280	286,443,361	18,516,632	1,155,717,057	682,707,427

APPENDIX C: KLM Balance sheet

KLM Consolidated Balance sheet					
All amounts are expressed in millions of Euro	2009	2010	2011	2012	2013
Assets					
Property, plant and equipment	4,632	4,537	4,405	4,182	3,999
Intangible assets	119	145	183	218	254
Investments accounted for using the equity method	78	76	85	113	105
Derivative financial instruments	127	104	95	88	108
Other financial assets	312	178	203	204	210
Deferred income tax assets	44	38	37	72	61
Pension assets	2,707	2,989	3209	2477	2454
Total Non-current assets	8,019	8,067	8,217	7,354	7,191
Derivative financial instruments	238	488	165	80	121
Other financial assets	287	264	86	78	247
Inventories	192	199	236	204	202
Trade and other receivables	978	977	856	887	872
Cash and cash equivalents	1,085	1229	1057	1,235	976
Total Current assets	2,780	3,157	2400	2,484	2,418
Total assets	10,799	11,224	10,617	9,838	9,609
EQUITY AND LIABILITIES					
Intercompany loans	388	388	387	476	491
Finance lease obligations	2,002	1,739	1,795	1,796	1,683
Derivative financial instruments	312	109	119	206	167
Other financial liabilities	1,488	1,628	1,476	1,424	1,077
Deferred income	223	210	210	186	158
Deferred income tax liabilities	308	411	369	57	84
Provisions for employee benefits	167	156	149	434	389
Other provisions	222	393	412	484	506
Total Non-current liabilities	5,110	5,034	4,917	5,063	4,555
Trade and other payables	1,581	1,755	1,624	1,784	1,805
Loans from parent company	0	0	150	60	0
Finance lease obligations	451	397	284	322	263
Derivative financial instruments	279	279	64	44	68
Other financial liabilities	102	143	239	152	344
Deferred income	814	855	685	825	875
Current income tax liabilities	0	0	4	0	0
Provisions for employee benefits	40	34	48	48	45
Other provisions	182	44	44	39	43
Total Current liabilities	3,449	3,507	3,142	3,274	3,443
Total Liabilities	8,559	8,541	8,059	8,337	7,998
Total Shareholder's Equity	2,240	2,683	2,558	1,501	1,611
TOTAL EQUITY AND LIABILITIES	10,799	11,224	10,617	9,838	9,609

APPENDIX D: KLM Income Statement

KLM Consolidated Income Statement					
All amounts are expressed in millions of Euro	2009	2010	2011	2012	2013
Accounts					
Revenues	7,469	8,651	6,985	9,473	9,688
Expenses					
External expenses (-)	5,072	5,641	4,627	6,456	6,337
Employee compensation and benefit expense (-)	2,197	2,153	1,637	2,393	2404
Depreciation and amortization (-)	546	539	410	517	507
TOTAL EXPENSES	7,815	8,333	6,674	9,366	9,248
Other income and expenses	61	65	36	26	139
Income from current operations	-285	383	275	81	301
Other non-current income and expenses	91	78	3	95	51
Income from operating activities	-376	305	272	-14	250
Gross cost of financial dept (-)	165	163	124	157	157
Income from cash and cash equivalents	67	43	29	29	30
Net cost of financial dept	-98	-120	95	128	127
Other financial income and expenses	16	39	112	24	68
Pre- tax income	-490	146	65	-118	191
Income tax (expense)/benefit	114	1	22	31	48
Net result after taxation of consolidated companies	-376	145	43	-87	143
Share of results of equity shareholdings	7	2	5	11	10
Profit / (loss) for the year	-383	147	48	-98	133