## Maersk Line

-A Company Analysis

Khwaja Arafat Abdullah and Muhammad Shabbir

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## List of Abbreviation

A.P.M.M: A.P Moller-Maersk
F.S.A: Financial Statement Analysis

FIFO: $\quad$ First in first out
CGS: Cost of Goods Sold
IFRS: International Financial Reporting Standard
PP \& E: Property, Plant and Equipment
IASB: International Accounting Standard Board
WACC: Weighted Average Cost of Capital
ROIC: Return on Invested Capital


#### Abstract

\section*{A.P. Moller Maersk Group - A Company Analysis}

\section*{By <br> Khwaja Arafat Abdullah and Muhammad Shabbir}


A company analysis of A.P. Moller Maersk gives the fundamental worth of the firm. It is a study done to understand how to analyze a giant company from the perspective of investors and creditors. The main purpose is to reveal the real picture and to find out whether the numbers in the financial reports really mean what they show. The models and theories used in this regard is the square model, agency theory along with the key performance indicators such as ratios, cash flow and other analysis that reveals the information asymmetry in the principal and agent relation. In our research mainly secondary data were used. The results obtained indicate that although there has been a continuous growth in the shipping industry but there have been some peculiarities in the financial statements of Maersk and we identify them as red flags in our analysis. To conclude we would like to add that there might me various techniques to analyze financial statements of a company but those techniques will only be effective if we can adjust the reported figures to minimize distortions.

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Muhammad Shabbir

Khwaja Arafat Abdullah

PART
1

## CHAPTER NO. 1

## 1. Introduction

This chapter starts with the introduction of the chosen research topic. Furthermore, we will provide the theme of the thesis by discussing the research problem, the purpose and the scope of the study.

The world economy is currently plagued with financial crisis. In this situation, most multinationals companies use different tools to demonstrate their financial performance. In accountancy and finance, the different theory and numbers are used to describe the business. Due to competition, the management of the organizations always try to portray financial position in such a way that will attract the investors and different users of financial statement analysis. In order to compete in the market, most of the organizations show rosy picture in their annual reports.

To portray financial position in the best possible way, organizations use different tools for distortion for financial reporting. In this project, we analyzed the financial statements (Balance Sheet, Income Statement and Cash flow Statements) in order to develop the understanding of different users and to find out the real picture of the organizations behind the numbers. We examine that how the numbers in the financial statement have been affected by management using the "accepted" rather than "appropriate" accounting principles, management estimates, accounting choices and various accounting methods like conservative, liberal and neutral accounting methods by the means of company square model, accounting, performance, cash flow, trend and common size analysis. A.P Moller - Maersk group has been chosen for conducting accounting analysis because it is an asset based company.

### 1.1 Research Problem

All organizations want to reveal themselves in the best possible way by demonstrating public self reporting on the sustainability reporting to help and facilitate the achievement of the company's
own objectives. ${ }^{1}$ Financial statements are often highly complex for those users who do not have the expertise of understanding it; therefore fair and simple presentation is important both for management and the investor for decision making purpose. When accountant use different tools for distortion of financial reporting, there is a need for the general user, who become influenced with the biased numbers in the financial statements to get the real thing behind the numbers. Our motive is to analyze the numbers in the financial statements and to find out do the number really represents what they show. We also want to trace the distortions in the company reports and reveal the true scenario of the company for the convenience of general users.

In this research, we are trying to find out the red flags, the impact of numbers and the accounting policies used by A.P Moller - Maersk. We will work on the basis of following research question that will helps us to provide a better guideline for collecting information and analyzing financial statements.

## Research Question

- How the management misrepresent the financial numbers reported in the financial statements?
- What are the red flags in the financial statements from the perspective of investors and creditors?


### 1.2 Research Purpose

The purpose of our study is to explore that how management and accountant use different levels of manipulations for their own long standing interest by analyzing Balance Sheets, Income Statements and Cash Flow Statements. The purpose is not to investigate about other activities of A.P Moller-Maersk but to find out about the overall view of the company and point the red flags used in financial reporting so that the concerned users can take decisions on the future actions, based on the true picture of the financial position of the organization.

[^0]
### 1.3 Scope of Research

Our research is limited to the entities presented in Annual Report from 2004-2007 by APMM which is listed at Danish Stock Exchange in 1912. Our purpose is not to investigate how the management of the A.P Moller - Maersk arranges finance and other activities and disclosure. Our thesis focus is only from the user's perspective, especially primary users who want to know the financial analysis and red flags according to the IASB about the organization for decision making purpose. However, there are many others things that should be analyzed, which are important for our research work but we are doing our research on the basis of annual reports of four years.

### 1.4 The General Outline of Thesis



Figure.1: The General outline of thesis

## CHAPTER NO. 2

## 2. Methodology

This section is about the procedures and the manner in which our research was conducted. It includes all the approaches used and the methods deployed. This section also includes the sources from where the data were obtained.

The intention of our research was not to take a responsible position in an organization as an expert in analyzing the numbers. Our research was analyzed the different periods of development of APMM (well reputable company) in shipping industries based upon the skills, information and knowledge of our previous education.

### 2.1 Research Approach

Our thesis consists of two major parts and they are theoretical and empirical. Descriptive approach will be used in the theoretical part as we will give descriptions of the various important concepts such as financial statement analysis, ratio analysis, and square model. Description of these important concepts will serve as the basis for the elaborate empirical study. In addition to the descriptive approach we will use explanatory approach, which will in turn help us to give an overview of the cause and effect relationship between different peculiarities of the financial statements and their consequences. Over here we will try to explain the reason behind the peculiarities of the financial statements, which is defined as red flags.

### 2.2 Research method

There happens to be different research methods available for conducting research but the two most common are the qualitative and quantitative methods. Compared to qualitative method, quantitative method is more formal and structured. In using quantitative method information and data is collected from many sources in order to gain a general perspective of the research problem.

In our research we mainly focused on quantitative method, however all the theoretical data that were used are solely qualitative. Again the empirical data obtained from the annual reports are
mostly quantitative. The reason behind using this particular method is because the research intends to analyze financial statements from the shareholders creditors and different user's perspectives. In addition to quantitative method, qualitative method is complementary and is characterized by mutual dependence. ${ }^{2}$

### 2.3 Data Collection

Data collection is crucial to all research. Through this process, researcher accumulates empirical material on which to base their research. ${ }^{3}$ There are two main types of data collection methods and they are primary and secondary. The primary data collection method is about creating new data by doing surveys and carrying out interviews. The secondary data collection method is about collecting and analyzing existing data.

It depend upon your characteristics of the research whether "the researcher adopts a quantitative or qualitative approach for their data collection method." ${ }^{4}$ In conducting our research mainly secondary data collection method will be used. The secondary data source comprises of available academic books, annual reports and various websites from the internet. Secondary data will form the basis for both the theoretical and empirical part of our study. It is true that "secondary data is data that was developed for some purpose other than helping to solve the problem in hand. ${ }^{5}$ Due to time constrains primary data from surveys and interviews could not be obtained so our research was based on external resources rather than of internal resource. In addition to time constrains practical limitations of not having a standard interview process also hindered the primary data collection process.

### 2.4 Criticism of the sources

No doubt, primary data has its own importance for creating new data and secondary data can be manipulated and affected by its value instead of primary data. But according to our research question, secondary data are more important because every user have no access inside the

[^1]organization. Toward critical perspective about the information used in annual reports by management for its importance, authors will value the different numbers and information in annual reports from the perspective of different users to maintain the reliability and validity for minimizing the possibility of wrong answer of research questions.

### 2.5 Reliability and Validity

The data of chosen company mainly collected from annual reports of APMM between the periods from 2004 to 2007.and its official website. Summarizing the data of annual reports, website, internet and books, we used different analytical technique such as bank square model, segment analysis, and ratio analysis and earning quality analysis. Due to using secondary data, we increased our level of reliability by nature. According to Saunders et al. data from large and well known organizations (e.g. Company's annual report which are also audited before the released) are likely to be reliable and trustworthy, in general. ${ }^{6}$ The research data which was given in annual reports is reliable and according to IFRS. However annual reports are prepared individually and its extensiveness has it own importance so possibility of missing some information by the researcher is still considerable. To make sure its reliability, the two members in a group give advantage to double check about the collection and analyzing the data of annual reports. No doubt, our thesis based on secondary data but we believe, after that, other researcher will appreciate our research. Validity can be perceived as the extent to which research finding are really about what they profess to be about. It depends upon the researcher ability that how he/she interpret the different terminology. To keep the validity level, we conducted trend analysis of income statement, balance sheet and cash flow as well in order to know the background and consistency in development. Since the thesis is about the overview analysis of APMM group so reader should have some business knowledge. For this, different concept of literature has been given in next chapter to understand our research question.

[^2]
## CHAPTER NO. 3

## 3. Literature Review

This basic purpose of this chapter is to explain the theoretical framework which is used as a tool to analyze our research (Analysis of financial statements) for empirical finding. Prospective users of financial statements have little knowledge about it, therefore theoretical framework helps the readers to understand the purpose of financial statement analysis and helps in answering the research questions.

Shares of different organizations and businesses are traded every day in various stock markets of the world. The users or investors who are engage in this trade have different questions. Such as "Am I investing in the right organizations? How can we know the real worth of shares? Is the business profitable? If so, which segments are most profitable? Is the business growing? Does the business generate cash? ${ }^{\prime 7}$ The answers of the above mentioned questions are possible only by analyzing the financial statements from user's point of view. But for understanding our research, users should understand different concepts of financial statement analysis. Following are some theories for understanding our research analysis.

### 3.1 The Square Model ${ }^{8}$



Figure 2: The Square Model

[^3]The square model a concept developed by Professor Thomas Polesie gives a simple overview of a company's financial situation at a given point in time. The square model is a closed model which builds on accounting terms. The square boundaries consist of assets, liabilities and equity, revenues, costs and profits/losses. In other words, the borders of the square illustrate the relations between the financial measures from the balance sheet and income statement. The model only considers numbers taken directly from the financial reports which are published by the company. As mentioned earlier, the square model provides an overview of a company's financial situation at a given point in time, but it can also be applied when analyzing the development of a company within a certain period. Thus, we can consider the square model as both a static and a dynamic model. Furthermore, the model can be used to compare various companies. The construction of the square models allows them to proportionally change in size, relative to any changes in the financial measures. The changes in the size of the squares thereby provide an immediate visual impression of a company's financial situation. The left-hand side of the square lists the assets of the company, while the right-hand side represents the company's capital structure, composed by liabilities and shareholder's equity. The relationship between the left and right-hand side of the model is especially useful to analyze how the firm finances its assets, and to what extend the company utilizes shareholders funding or financial leverage. The profitability of the company is measured by the horizontal lines of the model. The diagonal line, dividing the model in an upper and lower triangle, separates the company's financing from its operations, where the upper triangle represents the former and lower triangle the latter.

### 3.2 The Assumptions of the Square Model

### 3.2.1 Type of Model

The square model is a closed model. This is caused by its well defined boundaries. The boundaries consist of the distinction of the information used, into the different elements used in the model. ${ }^{9}$

[^4]
### 3.2.2 Simplicity

There are many models used, giving the user abundant information. Thus a selection of the relevant information has to be made. The aim of the square model is to optimize the financial information and simplify an overview of a company's financial statement. Consequently the information given by the model is simple and available for various users to take part of. ${ }^{10}$

### 3.2.3 A Going Concern

One of the fundamentals of the accounting regulation is the going concern principle. The principle is also applicable in the square model. The going concern principle implies that a company will continue to operate indefinitely without the intention or threat of liquidation. ${ }^{11}$

### 3.2.4 The Elements

The square model is a synthesis of the balance sheet and income statement. In the model the elements used are; assets, liability, costs, income and profits or losses. ${ }^{12}$

### 3.2.5 The Time Aspect

In order to allow a comparison between different periods, the same time period has to be used. Generally a 12 months period is applied. Given that normally the time stated and used in the financial reports is 12 months. Indeed, quarterly reports, for instance, could also be applied in comparison to the first quarter. As seen from without the time aspect and as already mentioned above, the square model is both static and dynamic. Static in terms of describing a company's state in a certain moment of time and dynamic when describing the development of the company over time. ${ }^{13}$

### 3.2.6 The Enumerates

The enumerates used in the square model have to be consistent. All the numbers used are established by monetary measurements. These assumptions are attributable to enable a

[^5]${ }^{11}$ ibid
${ }^{12}$ Polesie,T. (1995), Drift \& Finans - aspekter på ett företags ekonomi and Polesie, T (1989), Att beskrivaföretags ekonomi
${ }^{13}$ ibid
comparison for a certain company over time or between a company and another. Hence if the figures stated were to be in different currencies, the shape of the square would be misleading. ${ }^{14}$

### 3.2.7 The Information

The only information used in the model is the financial reports published by the company. Neither human resources, information of other potential important factors nor details of what occurs within the company are taken into consideration. Hence an outside perspective is held. The financial reports used are not adjusted. This elevates the importance of the belief that the numbers stated in the reports are accurate and that they reflect the company's state. Otherwise the analysis of the square model becomes futile. Furthermore, the assumption that the company does not present any problem with the generation of cash flow is made. Thus the square model does not take the cash flow into consideration. ${ }^{15}$

### 3.3 Information asymmetry

Information asymmetry problem is one of the main phenomenon in an organization, this phenomenon arise when management distributed unequally the information about the financial position of business within the organization and market. Due to information asymmetry problem, reliability and validity of the numbers needed to evaluate in a proper way. This theory suit the purpose of our research.

### 3.3.1 Information Problem

Sometime one party can get more information due to contractual relationship while counter party do not have. So naturally an information problem arises due to unequal distribution of information. Such type of information between two parties is called information asymmetry. A lot of problem, this phenomenon was discussed through agency problem.

### 3.3.2 Agency problem

Agency theory developed in the 1960s within the field of micro economics as an attempt to model the relationship existing when one party, "the agent" must act on behalf of another party,

[^6]"the principal"(Eunmi \& Susan, 1999). The theory's focus on the relationship between two parties makes it useful for investigating any type of situation where the returns to one individual depends, to some degree, on the actions of another(Pratt \& Zeckhauser, 1991). This theory suit our research because the principal (Employee) obey to act according to the interest of agent (management). Due to this, manipulation chances in financial numbers increased.

### 3.4 Financial Statement Analysis

Financial statements provide the information to the analysts predicting fundamental value of the organization. The users must understand what the numbers of statements are saying and which numbers are showing red flags. Our research focus is not on the details of accounting rules but on the important principles behind the numbers, which can't be ignored. Financial statements are just like lens of the organization / business because these statements portray the picture of the business for different purposes. Here it is important that the analysts must understand the different techniques and principles used in financial statements.

FSA is a process by which analytical tools and techniques are applied to financial statements and related data to derive estimates and hints, which are necessary to make important business decisions. It is both a screening and a forecasting tool crucial for selecting investment or merger candidates and forecasting future conditions and consequences. It is also a diagnostic and evaluation mechanism in assessing financing, investing, and operating activities for managerial and other business decisions. FSA diminishes our uncertainty in decision making and establishes an effective and systematic basis for making business decisions.

### 3.4.1(A) Four primary business activities

Past financial performance and current financial position of a company are reported in its financial statements. Financial statements are designed to provide information on four primary business activities and they are planning, financing, investing, and operating activities. Analyzing financial statements helps us sort through and evaluate information, focusing attention on reliable information most relevant to our business decisions. A company requires considerable resources to finance its operations and its balance sheet reveals contributions from shareholders and creditors, therefore FSA helps us in answering the crucial question like whether to contribute
to the financing of the company through an investment in stock or through a loan. If we opt to invest in stock the concerned analysis help us to determine at what price to buy the company's shares at.

### 3.4.2 (B) Different users of financial statements

There are different users of financial statements. Shareholders and creditors use it to assess future company prospects for investing and lending decisions. Boards of directors, as shareholders' representatives, use financial statement information in monitoring management's decisions. Employees and unions use it in labor negotiations. Suppliers use it in establishing credit terms. Customers use it in deciding whether to establish supplier relationships. Public utilities set customer rates by referring to financial statements. Information intermediaries use it to make buy-sell recommendations and setting credit ratings. Auditors use it in assessing the "fair presentation" of their clients' financial statement numbers. While financial statement analysis does not provide all the answers of all its users but every decision is aided by such analysis.

The different users of financial statements are classified into two groups and they are internal and external users. Internal users are the managers and employees of a company who does have an access to internally generated financial reports specially tailored to the unique information needs of an internal decision maker. On the other hand external users are individuals who are not directly involved in the company's operations. These users must rely on information provided by management as a part of the financial reporting. Our project stresses on the analysis needs of external users of general-purpose financial statements.

### 3.4.3 (C) Balance Sheet

Assets = Liabilities + Shareholders' equity

The above equation is the basis of the financial reporting system. The left-hand side of the equation relates to the economic resources controlled by a company, or assets. These resources are valuable in representing potential sources of future revenues through operating activities. To engage in operating activities, a company obtains funding to invest in assets. The right-hand side of this equation identifies funding sources. Liabilities are funding from creditors and represent
obligations of a company or, alternatively, claim of creditors on assets. Shareholders' equity is a total of (1) funding invested or contributed by shareholders and (2) accumulated earnings since inception in excess of distribution to shareholders (retained earnings). From the shareholders' point of view, these amounts represent their claim on company assets. ${ }^{16}$

A balance sheet summarizes the financial position of a company at a given point in time. Most companies are required under accepted accounting practices to present a classified balance sheet. In a classified balance sheet, assets and liabilities are separated into current and noncurrent accounts. Current assets are expected to be converted to cash or used in operations within one year or the operating cycle, whichever is longer. Current liabilities are obligations that the company must settle in the same period. The different between current assets and current liabilities is working capital. ${ }^{17}$

It is revealing to rewrite the accounting equation in terms of underlying business activities:
Investing activities $=$ Financing activities
Recognizing the two financing sources, this rewritten as:
Investments = Creditor financing $\boldsymbol{+}$ Shareholder financing

### 3.4.4 (D) Income Statement

An income statement measures a company's financial performance between balance sheet dates and, hence, reflects a period of time. It lists revenues, expenses, gains, and losses of a company over a time period. The bottom line, or net income, shows the increase (or decrease) in net worth of a company (assets less liabilities), before considering distributions to and contributions from shareholders. In practice, net income is determined using the accrual basis of accounting. Under this method, revenues are recognized when a company sells goods or renders services, independent of receiving cash. Expenses, in turn, are recognized when related revenue is recorded, independent of paying cash. ${ }^{18}$

[^7]
### 3.4.5 (E) Statement of Cash Flows

Under accrual accounting, net income does not typically equal net cash flow except over the life of a company. Since accrual accounting yields numbers different cash flow accounting, and cash flows are important, there is a need for periodic reporting of cash inflows and outflows. For example, analyses involving reconstruction and interpretation of business transactions often require the statement of cash flow. The statement of cash flows details cash inflows and outflows related to a company's operating, investing, and financing activities over a period of a time. ${ }^{19}$

### 3.4.6 (F) Links between Financial Statements

Financial statements are linked at points in time and across time. For novice users of financial statements, the figure given above helps to get a deeper understanding of the financial statements and their link with each other.

Financial statements are linked at points in time and across time.


Figure 3: Link between Financial Statements

[^8]APMM Group's balance sheet is a listing of its investing and financing activities at a point in time. The two statements of (1) cash flows and (2) income explain changes typically from operating activities over a period of time in Maersk's investing and financing activities. Every transaction captured in these two latter statements impacts the balance sheet. Examples are revenues and expenses affecting net income and subsequently carried to retained earnings, or cash transactions in the statement of cash flows and summarized by the cash balance on the balance sheet, or all revenue and expense accounts affecting one or more balance sheet accounts. Consequently, financial statements are inherently linked: point-in-time balance sheets are explained by the period-of-time income statement and statement of cash flow. ${ }^{20}$

### 3.5. Preview of Financial Statement Analysis

In analyzing financial statements there are various options available from where users can select those suited to their specific needs. Certain tools of analysis are comparative financial statement analysis, common-size statement analysis, and ratio analysis. Our financial analysis, motivated by various objectives, falls within any or all of the six areas of inquiry below - in any sequence and with the degree of relative emphasis required under the circumstances. These six areas of inquiry and investigation are the building blocks of FSA.

- Short-term liquidity. A company's ability to meet short-term obligations.
- Funds flow. Future availability and disposition of cash.
- Capital structure and long-term solvency. A company's ability to generate future revenues and meet long-term obligations.
- Return on investment. A company's ability to provide financial rewards sufficient to attract and retain suppliers of financing.
- Asset utilization. Asset intensity in generating revenues to reach a sufficient level of profitability.
- Operating performance. A company's success at maximizing revenues and minimizing expenses from long-run operating activities.

[^9]
### 3.5.1 Comparative Financial Statement Analysis

Comparative financial statement analysis is conducted by setting consecutive balance sheets, income statements or statement of cash flow side by side, and reviewing changes in individual categories on a year-to-year basis. Trend is the important aspect revealed by doing this kind of analysis. A comparison of statements over several years reveals direction, speed and extent of a trend. Comparative financial statement analysis is also referred as horizontal analysis because of the left-right movement of the eyes while reviewing comparative statements. One of the techniques of comparative analysis that we have used in our project is the year-to-year change analysis. Analysis of year-to-year changes in line items is done by comparing financial statements over relatively short time periods of two to three years. It is manageable and understandable and has the advantage of presenting changes in absolute currency units as well as in percentage. Both the cumulative total for the period under investigation and the average for the period are reported by comparative financial statement analysis. Comparing yearly amounts with an average computed over a number of years highlights unusual happenings for a particular period, as average values smooth out erratic or unusual fluctuations. ${ }^{21}$

### 3.6 Common-Size Financial Statement Analysis

The knowledge of proportion of a total group or subgroup an item represents is beneficial for financial statement analysis. While doing the analysis of balance sheet it is a common practice to express total assets, liabilities, and capital each as 100 percent, and individual items within these categories as a percent of their respective total. On the other hand while analyzing income statement, net revenue is commonly set as 100 percent with other income statement items expressed as a percent of net revenues. The analysis technique is said to yield common-size financial statements because the sum of the individual items in it sums up to be 100 percent. It is also referred to as vertical analysis because of the up-down movement of our eyes while reviewing the statements. It is a study to reveal the internal structure of financial statements. For example, in analyzing a balance sheet, a structural analysis focuses on sources of financing

[^10](including the distribution of financing among current liabilities, non-current liabilities, and equity capital) and composition of investments (including current and non-current assets). ${ }^{22}$

### 3.7 Ratio Analysis of Financial Statements

The most commonly used tools of financial statement analysis are ratios. But even though they are widely popular they are often misunderstood and as a result their importance is often overrated. It expresses a mathematical relation between two quantities i.e. a ratio of 200 to 100 is expressed as $2: 1$, or simply 2 . Even though the calculation of a ratio is simple arithmetic operation its analysis is far more complex. A ratio must refer to an economically important relation to be meaningful. For example, the ratio of cost of goods sold to sales is an important one because there is a direct and crucial relation between an item's sales price and its cost. Clues and symptoms of underlying condition are provided by ratios. It identifies areas requiring further investigation. It reveals important relations and bases of comparison in uncovering conditions and trends difficult to detect by inspecting individual components comprising the ratio. Factors affecting a ratio for their probable future trend and magnitude must be adjusted because similar to other analysis tools ratios are also future oriented. The usefulness of ratios depends on the skillful interpretation of the factors potentially influencing future ratios.

### 3.7.1 Factors Affecting Ratios

The effects of economic events, industry factors, management policies, and accounting methods must be taken into consideration beyond the internal operating conditions affecting a company's ratios. The effectiveness of ratios gets affected by weaknesses in accounting measurements. For instance, historical cost values are sometimes less relevant to a decision than current market values. We must confirm that the numbers used while computing ratios are valid and consistent prior to computing ratios, or similar measures like trend indices or percent relations. For instance, when inventories are measured using LIFO and prices are increasing; the current ratio is understated because LIFO inventories are understated. In the same way certain pension liabilities are often unrecorded and disclosed in notes only but we normally want to recognize these liabilities when computing ratios like debt to equity. In order to be consistent adjustments made in one ratio requires also to be made in others. For example, the omission of pension liability

[^11]implies understated pension expenses and hence net income numbers often requires adjustments in ratio computation. The quality of numbers used in the computation of ratios determines their usefulness. The ratios, resulting from a company whose internal accounting controls or other governance and monitoring mechanisms are unreliable in producing credible figures, are equally unreliable.

### 3.7.2 Ratio Interpretation

Ratios must be interpreted with care since factors affecting the numerator can correlate with those affecting the denominator. ${ }^{23}$ For example, companies can improve the ratio of operating expenses to sales by reducing costs that stimulate sales such as research and development, but this cost reduction ultimately leads long-term declines in sales or market share. A seemingly short-term improvement in profitability can largely damage a company's future prospects and hence it needs to be interpreted with great care. Many ratios have important variables in common with other ratios therefore it is not necessary to compute all possible ratios. Similar to most tools used in financial analysis ratios are not significant by themselves and are interpretable only while comparing with prior ratios, predetermined standards and ratios of competitors. The variability of a ratio over time is often as important as its trend.

### 3.7.3 Illustration of Ratio Analysis

Numerous ratios are often computed using a company's financial statement. While some ratios are unique to specific circumstances or industries others have general application in financial analysis. In the chart below list of selected ratios having general applicability for most business have been given and are grouped in accordance with their major financial analysis objectives. In order to assess short-term liquidity there are many ratios that can be used. One of the most common is the current ratio indicating the current assets available to meet up current liabilities. The acid test ratio is the more rigorous test of short-term liquidity. It uses only the most liquid current assets such as cash, short-term investments and accounts receivable. Short-term liquidity can also be assessed by estimating magnitude of time needed for conversion of receivable and inventories to cash. In order to assess a company's financing its capital structure and long-term

[^12]solvency is examined. These ratios are especially reassuring for a credit analysis. ${ }^{24}$ For assessing different aspect of return on investment there are two popular ratios and they are as follows. Return on total assets refers to amount of earning generated before after-tax interest on a particular amount of investment. Again shareholders are interested in management's performance using equity capital and to serve this particular purpose the ratio of return on equity capital is particularly significant. Operating performance ratios often link income statement line items to sales, and are not unlike results from common-size income statement analysis. ${ }^{25}$ One of the important determinants of return on investment is the asset utilization ratios, which relates sales to different asset categories. Although ratio analysis yields valuable insights but it must be remembered that these calculation are based on numbers reported on a company's financial statements. Therefore in order to draw useful insights and make valid intercompany comparisons it is very important to have skills in adjusting reported numbers before including it in the ratio analysis.

## Financial Statement Ratio Computation

## Short-Term Liquidity Ratios

- Current ratio = Current assets

Current liabilities
Cash+ cash equivalents+

- Acid test ratio $=$ Market securities + Accounts receivable

Current liabilities

- Collection period = Average accounts receivable

Credit sales / 360

- Days to sell inventory = Average inventory

Cost of revenue /360

## Capital Structure and Solvency Ratios

- Total debt to total capital = Current liabilities + Long-term liabilities Equity capital - Total liabilities
- Long-term debt to equity = Long-term liabilities Equity capital

[^13]
## Return on Investment Ratios

- Return on total assets $=$ Net income + Interest expense (1-Tax rate)

Average total assets

- Return on common equity $=$ $\qquad$
Average equity capital


## Operating Performance Ratios

- Gross profit ratio $=\underline{\text { Gross profit }}$

Net revenues

- Operating profit to sales = Income from operations

Net revenues

- Pretax profit to sales = Income before income taxes

Net revenues

- Net income to sales = Net income Net revenues


## Asset Utilization Ratios

- Sales to cash $=$ Net revenues

Average cash

Sales to accounts receivable = $\qquad$
Average accounts receivable

- Sales to inventories $=$ Net revenues Average inventories
- Sales to working capital $=\quad$ Net revenues

Average working capital

- Sales to fixed assets $=\quad$ Net revenues

Average fixed assets

- Sales to total assets $=$ Net revenues

Average assets

## PART



## CHAPTER NO. 4

## 4. Preliminary Financial Analysis

## Chapter overview

| $\longrightarrow$ |
| :--- |
| $\longrightarrow$ | Introduction of the APMM Group

- Year to year analysis
- Comprehensive overview of square model

Revenue and profitability analysis of the segments given below (Four year Cumulative \& year to year from 2004-2007)

- Container shipping and related activities
- Tankers, offshore and other shipping activities
- Oil and gas activities
- Retail activities
- Shipyards, other industrial companies

In this chapter initially a brief introduction will be given of A.P Moller - Maersk Group and its accounting policies presented in financial statements. It is necessary to understand these policies because accounting numbers are the output of the accounting policies, choices and estimates used by the company's management in the development of financial statements. APMM Group's square models for four years are drawn, which shows business expansions, resources and profit. Discussion of each year's square model is summarized from creditors and investors point of view regarding their decision making (buying, selling, and holding of shares) process.

Due to diversified company, year to year and cumulative segment analysis are carried out in order to know the profitability, growth and risk of each segment on the whole business activities because creditors and investors are much interested about the major sources and uses of cash etc.

### 4.1 Introduction of A.P Moller - Maersk

The A.P. Moller - Maersk Group is a worldwide shipping organization with about 120,000 employees and offices in around 130 countries - with global headquarters in Copenhagen, Denmark. It owns one of the world's largest shipping companies and in addition to that it is also involved in a wide range of activities within the energy, shipbuilding, retail and manufacturing industries. As it is a Danish company it is listed on the Danish Stock Exchange. Started in 1904, the APMM Group went on to be a global company, employing about 120,000 people in around 130 countries. It is the result of a merger in 2003 between D/S 1912 and D/S Svedberg. It is a global Group involved in a diverse range of business industries such as transportation, oil production and shipbuilding. Following are the four main business areas of the group: Container and related activities, Energy, Shipping and Offshore, Retail and other businesses. In our thesis the company is further represented by the word Group and all the figures related to the Group is in billion DKK (Danish Kroner). ${ }^{26}$

### 4.2 Analysis of the Accounting Policies of APMM

While analyzing the financial statements of any organization, it is necessary to understand the accounting policies of that organization because analysis of estimates, accounting policies and choices are have gained much more importance due to globalization. The management used these accounting policies in financial statements for justifying business reality. Sometimes, they used it as a tool for manipulation. So users should understand these accounting policies for making the appropriate decision. The annual report 2003 of APMM Group has been prepared in accordance with the provision of the Danish Financial Statements Act implicated to listed companies and the Copenhagen Stock Exchange financial reporting requirement for listed companies ${ }^{27}$. From financial year 2005, A.P Moller - Maersk adopted IFRS. Comparative figure of year 2004 has been restated for better understanding of accounting policies.

In the sections below the accounting policies and choices of the group has been analyzed and their strengths and weakness are discussed from the perspective of creditors and

[^14]current/potential equity investors. Our previous accounting project on APMM is the basis of further studies in our thesis.

### 4.2.1 Recognition of Revenue

Revenue should be recognized according to IAS (International Accounting Standard) 18. Revenue comprises of invoiced sales ${ }^{28}$. It means that the revenue is recognized as soon as transaction taken place regardless of the fact whether the voyages are completed or not (or whether the risk and reward related to the transaction has been transferred to the owner or not). This treatment of recognition of revenue is very liberal which overstates the earning and eventually increases net assets when the earning is transferred to equity, although it affects earning quality adversely. Such accounting policies portray good image on stock exchange and positively affect stock price of the company. On the other hand long term creditors favor a conservative accounting treatment that is late recognition of revenue and accelerate the recognition of liabilities.

### 4.2.2 Stocks and inventories measurements

The IAS 2 applies for stock and inventories measurement. Inventories are measured at cost according to the FIFO method ${ }^{29}$. FIFO method assigns older cost to the cost of good sold which understate the CGS and overstate the earning. On other hand the freshest inventories remain on balance sheet which overstates the assets. This kind of accounting practices are favorable for investors as increased earning push up the stock/share price in the stock exchange.

### 4.2.3 Tangible and intangible fixed Assets

Intangible assets should be recognized according to the IAS 38. Tangible and Intangible assets except goodwill are recognized at cost and annually depreciated/amortized using estimated useful life determined by the individual assessment of the assets. Goodwill acquired in business acquisition is recognized at fair value and amortized annually. This is not in accordance with IFRS.

[^15]
### 4.2.4 Depreciation, Amortization and Impairment of Fixed Assets

The depreciation should be calculated according to the IAS 16 (property, plant and equipment) and impairment according to IAS 36 (Impairment of assets). There is minimum disclosure regarding accounting policies of the Group for depreciation, amortization and impairment even depreciation method is not mentioned in Annual Reports. To amortized intangible assets especially goodwill has led to high amount of depreciation, amortization expenses which understand the income till 2003, in year 2004 the Group become IFRS compliant which led to impairment of goodwill rather than annual amortization.

Depreciable life of the Vessels and Containers in year 2006 was increased to 20 years and 12 years, before it was between $15-20$ years and $8-12$ years respectively. This policy is quite liberal as this practice will decrease the future depreciation expenses, overstate assets and eventually increase income. Income increases the value of Equity investors, so this policy might attract and retain Group's equity investors.

### 4.2.5 Recognition of provisions for expected future losses on contracts

According to the IAS 37, a provision is recognized only when a past event has created a legal or constructive obligation, an outflow of resources is probable and the amount of the obligation can be estimated reliably ${ }^{30}$.Group's contractors activities inherent a moderate degree of risk that's why group estimates the anticipated losses and creates provision for it and expense it in the current year. This accelerates the liabilities; usually the Group uses such practices to expense the future expenditure in current year.

### 4.2.6 Presentation of Financial statement and lack of disclosures

APMM financial statement presentation is not in accordance with the IFRS 1 while minimum disclosure policy is adopted in their financial reporting. This made not only our analysis process difficult but also some of the analysis could not perform due to lack of information. For example, the Group has not mentioned the depreciation/amortization method used for depreciation of

[^16]fixed assets, there is no information given regarding repair and maintenance cost that whether it is treated as an expense or capitalized as a part of asset.

These information regarding depreciation method, repair and maintenance of PP\&E are quite important from analytical point of view, as it shows the notion of accounting methods (whether conservatism, neutral or liberal accounting method) are used. Due to poor disclosure the financial statements lack the characteristics of understandability, reliability and relevance.

### 4.2.7 Change in accounting policies

The IAS 39 (Financial instruments: Recognition and Measurement) clearly defined the way if changes in accounting policies are needed. According to IFRS a company can only change its accounting policies with proper justification that the change will present more true view of the business or the company when it switches from one accounting standards to another.

In year 2006 the company has revised its estimated useful life for vessels, container and rigs from 15 to 20 years and $8-12$ years to 20 and 12 years without giving any explanation for the change.

### 4.3 Company Square Model

Year 2004: As compare to year 2003, the financial position of the A.P Moller Maersk is little bit better. The group's square model for the year 2004 shows expansion of total assets. In year 2003, the total assets were DKK 173 billion. The total assets in year 2004 increased by DKK 9 billion (4.9\%). The slight expansion in square model is due to increase in non-current assets by DKK 11 billion (18.13\%) while fixed assets decrease by DKK 2 billion. As compare to previous year, the increase in revenue was not satisfactory (1.5\%). This is mainly due to negative exchange rate of USD dollar, which
 declined by $16.5 \%$ in year 2004. One red flag is here that profit increase by 28 billion ( $64.7 \%$ ) as
compare to previous year which is not an average growth. We found that this was due to write down of tangible assets that were $-60.7 \%$ compare to year 2003. The Group also decreased depreciation expenses a lot, which caused the bust up of profit artificially. The other red flag is that APMM gained two billion DKK profit by discontinued operation. Although the liability decreased by only DKK 2 billion but the increase of DKK 10 billion in equity shows that APMM is trying to reduce its debts, which is encouraging for the shareholders.(Appendix No.1)

Year 2005: Overall business performance was positive. In 2005 was the year of high level of activity with considerable investment including two major acquisitions, one in august, Group acquired the British/Dutch (container shipping company) and second in November with the American Oil Company Kerr-McGee's. ${ }^{31}$ That's why the group's square model shape is substantially taller and broadens as total assets are amounted to 285b increased by DKK 103b (56.59\%) because of the acquisitions. The current assets increased to DKK 12b (17.14\%) while non current assets increased by DKK 91b (81.25\%) which was
 due to the huge investments made in vessels, terminals, oil exploration and field development as well as in information technology. No doubt revenue was increased to DKK 217b DKK by 45b (26.12\%) compared to last year due to the acquisition with two above said companies but 40\% increase in oil prices was another important reasons for increasing the revenue. Cost and expenses were increased to DKK 197b by DKK 53b (36.80\%). The relation between revenue and expenses indicate a red flag because ratio of cost and expenses are much higher than increase in revenue. The profit should be much more than previous year due to acquisition but profit

[^17]increased only by DKK 20b which was decreased by DKK 8b (-28\%) because costs and expenses were increased. Equity increased by DKK 21b (20.39\%) that shows assets were purely financed through debts which bust up liabilities by DKK 82b (103.79\%) as compared to year 2004. Depreciation, amortization and write-down expenses rose to DKK 5b (39\%) to its normal level because last year these were declined by $(-28.18 \%)^{32}$. In 2005, APMM maintained the market position in different segments (Appendix No.1)

Year 2006: In 2006, different segments of the APMM Group developed positively which caused the height of the square model to increase. Square model for year 2006 still shows growth in assets as its height is increased by DKK 29b to DKK 314b (10.18\%). The contribution of the current assets was DKK 11b (13.41\%) and non-current asset was DKK 18b (8.86\%). According to the directors' reports the volume of sales did not reach the expectations and Maersk line lost market share due to difficulties for implementation of comprehensive
 IT system ${ }^{33}$. Revenue was maintained on its last year level, revenue rose to DKK 272b by DKK 55b (25.35\%) because the high investment level from 2005 continued in 2006, while expenses \& costs continually increased to DKK 256b (29.95\%) as compared to previous year. Although the profit was DKK 16b in 2006 but as compare to previous year, this was decreased to DKK 16b by -20\%. This was mainly due to abnormal increase in cost and expenses and integration cost which was $58 \%$ more for the two newly acquired companies. Gain on sale of vessels and changes of the depreciation period were the main cause for increased profit. APMM Group did not explain in its disclosure the reasons of change in depreciation period. Liabilities increased to DKK 177b (9.93\%) and equity increased to DKK 137b (10.48\%) that shows the APMM financing was primarily through equity. Acquisition was one of the causes of increase in liability (Appendix No.1)

[^18]Year 2007: Total assets were growing but growing rate was not satisfactory because total assets increased to DKK 328b by (4.47\%). Although total assets increased, the contribution of fixed assets in total was $5.42 \%$ but current assets decreased by $2.17 \%$ as compared to previous years 2005 and 2006. The director of APMM admitted that 2007 was a challenging year. Revenue was increased only by 7.35\%. Expenses and cost were also increased by $6.64 \%$ compared to year 2006. We think that APMM
 succeeded to build up the trust of shareholder because combination of total assets, revenue and expenses were favorable as total administration and operational expenses increased but with decreasing rate compared to the revenue. The profit increased to DKK 19 billion while in year 2005, the profit was DKK 16b. A minor increase in liabilities have been seen, only liabilities increased $2.26 \%$ as compared to previous year while equity decreased by DKK 10 b (7.35\%) as compared to year 2006 (Appendix No.1)

### 4.3.1 Comprehensive overview of Square Models

The square model (Thomas Polesie) enables us to analyze the closing position and overview of


Figure 4: Comprehensive overview of Square Models
the performance of an organization. The last four years performances can be easily overviewed for APMM by using square model. We drew four years analysis of the square model for analyzing the activities of the Group.

An instant view of the Group's square model reveals that company is growing as the square is getting taller and broader consistently from year 2004 to 2007. The Group's assets are increased
by DKK 120 billion in last four years. Liabilities and Equity are increased by DKK 102 billion and DKK 44 billion respectively. Such a capital structure indicates that growth in total assets is financed mainly by internally generated funds, and liabilities.

This kind of financial position is much favorable for both creditors and investors. Investors are interested in future inflow in order to get appreciated price for stock and dividend. The rise in Group's assets bust up its future inflow generation prospects, which is the main concern of investors. On other hand the growth in assets is financed mainly by Equity financing, this has increased safety margin for creditors, which is their main concern.

Revenue, as per Group's square model, is increased for DKK 120 billion from financial year from 2004 to 2007. While the expenses of the Group also increased by a higher amount that is DKK 129 billion. Although the Group has not generated considerable amount of profit from year 2004 to 2007 but this does not mean that the company has lost value for the investors. Investors are always interested in the company's future returns, and it is not based on current year's profit but the company's plan for future growth. Therefore such a financial position - that the group has invested considerable amount in assets which brighten its future returns - is favorable for investors and creditors as well.

Despite the fact that Square Model instantly visualizes the business activities using financial data from income statement and balance sheet without recasting for abnormal, non-recurring items etc. We also know that these statements are based on accrual accounting, where management distorts the information by accounting estimates, choices and earning management. Besides Square model does not take cash flow information into consideration, which no doubt play an important role in analyzing financial health of any company.

While performing analysis of APMM using square model, we have found an application of the short-comings of the model in year 2004 where group showed DKK 10 billion increases in profit as compared to last year increase. But when we went beyond the square model and analyzed the source of changes in profit it is revealed that increases of DKK 10 billion was not the results of core business activities but in year 2004 as DKK -5 billion lower write down has been made to the
fixed assets compared to last year while DKK 2 billion gain was realized on discontinuing operations. Due to these two unusual factors the profit, as showed in square model is busted.

### 4.4 Segment Analysis

Many companies are engaged just in one business, but due to globalization and competitive market, most of the companies often have more than one business. Each segment contributes a vital role and influences the overall business of the organization. That's why while valuing financial position of any business; analysts suggest that one should conduct segment analysis in order to know that which segment is contributing how much in the total revenue and profit. Segment analysis is more important while doing the analysis of diversified companies. A. P Moller Maersk is a well diversified company having five business segments.

- Container shipping and related activities
- Tankers, offshore and other shipping activities
- Oil and gas activities
- Retail activities
- Shipyards, other industrial companies

Each business division or segment of APMM has its own growth pattern, profitability and future potential. The first thing to look for is how the company's various businesses contribute to its total revenue, the company may have a big sideline business that reduces the influence of mainline operation ${ }^{34}$. Profitability is the main key so it is important to know a company's business is divided, it is also good to consider those business profits ${ }^{35}$. The segment analysis of APMM Group has been conducted into two sections. In first section brief analysis of each segment's Revenue and Profit for four years (2004 to 07) are conducted while in second section, we analyzed each segment from year to year in order to know the trend.

[^19]
### 4.4.1 Four years (2004-07) cumulative segment analysis

As we already mentioned in the theoretical framework that objectives of every user is different. The most important are investors and creditors, they are much interested to analyze the contribution of each segment and they want to know how individual business segments impact the Group performance as a whole. Because creditors are interested in knowing that which segments are resource generator and which are not?

| Business Segments | Revenue(in DKK billion) <br> Year 2004-07 |  | Profit(in DKK billion) year 2004-07 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Absolute | Common size in \% | Absolute | Common size in \% |
| Container and shipping | 506 | 56\% | 18 | 22\% |
| Tanker, offshore | 79 | 9\% | 20 | 24\% |
| Oil and Gas | 137 | 15\% | 34 | 41\% |
| Retail | 144 | 16\% | 6 | 7\% |
| Shipyards, other industrial Co: | 41 | 5\% | 5 | 6\% |
| Total | 907 | 100\% | 83 | 100\% |

Table 1: Segment Analysis

In the above table we analyzed the four years accumulated revenue and profit generated by each business segment. Accumulated revenue and profit gives some interesting information that are useful for creditors, investors and management.


Figure 5: Chart of segment analysis

The revenue of all segments is DKK 907 billion, the major contribution is from Container and Shipping segment which is DKK 506 billion ( $56 \%$ of the total revenue). Tanker, offshore segment contribute DKK 79 billion (9\% of the revenue), Oil and gas contribute DKK 137 billion (15\% of total revenue), retail contribute DKK144 billion (16\% of total revenue) and segment of shipyards, other industrial companies contribute DKK 41 billion (5\% of the total revenue)

The revenue and profit shows an interesting relationship among different business segments with regard to its ability to generate revenue and accordingly net profit. As we already mentioned that Container and shipping division contributed DKK 506 billion revenue in last four years but its contribution to the net profit is only DKK 18 billion. On the other hand Oil and Gas division's turnover is only DKK 137 billion but contributed DKK 34 billion to the net profit in last four years. It means that Oil and Gas division's revenue is almost 4 times less than shipping division while its profit is 2 times more than shipping division. Here sometimes most of the financial statements users interpret it that this is due to manipulation. But when we analyzed behind these numbers, it seems that this abnormal relationship is due to increase in depreciation, amortization and impairment loss charges, which are materially large, are mainly charged to shipping division which substantially decreased its profit for the year. Besides Oil and Gas division performed very well especially by acquiring American oil company in 2005 and entering into an agreement with Danish government which have assigned the oil concessional rights to the group in the Danish part of South Sea.

### 4.4.2 Year to year - Individual Segment Analysis

The year to year analysis of APMM was conducted from year 2004 to 2007. We developed the following table for better understanding of comparison between different segments, especially in the context of revenue and profit.

Year to Year - Individual Segment Analysis
Revenue

| Business Segments | Amount in DKK Billion |  |  |  |  | Change in \% |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2003 | 2004 | 2005 | 2006 | 2007 | 2003-2004 | 2004-2005 | 2005-2006 | 2006-2007 |
| Container and Shipping | 90233 | 95150 | 128924 | 150312 | 145214 | 5,45\% | 35,50\% | 16,59\% | -3,39\% |
| Tanker, offshore | 14390 | 15823 | 18556 | 22191 | 24175 | 9,96\% | 17,27\% | 19,59\% | 8,94\% |
| Oil and Gas | 19159 | 20166 | 27433 | 41126 | 51537 | 5,26\% | 36,04\% | 49,91\% | 25,31\% |
| Retail | 22106 | 23352 | 25331 | 43054 | 56382 | 5,64\% | 8,47\% | 69,97\% | 30,96\% |
| Shipyards, other industrial Co: | 20125 | 10654 | 13510 | 10213 | 8224 | -47,06\% | 26,81\% | -24,40\% | -19,48\% |
| Elimination etc | -8901 | -5601 | - 5052 | -6762 | -6660 | Elimination \& u tra-group trans | nallocated ite action as well | s comprise <br> as expenses | ination of in- <br> financial ite- |
| Total Revenue | 157112 | 159544 | 208702 | 260134 | 278872 | ms which are n | ot allocated to | business se |  |

Source: Annual report A.P Moller Maresk 2007 \& 2005
Year to Year - Individual Segment Analysis
Profit

| Business Segments | Amount in DKK Billion |  |  |  |  | Change in \% |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2003 | 2004 | 2005 | 2006 | 2007 | 2003-2004 | 2004-2005 | 2005-2006 | 2006-2007 |
| Container and shipping | 3873 | 9109 | 7655 | -3375 | 1183 | 135,19\% | -15,96\% | -144,09\% | -135,05\% |
| Tanker, Offshore | 2171 | 3222 | 3848 | 5734 | 6781 | 48,41\% | 19,43\% | 49,01\% | 18,26\% |
| Oil and Gas | 6490 | 6799 | 6988 | 10119 | 8866 | 4,76\% | 2,78\% | 44,81\% | -12,38\% |
| Retail | 998 | 1304 | 1095 | 1838 | 2015 | 30,66\% | -16,03\% | 67,85\% | 9,63\% |
| Shipyards, other industrial Co: | 24 | -300 | 1695 | 1835 | 2449 | -1350,00\% | -665,00\% | 8,26\% | 33,46\% |
| Unallocated activities |  |  |  | -307 | -2203 |  |  |  |  |
| Discontinue operation |  | 2026 | 404 | 131 | -533 | Elimination \& unallocated items comprise elimination of in-tra-group transaction as well as expenses and financial items which are not allocated to business segments. |  |  |  |
| Elimination \& unallocated items | 3718 | 6096 | -1479 | 211 | 100 |  |  |  |  |
| Total | 17274 | 28256 | 20206 | 16186 | 18658 |  |  |  |  |

Source: Annual report A.P Moller Maresk 2007 \& 2005
㫣
Table 2: Year to year segment analysis of revenue and profit

In the year 2004, revenue for the year of container and shipping segment increased by only $5,45 \%$ as compared to previous year but profit positively increased by $135,19 \%$. Because in year

2004, the overall growth market rate is $5 \%$ which in shipping industry is considered a good rate of growth. The other reason of unbelievable increase in profit was due to decrease in expenses by $12 \%$ by lower write down on fixed assets in this year. Increase in gain on sales of ships also increased by $134 \%$ which alternatively busted up the profit. Although in 2004, there had been seen minor increase in revenue but in year 2005, revenue dramatically increased by DKK 33 billion while profit decrease by 1 billion. The revenue increased due to acquisition, the APMM group acquired British shipping container company P \& O Nedlloyed and profit decreased due to high integration and depreciation \& impairment losses of newly acquired firm.

In year 2006, most of the core group of APMM Group developed positively. The revenue of container and shipping segment increased by DKK 21 billion and there had been more than DKK 3 billion net losses due to decline in rate of container services and increase in high fuel price. The expectation of acquisition did not reach the desired target. Container and shipping segment contribute $56 \%$ of total share so APMM lost market share this year. The container vessel capacity increased more than the volume transported, the weakening of the balance between supply and demand resulted in a decline in rates ${ }^{36}$. Due to global crises, the year 2007 was a challenging year. The revenue reduced by 5 billion in year 2007 but due to effective management and new CEO controlled the integration and other cost, reduce taxes so positive development had been seen. The profit of associated companies increased but not satisfactorily because the USD exchange rate 8\% declined throughout the year as compared to year 2006.

In year 2005, The revenue of oil and gas also increased by DKK 7 billion (36\%) but profit increased by only $2,78 \%$. The situation had been seen different in year 2006, revenue consistently increased by DKK 13 billion (49,91\%) and profit also increased by DKK 3 billion (44,81\%). The overall result for the year 2006 for Danish and international oil and gas activities were USD 1702 million which was considerably above $2005^{37}$. The result effected positively by higher oil prices whereas increase in depreciation and impairment lost and taxes effect negatively.

[^20]Most of the companies acquire other companies for survival and to compete in the market. The APMM is a well diversified company, we had seen while conducting the analysis of APMM Group practice of acquiring companies. In year 2005, APMM Group acquired two British Companies for container and shipping segment (Dutch Container Company \& Royal P\&O Nedlloyed) for Dkk16 billion. An American Oil company also acquired Kerr - McGee) for oil and gas segment. That's why the dramatically negative effect had been seen in year 2005 due to acquisition because of increase DKK 1.8 billion integration cost. Due to acquisition, depreciation and impairment loss in container and shipping segment was increased by DKK 2 billion (36\%) as compare to the previous year. Due to acquisition of container and shipping and oil and gas segment, the profits for the year 2005 and 2006 were negatively affected.


Figure 6: Effects of Acquisition
The profit of Oil and Gas segment was in a much better position because of $40 \%{ }^{38}$ and $20 \%{ }^{39}$ increases in Oil prices in years 2005 and 2006 respectively. Graphically, one can see that Container and Shipping segment's profit are much negatively affected than Oil and Gas segment in year 2005 and 2006. But in year 2007, there had been positive effect in container and shipping segment. Wise \& risk taker investors always favor such a situation where a company suffers losses because of acquiring new companies, because they expect that the new companies can generate a positive return in future.

[^21]
## CHAPTER NO. 5

## 5. Performance Analysis

## Chapter overview

By using Income Statement Analysis<br>- Earning Quality of A.P Moller-Maersk Group<br>Relationship between

a) Revenue and trade receivable
b) Revenue and inventories

Analysis of key performance indicators

- Depreciation, amortization and impairment loss
- External cost and staff cost
- Tax expenses
- Financial expenses
- Trend analysis of income statement (Four years)
- Strengths and weaknesses for investor and creditors

APMM's performance analysis over four years is conducted using income statement analysis for Earning Quality, Revenue Vs Profit analysis and how does it affect equity investors' decision making, since equity investors are interested in income which increase its value of investment in the Group. The basis of performance analysis in this section is the accounting project that we previously deed on Maersk.

Group's accounting measures for the revenue are quite liberal since earning quality are derived using conservative accounting measures. Depreciation is one of major expenses of the Group, and it is used as a tool to boost up earning in year 2004.

Group's revenue is recognized when invoice sales occurred, which overstates the revenue. But on the other hand provision for the estimated loss on the future contracts are recognized in balance sheet which off-set against overstatement of revenue.

Trend analysis of the income statement for the group over four years is conducted and concluded from the perspective of equity investor and creditors. All financial statements have logical relevance to the profitability analysis but principally income statement is the most important statement for the analysis of performance or profitability analysis. Income statement reports company operating results which are the core operation of business and plays main role in company's value, solvency and liquidity.

APMM's profitability from year 2004 to 2007 has critically been analyzed to determine whether the accounting measures reported are true income? Equity investors concentrate on income because it is the unique factor which adds value to their investment (equity). For creditors, income and net cash flow from operation are the source of principle and interest payment. Therefore in the section below, APMM's income quality is evaluated by analyzing the Group's accounting estimates and methods related to revenue measurements and expenses.

### 5.1 Earning Quality of APMM

A company's income has earning quality if it is derived using conservative accounting methods, free of management distortion, and exclusion of non recurring items. During the analysis Group's earning quality an important relationship between revenue and profit for the year is observed, which really helped us to determine earning quality of group. According to the observed relationship "Revenue is the main source of profit; therefore change in revenue should be accompanied by a proportionate increase/decrease in profit only and only if there is no management distortion and extra - ordinary or non - recurring gain/losses". If the above relation is true company's income is persistent and has Quality and vice versa.

In the below diagram the discovered relationship is applied to Group's revenue and profit in order to conclude that whether accounting profit is a true measure of income or not.


Figure 7: Graph of revenue Vs profit

The diagram indicates Group's revenue in year 2004 is increased by 2\% (DKK 2 billion) compared to year 2003 but profit for the year is increased by 62\% (DKK 11 billion). This reveals that an increase in profit is not proportional to the increases in revenue or in other words the Group's earning has poor quality. It indicates that accounting conventions or non - recurring items contributed to the profit. Therefore we have conducted in-depth analysis and discovered that $62 \%$ increases in profit resulted because of $60 \%$ lower - write down in fixed assets is made compared to last year, which reduced the depreciation and impairment expenses by $38 \%$ in comparison to last year. If we normalize these effects the profit for the year remains at $3 \%$ increase compared to last year.

In year 2005 and 06 also indicates that Group has poor quality of earning because the revenue is increased by $31 \%$ and $25 \%$ respectively but the profit is decreased by $-28 \%$ and $-20 \%$ respectively because the depreciation expenses are carried up on its normal level which was reduced in last year. One time integration cost of DKK 2 b is also incurred in year 2005 which negatively affected the profit. The curve of revenue and profit is moving in opposite direction, which is due to shifting of profit or losses from one financial year to other using accounting conventions (Appendix No.9).

### 5.1.1 Relationship between Revenue, and Trade Receivables

The relationship between revenue and receivable is far more important from the dimension of measuring earning quality. If the account receivable is increasing faster than increase in revenue, it might be generous extension in credit line, increased incentives or poor collection policies.


Figure 8: Revenue Vs Trade Receivable
Revenue Vs Trade Receivable

|  |  |  |  |  |  |  | 2003 | 2004 | 2005 | 2006 | 2007 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Revenue | 157,112 | 159,544 | 208,702 | 260,134 | 278,872 |  |  |  |  |  |  |
| Increase $\%$ | - | $2 \%$ | $31 \%$ | $25 \%$ | $7 \%$ |  |  |  |  |  |  |
| Trade Receivable | 15,607 | 16,613 | 23,551 | 26,205 | 23,677 |  |  |  |  |  |  |
| Increase $\%$ | - | $6 \%$ | $42 \%$ | $11 \%$ | $-10 \%$ |  |  |  |  |  |  |

The above diagram reveals the relationship between Group's revenue and account receivables from year 2004 to 2007. It indicates that account receivable grow at a rate exceeding revenue from year 2004 to 2005, because of extensive credit lines and loss credit policies as well future recognition of the revenue. But in year 2006 receivables increased at a decreasing rate compared to the revenue. While in 2007 revenue increased but receivables decreased by $10 \%$ which shows that recovery policies of the Group has been affectively implemented which indicates earning quality in coming years.

### 5.1.2 Relationship between Revenue, and Inventories



The diagram indicates that except in year 2003, inventories are kept at very high level as compared to the revenue. This indicates cash is invested in excess amount of inventories which may have affected group's working capital and current ratio especially in the year2005. Just-intime system has far more benefits.


Figure 9: Revenue Vs Inventory

### 5.1.3 Depreciation, amortization and Impairment losses

Impairment losses, amortization and depreciation expenses are significant in amount for the APMM Group. The reason for such a high depreciation charges is that service companies usually have substantial amount of depreciation, besides the Group operates in highly intensive investment industries where companies maintain a large amount of assets and ultimately result in high depreciation charges.

Change in Group's assets and depreciation expenses from year 2003 to 2004 shown in the diagram below, are decreased but depreciation expenses are decreased at exceeding rate than assets compared to previous year. The reason for abnormal decreases in depreciation expenses was only due to write down of the fixed assets which artificially busted up the profit for the year by $62 \%$. This indicates that depreciation is used as a tool for earning by the management.

In year 2005 \& 2006 the depreciation expenses are increased to the normal level, although in year 2005 and 2006 substantial amount of investment has been made in fixed assets, which resulted in $35 \%$ increase of depreciation expenses in year 2007 compared to 2006(Appendix No.9)


Figure 10: Depreciation, amortization and impairment losses

### 5.1.4 External Cost (fees to auditors and legal consultants for merger/acquisitions etc) and Staff cost

External cost are increased by 20\% and 29\% in year 2005 and 2006 respectively due to increases in the payment of fees and service charges to consultants for acquisition of three major companies in shipping container and oil \& gas segment. This has negatively affected the profit in the year it is occurred (Appendix No.9)

### 5.1.5 Tax Expenses

Group's earning is considerably affected the increased amount of taxes, which is increased by $40 \%$ to $50 \%$ in year 2005 and 2006 as compared to year 2004. There were two main reasons for this increase in taxes. First, Government revised tax rates in year 2004 which is implemented in year 2005 led to high tax rates. Second, the Group has entered into an agreement with Danish government for extension of oil concession in the North Sea in return of $20 \%$ of share of profit. This share of profit is included in the taxes which busted it abnormally (Appendix No.9)

### 5.1.6 Financial Expenses

Financial expense of the Group consisted of interest expenses and gain/losses on exchange rates and adjustments to the average USD exchange rates. These expenses increased considerably
because in year 2005 and 2006 due to increased debts in 2005 which has increased the interest expenses. On the other side, fall in USD exchange rates has pushed the figure for financial expense.(Appendix No.9)

### 5.2 Trend Analysis of Income Statement over four years

For the purpose of trend analysis, five year data from 2004-07 has been analyzed. We focus on the evaluation of revenue with comparison to profit and the cost related to it. If we analyze the data of APMM, we observe a low growth rate in revenue in year 2004 and 2007. In year 2004 revenue increased to DKK 160 by 3 billion (2\%) while in year 2007, revenue increased to DKK 279 billion by DKK 19 billion (7\%). After 2004, turnover increased abnormally in year 2005 and 2006. In year 2005, the situation was opposite as compared to year 2004. Revenue increased to DKK 209 billion by 49 billion (31\%) in the year 2006, it increased to DKK 260 billion by DKK 51 billion (25\%). The reason for lower growth rate in year 2004 and 2007 was due to new major investment in concerning industry. In year 2005 and 2006, the revenue increased due to merger and acquisition with three companies and their effects will be discussed in next paragraph while analyzing profit trend. (Appendix No.9)

The profit for the year of the Group was positively increased to DKK 28 billion by DKK 11 billion (62\%) in year 2004 but had negative influence in year 2005 and 2006, by exceptional expenses relating to acquisition of companies, that was decreased by $28 \%$ and $20 \%$ respectively. In year 2006, again Group improved its controllability and the graph increased by $15 \%$ as compared to year 2005. Abnormal profit (62\%) increased due to depreciation, amortization and impairment expenses reduced to DKK 13 billion by DKK 5 billion (-28\%). The result of year 2004 affected positively as compare to previous years which could be explained due to increasing demand for container demand and higher tanker rate, oil prices increased by $27 \%$ and low write-down on intangible fixed assets, due to increasing tax on oil activities and USD exchange rate which is $9 \%$ lower in relation to DKK (Appendix No.9)

The negative profit in next two year was due to acquiring other companies. So depreciation expenses increased by $39 \%$ and $9 \%$, External cost increased by $36 \%$ and $32 \%$, financial expenses
were $84 \%$ and $34 \%$ respectively. Increase rate of Integration cost and tax rate were also the other reasons of declining profit. .Although the Group financial position seems negative but the situation is favorable for potential investor because after merger and acquisition affect of utilization of assets will give benefit in later years. The risk factor is also minimized in this situation for the creditors, but the alarming point is that after merger and acquisition, intangible assets increased to DKK 28 billion by DKK 27 billion (2438.72\%) which involve uncertainty. As we already said, that in year 2007, graph profit increased (Appendix No.9)

The reason behind this was that the Group continued to increase positively its investment receiving a total of 33 container vessels, 15 tankers and one drilling rig with Australian tugboat company Adsteam Marine Limited but profit was negatively affected by the increase of oil price which was $64 \%$ as compared to previous year. The total investments amounted to DKK 34 billion in DKK caused the increase in depreciation which was increased to DKK 26 billion by DKK 7 billion (35\%). The Group's profit was increased to DKK 19 billion by DKK 3 billion (15\%) as compared to last year. Comparatively very good profit in last two year was due to the Group's arrangement of finance for more investment through the gain on sales which increased to DKK 6 billion by DKK 2 billion(43\%) by sale of 24 vessels and three rigs and also by returning unproductive vessels taken under finance leased (Appendix No.9)

### 5.3 Conclusion from the perspective of investors

Performance analysis of the Group for the four years reveals that group revenue is increased substantially because of increased price of Oil, freight rates, acquisition of British/Dutch shipping company, Royal P\&O and American Oil Company Kerr - McGee. Although Net profit in these four years does not show substantial increase due to the fact that Average USD exchange rates are declined, higher integration cost on acquisition, increased depreciation and impairment losses and increased Staff cost because of increase of employee from 76,000 to 120,000.

In year 2005 Group reported $62 \%$ of increase in net profit for the year but this increase was not due to operating efficiency but of earning management. The group has bright and persistent long
term prospects as major cost on acquisition, integration cost, and write down on fixed assets are done in previous year, which will result in lower expenses and high earnings in later years.

Equity investors use earning as an indicator for buying/selling/holding company's stock. As already discussed, in year 2005 and 06 profit was decreased by $-28 \%$ and $-4 \%$ compared to last year, which might reduce share price of the Group. A wise investor always look for such a situation where company's profit decreases not because of poor performance but due to acquisition and depreciation cost. These costs are one time, and do not recur in later periods besides acquisitions may decrease profit for the year in which it is occurred but it will be profitable in the long run, which will affect the stock price positively.

## CHAPTER NO. 6

## 6. Balance Sheet Analysis

## Chapter overview

Comprehensive overview of

- Equity
- Liabilities
- Profit
- Dividend
$\longrightarrow$ Analysis of Group's short term liquidity through
- Current \& acid-test ratio
- Cash assets \& cash liabilities ratio
- Day's sales in receivable and inventory (Days)
- Account receivable and inventory turnover(Time)
- Cash provided by operation to average current liabilities
- Working capital
$\longrightarrow$ Analysis of Group's assets utilization through
- Sales to cash and equivalent
- Sales to receivable and inventory
- Sales to working capital
- Sales to fixed assets and total assets
- Sales to short-term liabilities

Analysis of Capital structure \& solvency

- Total debt to equity \& total debt + equity ratio
- Long term liabilities to equity \& total equity to total debts
- Fixed assets to equity and current assets to total liabilities

Analysis of Return on investment

- Return on investment capital (ROIC)
- Return on total assets (RTA)
- Return on equity (ROE)

Trend analysis of four years of Balance Sheet

In previous chapter, we discuss the different aspects of income statement, no doubt, no doubt, after analyzing the income statement; it is easy to draw a picture of profitability through its operations. But here's one of the best kept secrets in the world of financial statements: a change in one statement nearly always has an impact on the other statements so when income statement in to be managed, it also have an effect on the balance sheet. ${ }^{40}$ Because balance sheet in the only source where one can get information about the resources of the company and how these sources of funds are used for different operations of the business.

To make judgments about a firm's performance the analyst needs benchmarks ${ }^{41}$.There are different types of benchmarks such as cross-sectional analysis (Comparison to other firms), timeseries analysis (Comparison to a firm's own history). Here we analyze the balance sheet by timeseries analysis or trend analysis. We analyze the balance sheet of APMM Group for four years in order to know the financial position, its assets ingredients, market strength and sources and their uses. For this we used following analytical tool

- Comprehensive overview of APMM Group (Accumulative of four years)
- Group's short term liquidity
- Group's assets utilization
- Return on investment
- Capital structure
- Trend analysis of balance sheet.


### 6.1 Comprehensive overview of Equity, Liabilities, profit \& Dividend

In income statement and preliminary financial analysis, we discuss revenue and profit briefly accumulatively and segmental. But dividend and equity is also important and relate to revenue and profit so analysts insist that while analyzing financial position, one have to know about the growth rate because it is important for financial measure.

[^22]
## A.P Moller - Maersk Group <br> Analysis of Four year 2004-07



Source: Annual Report A.P Moller Maersk Group 2007, Page 2
Figure 11: Comprehensive overview of Equity, Liabilities, Dividend and Profit
As shown above in the graph, APMM Group, we had seen remarkable improvement during the last four years. In year 2003, total equity was DKK 83,657 million ${ }^{42}$. The equity in 2004 increased by DKK 19 million (18.54\%). In year 2005, the same trend had been seen, equity increased by $19.18 \%$ as compared to previous year. But in year 2006 and 2007, the equity increased by only 7.04\% and $6.81 \%$ respectively. We already explained the liabilities and equity relationship in square model; one can analyze the relationship of equity and liabilities. This relationship shows that how a firm financed its operations. There are two ways of financing, weather the finance for the company generated through shareholders or funds are generated through external resources such as bank. Equity was growing every year which shows that overall positive performance with high level of activities.

[^23]The comparison of year 2004 and 2005 shows that APMM financed assets purely through debts which bust up the liabilities $105 \%$ as compared to year 2004. After 2004, the liabilities decreased and equity increased with positive ratio that shows that APMM is trying to reduce its debts. We think that APMM Group is trying to portray a rosy picture of profit because a lot of depreciation expenses decreased by increasing its useful life without giving any logical comments, according to IFRS, there should be given proper disclosure but we had not been seen any detail in the notes of its annual reports. In year 2004, APMM Group gained DKK 2 billion profit from discontinued operations, which shows that they are trying to create a positive because after that a slight decrease in trend had been seen in profit. Regarding the dividend analysis, in year 2004, the dividend increased by DKK 150 million (33.33\%) but after that in year 2005, 2006 and 2007 dividend increase only by $18.18 \%, 0.00 \%$ and $15.38 \%$ respectively. After the acquisition there was no major rise had been seen in dividend while in year 2006, same amount of dividend paid that was year 2005, it was due to acquisition because APMM Group invests the part of dividend amount for more investment. The relationship among expenses, revenue, cost, assets and equity and their consequences are also described in the square model as above.

### 6.2 Group Short-term liquidity

Short term liquidity position of APMM Group was analyzed through following liquidity ratios. Short term liquidity gained much importance for creditors and investors because "liquidity is a matter of degree, a lack of liquidity may mean that the enterprise in unable to avail itself of favorable discounts and is unable to take advantages of profitable business opportunities as they arise" ${ }^{43}$.

[^24]| Short Term Liquidity Analysis |  |  |  |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Measure | Unit | $\mathbf{2 0 0 4}$ | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 6}$ | $\mathbf{2 0 0 7}$ |
| Current Ratio | Ratio | 1,54 | 1,35 | 1,49 | 1,32 |
| Acid test ratio | Ratio | 1,45 | 1,28 | 1,35 | 1,18 |
| Accounts Receivable turnover(Times) | Times | 6,47 | 6,96 | 7,13 | 7,35 |
| Inventory turnover(Times) | Times | 29,84 | 31,10 | 29,26 | 24,00 |
| Days sales in receivable(days) | Days | 37,49 | 40,62 | 36,27 | 30,57 |
| Days sales in inventory(days) | Days | 12,36 | 13,85 | 14,11 | 16,21 |
| Cash assets ratio | Ratio | 0,24 | 0,25 | 0,25 | 0,13 |
| Cash liabilities ratio | Ratio | 0,87 | 0,58 | 0,70 | 0,50 |
| Working Capital | B.Dkk | 24,46 | 20,94 | 30,35 | 22,58 |
| Cash provided by operation to average current liabilities | Ratio | 0,70 | 0,63 | 0,39 | 0,60 |

Source: Annual Report of A.P Moller - Maersk Group
Table: 03: Short term liquidity analysis
Short term liquidity is of great importance while conducting analysis due to the fact that until a firm is able to pay its short term debts, it has the prospects of continuing as a going concern. The result of the above table presents some important clues of analyzing short term liquidity over the previous four years of APMM Group. The Group's current ratio in year 2004 was 1.54 but after that current ratio decreased slightly every year except in year 2006. The current ratio of APMM Group in all years had been low but in year 2001 it is at its lowest level in four years. According to the rule of thumb, it seems relatively low in all four years. The rule of thumb of current ratio is 2:1 (or 200 percent), it is sound and anything below that norm is bad while the higher above that figure the current ratio is, the better ${ }^{44}$. We think that low ratio were due to increase rate of growth in current liabilities from year 2004 to 2007 continually, where we find $34.72 \%$ in year 2005 as compare to previous year. We also find that this was due to cash and cash equivalent from year 2004 to 2007 represent a greater proportion of current assets (Appendix No

[^25]Graphical Presentation of short-term liquidity analysis


Figure 12: Graphical presentation of short term liquidity analysis

APMM Group acid-test ratio from 2005 to 2007 (1.28, 1.35 and 1.18 respectively) had been seen slightly decreasing position. According to trend analysis of APMM Group, we find that inventories represent lower proportion of current assets and total assets but if we see the accounts receivable turnover and the inventories turnover than it seems that the level of liquidity of company is good because its revenue is increasing smoothly (74\% growth) and no doubt, revenue is the best source for paying short term debts. Accounts receivable turnover represents good position in last two years which improves the finance for APMM Group (Appendix No.2)

The Group's day's sales in receivables was getting worse as it declined in year 2003 to 2005 and that might be the reasons of increasing bad debts. The reason for this ratio to decline was due to the acquisition of three big companies by APMM Group for future realization of the revenue credit policies. We find that after the acquisition the ratio of day's sales in receivable improved in last year.
"Day's sales in inventory are increasing year by year which indicates the failure of revenue to keep up with the operations. Days that sales are in inventory is increased from 9 to 16 in four years, because growth in inventory is $26 \%$ while sales/revenue's growth is only $16 \%$, in last five years. But the reason for keeping such a high inventory was management's expectation of increased turnover which didn't turn out to be the case.

The cash asset ratio is similar to the current ratio, except that the current ratio includes current assets such as inventories in the numerator. Some analysts believe that including current assets makes it difficult to convert it into usable funds for debt obligations. The cash asset ratio is a much more accurate measure of a firm's liquidity ${ }^{45}$. The ratio is smaller than 1 which shows that APMM Group is not in a position to pay its short term debts. But we find that the situation behind the number is different. One thing should be kept in mind that this ratio varies according to the size of the company, industry and by other factors. This was because the company is allocating its resources for the growth of the business so they acquired three big companies.

[^26]Cash liability ratio used for the measurement of cash available to pay the short term debts. This cash to current liabilities shows the quality of liquidity of current liabilities. The higher cash liabilities ratio shows high liquidity of current obligations. We had seen a slight decrease after 2004 ( 0.87 to 0.50 in last four years) in the APMM Group's financial statements which was because of more investment for better expectation in future instead of decreasing its debts (Appendix No.2)

The working capital decreased by 4 billion in 2005 but increased by 10 billion in 2006 than in 2007 working capital decreased by 8 billion. Although there is no consistency in working capital but still this is in favorable and positive position. "The basic concept of working capital is relatively simple. It is the excess of current assets over current liabilities" ${ }^{46}$. The creditors and investors can overview the financial position of the company by ratio. Working capital also gives investors an idea of the company's underlying operational efficiency ${ }^{47}$. Cash provided by operation to average current liabilities is purely a cash flow related measure "This over come the weakness of the static current ratio in that its numerator represents a flow over time" ${ }^{48}$. The ratio $0.70,0.63,0.39$ and 0.60 from year 2004 to year 2007 was not bad. According to the empirical study ${ }^{49}$ the ratio of operating cash flows from operations to average current liabilities should be 0.40 . This ratio ( 0.40 ) shows that company is going in a healthy position. Once in year 2006, the ratio of A.P Moller - Maersk had been seen 0.39 while in other years, it seems at very good level. (Appendix No.2)

[^27]
### 6.3 Asset Utilization Analysis

| Asset Utilization Ratios |  |  |  |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Measure | Unit | $\mathbf{2 0 0 4}$ | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 6}$ | $\mathbf{2 0 0 7}$ |
| Sales to cash and equivalents | Ratio | 9,57 | 10,33 | 11,36 | 12,16 |
| Sales to receivable | Ratio | 9,60 | 8,86 | 9,93 | 11,78 |
| Sales to inventories | Ratio | 38,67 | 33,93 | 31,49 | 28,72 |
| Sales to working capital | Ratio | 6,52 | 9,97 | 8,57 | 12,35 |
| Sales to fixed assets | Ratio | 1,42 | 1,03 | 1,18 | 1,19 |
| sales to total assets | Ratio | 0,88 | 0,73 | 0,83 | 0,85 |
| Sales to short term liabilities | Ratio | 3,55 | 3,45 | 4,17 | 3,90 |

Source: Annual Reports of A.P Moller - Maersk Group
Table 04: Assets Utilization Analysis
As shown in above table, APMM Group assets utilization had been seen in stable position over the last four years. Sales to cash and equivalent ratio improved from year 2004 to year 2007. In year 2004, it was 9.57 while in year 2007; it increased to 12.16 which show that the sales of A.PMM Group Sales can generate more cash according to the circumstances. Sales to receivable ratio also increased because of DKK 2 billion decreases in accounts receivable of APMM Group by implementing the effective credit policies. In year 2004, this ratio was 9.60 while aggressive increased had been seen in year 2007 which increased to 11.78 . Sales to fixed assets and sales to
 total assets indicate lower performance in year 2007 as compared to last three years. Sales to fixed assets and sales to total assets in year 2004 was 1.42 and 0.88 respectively while in year 2007, this ratio had been 1.19 and 0.85 respectively.

This is because of acquisition of three big companies that was an intensive investment in year

2005 in fixed asset but it has not been still utilized fully. APMM Group expects that these not fully utilized assets will contribute in future for increasing the group activities. A sale to short term liabilities was at good level in year 2006 because of increasing equity through shareholders and not debts by APMM Group.

### 6.4 Capital structure and solvency ratios

The process of the evaluation of capital structure and solvency of any enterprises is not an easy task. Without analysis of number of key elements, it is difficult for analyzing capital structure and solvency of enterprises. APMM Group is a well diversified company and engages in different segments. The analysis of capital structure is concerned with the types of capital funds used to finance the enterprise ${ }^{50}$.

| Capital Structure and Solvency Ratio | $\mathbf{2 0 0 4}$ | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 6}$ | $\mathbf{2 0 0 7}$ | Industry composite |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Measure | 0,77 | 1,30 | 1,29 | 1,23 | $\mathbf{1 , 1 7}$ |
| Total debt to equity | 0,43 | 0,56 | 0,56 | 0,55 | $\mathbf{0 , 5 4}$ |
| Total debt to total debt+equity | 0,33 | 0,81 | 0,84 | 0,75 | $\mathbf{0 , 4 3}$ |
| Long Term liabilities to equity | 1,30 | 0,77 | 0,77 | 0,81 | $\mathbf{0 , 8 6}$ |
| Total Equity to total debt | 0,81 | 1,20 | 1,22 | 1,25 | $\mathbf{0 , 4 6}$ |
| Fixed Assets to Equity | 0,57 | 0,38 | $\mathbf{0 , 3 5}$ | $\mathbf{0 , 4 0}$ | $\mathbf{0 , 6 1}$ |
| Current Liabilities to Total Liabilities |  |  |  |  |  |

Table 05: Capital structure and solvency ratio

The debt to equity ratios have increased in the last three years for the four years selected periods. The interesting thing we found that total debt to equity ratio was higher than the industry average in last three years but total debt to total debt + equity was almost according to industry average. The long term liabilities to equity ratio indicate that long term components of APMM Group grew because of aggressive credit policies. It seems that company moving away from conservative capital structure approach. Even in fixed assets, we used only total property, plant and equipment assets but still remain above the industry average. In last year, the result of

[^28]current liabilities to total liabilities have been seen below the industry average, it means that APMM Group emphasizes more on long term liabilities. Overall, APMM capital structure and solvency ratios are outstanding which show the financial strength of the group. If we compare these ratios to its industry and other standards, APMM Group has developed effectively in last three years. Although company acquire three major companies in year 2005, but still strong ratios of capital structure and solvency do not lose the significant protection of company's creditors. "Further, the company is still having ample debt capacity" ${ }^{51}$ and increased credit rating. The capital structure and solvency ratio can be viewed through following graphical presentation (Appendix No.3)

## Graphical presentation of capital structure and solvency ratio:




Figure 13: Graphical presentation of capital structure and solvency ratio

[^29]
### 6.5 Return on Investment

Mostly decision makers used return on investment approach. Return on investment is one of the several approaches to evaluate the investment by comparing the magnitude and timing of expected gain to the investment cost ${ }^{52}$.

By using this approach, the management of the organization can analyze how to improve return on investment (ROI), such as by reducing cost, increasing gain or accelerating gains.


## Source: http://www.solutionmatrix.com/return-on-investment.html

According to our research questions, for investor and creditors point of view, we conducted the data of APMM Group in order to determine whether the group return generated by invested capital is sufficient or not for future decision making.
a) Return on invested capital (ROIC)
b) Return on total assets (RTA)
c) Return on equity(ROE)
d) Weighted average capital(WACC)
(a) Return on invested capital (ROIC)

[^30]Four years data of Group's from year 2004 to 2007 has been conducted in order to know how management has allocated the capital into its different operations. The result of return on investment capital (ROIC) is not effectively understandable without comparing it to weighted average cost of capital (WACC). That's why, we conducted both measure to evaluate whether invested capital was used effectively or not and find out the true picture of the Group. We analyze APMM Group by using following formula.

$$
\text { ROIC }=\frac{\text { Net Income }- \text { Dividends }}{\text { Total Capital }}
$$



|  | 2004 | 2005 | 2006 | 2007 |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Return on Invested Capital <br> (ROIC) | $14.46 \%$ | $6.23 \%$ | $4.39 \%$ | $4.82 \%$ |  |

Source: Annual Report of A.P Moller - Maersk Group (Appendix No.4)
Figure 14: Return on invested capital
ROIC indicates that $14.46 \%, 6.23 \%, 4.39 \%$ and $4.82 \%$ of the return was generated from operation using assets in year 2004, 2005, 2006 and 2007 respectively which was acquired using equity and debt financing. As we already explained above that until we don't calculate the weighted average cost of capital (WACC) which shows the required rate of return we are not in position to elaborate that whether the above percentage are unfavorable or favorable for decision making purpose of different users including the management.

## (b) Return on total assets (RTA)

Return on total assets ratio is also calculated to measure the productivity of assets; we observe that the return on total assets from year 2004 to 2007 of APMM Group was declining after year 2004 and in later years. The return on total assets reached to a minimum level of $6.82 \%$ in year 2006 as it was $16.81 \%$ in 2004. The reason was the huge amount of investment in fixed assets. That's why it reduced the return on total assets in short run but it might be positive for investors in the long run whereby full utilization of assets might generate an effective and reasonable return.
$2004 \quad 2005 \quad 2006 \quad 2007$

| *Return on total assets (RTA) | $16.81 \%$ | $9.62 \%$ | $6.82 \%$ | $7.48 \%$ |
| :--- | :---: | :---: | :---: | :---: |
| ${ }^{* *}$ Return on Equity (ROE) | $30.3 \%$ | $17.8 \%$ | $12.4 \%$ | $13.2 \%$ |

*Source: Annual Report of A.P Moller - Maersk Group (Appendix No.5)
**Source: Annual Report of A.P Moller - Maersk Group 2007, page 2
Table 6: Return on total assets

## (c) Return on Equity (ROE)

Return on equity is calculated as the profit for the year divided by the average equity ${ }^{53}$. Return on equity (ROE) is important for analyzing profitability. The four years data of APMM Group has been collected in order to know how much profit the group has earned in comparison to equity. Return on equity at $30.3 \%$ exceeded in year 2004 which was above $10.5 \%$ of the industry average $\left(19.80 \%{ }^{54}\right)$ but in the later year 2004, the return on equity went below the industry average. In year 2007, it was only 13.2 \% due to $33.96 \%$ reduction in net income from DKK 28,256 million (2004) to DKK 18,658 million (2007)]. Low trend in equity in last three years shows that APMM Group was not capable to generate cash internally. The lower return on equity discourages the investors as well as different stakeholders.

[^31]
## (d) Weighted average cost of capital (WACC)

Finance is just like blood which is necessary to operate its different operations. There are two ways of financing, one is by debts and other is by equity. So assets of any businesses are financed by both debts and equity. By using WACC, each category is proportionally weighted according to cost. WACC is the average of the total costs of these sources of financing. ${ }^{55}$. WACC is expressed as a percentage ${ }^{56}$. WACC indicates the overall required rate of return demanded by the equity investors and creditors.

Where

$$
W A C C=\frac{E}{V} * R e+\frac{D}{V} * R d *(1-T C)
$$

$\mathrm{E}=$ Market Value of the Firm's Equity
$\mathrm{V}=$ Value of the Firm
RE $=$ Cost of the Equity
$D=$ Market Value of the Debts
$\mathrm{RD}=$ Cost of the Debts
TC = Corporate Tax
The Group financial data for year 2007 is put in the above formula
$\frac{4,395}{108,92} \times 15.31+\frac{104,530}{108,925} \times 85 \times 1-29 \%$
$0.040348 \times 0.153+0.9596511 \times 0.058 \times 0.71$
$0.006173+0.0395185$
$4.57 \%$

As ROIC tells us about the return that has been generated by taking funds from equity investors and creditors, on the other hand WACC tells that what is the average required rate of return demanded by equity investors and creditors. The Group's ROIC is $4.82 \%$ greater than WACC $4.57 \%$, which indicates that the Group's operations are self - sustainable, as it has generated the required rate of return for creditors and equity investors. Although the return of $4.82 \%$ is not a good return but the future prospects of the company is prosperous.

[^32]
### 6.6 Trend Analysis of Balance Sheet over four years

Trend analysis of balance sheet of four years from 2004 to 2007 of APMM Group has been conducted in order to know the growth and compare it with previous performance. Our focus was to analyze the trend of major items of the consolidated balance sheet of APMM Group such as assets, liabilities, equities, accounts receivable, revenue and inventories. It had been seen in assets that there has been increase in upward trend in total assets instead of both current and fixed assets. In year 2006 and 2007, total assets increased only $10.13 \%$ and $4.41 \%$ respectively while most significant increase had been seen in year 2005 when total assets increased by DKK 103,173 million ( $56.79 \%$ ) to DKK 284,846 million as compare to year 2004. It was very interesting for us when we analyze the components where current assets increased by DKK 12,095 million (17.42\%) to DKK 81,518 million while fixed assets increased by DKK 91,078 million (81.14\%) to DKK 221,032 as compare to year 2004. Further analysis shows that out of DKK 91,078 million, DKK 27,799 million (2438.72\%) was due to increase in intangible assets which was due to the acquisition of two major shipping and one oil and gas company. Intangible assets increased due to oil and concession rights but uncertainty feature exist because of the risk factor in future earning regarding intangible assets. So according to our research questions it seems that this happened due to management distortion which was not a positive sign for investors and creditors for future decision making.(Appendix No.6)

The total liabilities of APMM Group in 2005 also increased by DKK 81,796 million, which was $103.58 \%$ to DKK 160,763 million while in the same period equity increased ( $21.65 \%$ ) to DKK 20,750 million. In year 2006 and 2007, liabilities increase at normal rate which was $10.2 \%$ and 2.16\% respectively (Appendix No.6). Here we found interesting relationship that total fixed assets increased on the basis of liabilities (due to acquisition) but this relationship shows that it might be risky for the current investor because he or she is more interested for short term earning but it might be fruitful for future potential investor because assets acquired in the current period by acquisitions will fully be utilized in the future which will defiantly boost up future earnings.

We observed the trend in equity increased just like assets and liabilities in year 2005. Equity increased by $20.81 \%$ and in subsequent year 2006 and 2007, increasing rate was $10.18 \%$ and $7.32 \%$ respectively. It had been observed that the acquisition of two shipping and one oil and gas companies was mainly financed by liability instead of equity because we found that comparatively liabilities increased more compared to equity. That's why total liabilities DKK 160,763 million had been greater than equity DKK 124,083 million in year 2005. (Appendix No.6)

While doing trend analysis of balance sheet, we found another red flag by doing relationship trend between revenue and trade receivable which is an important measure for earning quality. It had been seen that the accounts receivable increased faster than the increase in revenue which might be a generous extension in credit policies, incentives or poor collection policies.

Trend analysis of revenue and accounts receivables from year 2004-2007 indicates growing rate of accounts receivable exceeding more than revenue rate from year 2004 to 2007 because of poor credit policies but APMM Group in year 2006 has been effectively implementing their extensive credit line policies. That's why receivable increased at a decreasing rate as compared to revenue in year 2006 while in year 2007 it had been seen that revenue increased only by $7.20 \%$ and accounts receivable decreased by $9.64 \%$ which indicates the earning will be more in coming years.

Trend analysis of inventories from balance sheet and its relationship with revenue from the income statement has been conducted in order to know the effect for earning quality. Inventories are kept consistently very high from year 2004 to 2007 as compared to revenue. This relationship also shows the mismanagement of APMM Group because a huge amount was invested in inventories which may have affected group's working capital and current ratio. Abnormal increase in year 2005 (49.10\%) and 2006(34.26\%) had been seen which might lose the trust of creditors as well as other users.

## CHAPTER NO. 7

## 7. Cash Flow Analysis

## Chapter overview



The investor who are interested in equity are concerned with profitability so they focus primarily on income statement and balance sheet rather than cash flow but we think they should not ignore the cash flow statement to elaborate the residual earning growth and abnormal growth in income statement and balance sheet, accrual accounting number are used for distortion. A difference between accrual accounting earning and operating cash flow is a "red flag" that could indicate manipulation, so the analysts must scrutinize the cash flows as well as accrual accounting earnings ${ }^{57}$.

Our main purpose of analyzing cash flow is in order to have better insight of APMM Group (Trend Analysis) operating, financing and investing activities. The second purpose is the analysis of major source of cash and major uses of cash of APMM Group has been conducted. Finally we will

[^33]analyze the relationship between net income and operating cash flow to find out the manipulation done by management.

The cash flow of APMM Group gives the insight of cash situation during the year 2004-2007. For investors and creditors, it is very important to know about the liquidity and flexibility situation by using cash flow analysis because in cash flow, there are minor chances of manipulation as compare to income statement and balance sheet where accrual number are used for manipulation. Indirect method for cash flow statement has been chosen because "the indirect method calculates cash from operations by adding back accrual (non cash) components of net income ${ }^{58}$. The net income is always taken as starting point in indirect method. Now one by one, we discussed cash from operating activities, cash from investing activities and cash from financing activities.

### 7.1 Analysis of Cash from operating, investing \& financing activities

Investor and creditors are more interested on cash from operating activities because cash from operating is related to business activities and it is the result that how much cash is generated from its core operation rather than all. It had been seen that cash flow from operating activities is positive during the period 2004 to 2007. This is due to huge amount of depreciation, amortization and impairment losses. These expenses increased by $39.17 \%$, and $35.42 \%$ in year 2004 and 2006 respectively. The cash flow from operating activities slightly increased every year from year 2004 to 2007 except in year 2006 when it decreased by 28.90\% (From 29207 million to DKK 33329 million) due to increase in financial expenses, taxes. Cash flow from operating activities amounted to DKK 33329 million, particularly due to growth, particular in the container business; there has been an increasing tying up of money in working capital ${ }^{59}$ (inventories and debtors). While in year 2007, we observed that in spite of negative trend in last year, cash flow from operating activities is still positive and increased by 68.03\% as compared to year 2005 due to positive change in working capital (Appendix No.7). We see that in year 2007, change in

[^34]working capital increased due to the decline of receivables, but we think this relationship show the red flag because it is not really a sustainable source of cash and in following year, the APMM Group cash position will change negatively. The investors and creditors in this situation not aggressively take any decision because it is important that APMM Group generate positive cash flow from its operating activities are really through sustainable source of cash.

Further we analyze that cash generated by investing activities represent an interesting picture. It had been seen that cash flow from investing activities from year 2004 to 2007 was negative. The worst year was 2005 when cash flow from investing activities negatively reached to DKK -53619 million from DKK - 26459 million which was $102.65 \%$ more as compared to previous year (Appendix No.7) When we analyzed deeply, we found that negative cash flow does not mean that the APMM Group activities are unfavorable because in year 2005, cash flow negatively increased due to the adoption of IFRS, movements in marketable securities included in investment ${ }^{60}$ and afterwards the APMM Group used much investment for expanding business and restructuring plan. In year 2004, the acquisition of subsidiaries and activities was only DKK 404 million while in year 2005; it was DKK -33131 million (8100.74\%). The change in capital expenditure also had been seen from DKK-18388 to DKK-61760 million (235.87\%). We can conclude that for short term, it seems that APMM negative cash flow investment more related to reduce in revenue and a negative return on equity, Due to above said reasons; creditors and investors might interoperate it negatively which is an important problem for A.P Moller - Maersk Group.

We also conduct the analysis of cash flow generated from financing activities. The cash flow in year 2004 was DKK -295 million while in year 2005, it was DKK 22250 million. The cash flow had been seen positive each year except in year 2004. This positive trend was due to proceed from Ioan from DKK 11993 million to DKK 35486 million (195.89\%). This shows positive signal for investor and creditors. Although, after that in year 2006 and 2007, the cash flow lit bit decrease but it's not a big problem.

[^35]
### 7.2 Major Sources \& Uses of Cash (2004-2007)

In the below charts, we analyze the major sources and its uses of cash during the year 2004 to 2007. It had been seen that cash flow from operations of the APMM Group was steady and it had growing sources of cash. The cash flow from operations slightly increased during the year 2004 to 2007. It has been observed that during the four years the major cash flow source was cash flow from operations DKK 126,050 million (38.21\%), the second major source was proceeds from debts DKK 96.843 million (29.35\%), the third source was the sale of marketable securities DKK 76,773 million ( $23.27 \%$ ), than disposal of non-cash assets, Gain disposal from subsidiaries and activities and capital increases with DKK 24,592 million ( $7.45 \%$ ), DKK 4,538 million ( $1.38 \%$ ) and DKK 1,107 million ( $0.34 \%$ ) respectively. In all four years, payment for dividend and investment needs was fulfilled by cash flow from operating activities (Appendix No.8)

Major uses of cash during the year 2004 to 2007 were investment in non-current assets DKK 148,129 million (46.44\%), purchase of marketable securities DKK 71,078 million ( $22.29 \%$ ), repayment of loans including short and long term DKK 47,544 million, acquisitions of subsidiaries and activities DKK 37,211 million, dividend distributed DKK 7,613 million and acquisitions and other investment in associated companies DKK 7,361 million out of total cash during the period from years 2004 to 2007.(Appendix No.8)

As we can see that marketable securities have an important impact on both side (Sources and Uses). A very small decrease had been seen in marketable securities.

Figure 15: Major sources and uses of cash It had been seen that cash collected from different sources has been allocated for the investment

in acquisition of two shipping and one oil and gas company which was DKK 37 billion and also investment in non-current assets which was DKK 168 billion during the year 2005. This huge amount arranged mainly from net cash flow from operation and proceed from loans were 39\% and $30 \%$ of total respectively. A $15 \%$ of cash flows used for repayment of loans. (Appendix No.8) From the investor and creditor point of view, they are not sure about whether huge investment successfully integrated and manageable or not. If management failed to implement it than might be earning will be affected negatively due to huge amount of depreciation and other related expenses because a huge amount invested for the purchase and acquisition of asset and on the other hand in later years, debts will be increased which alternatively negatively effect the earning and decrease the safety margin. So the situation will not be favorable for equity investor as well as creditors because mostly they concern their income. It seems that emphasis of the management of the group was to achieve more capacity, new opportunity in different segments especially container \& shipping and oil \& gas segment through acquisitions in all over the world.

### 7.3 Relationship between net income and operating cash flow

Income statement is on based on accrual accounting while cash flow statement based on actual cash transaction so accounting choices does affect cash flow like income statement. The analysis of net income and cash flow from operating activities has been conducted from year 2004 to 2007 in order to know the manipulation. Profit which is derived from income statement involves accrual that's why we have compared it with operating cash flow (cash based inflow). The manipulation or distortion levels used in driving net income in each year are shown in below section (diagram).

## Net Income Vs Cash flow from operating

From year 2004 to 2007


Source: Annual Report A.P Moller- Maersk Group 2007, page 2
Figure 16: Net income Vs cash flow from operating
One can see the net operating cash flow generated from activities on upper curve and net profit on derived from income statement lower curve. The green shaded area indicates about the use of accruals and conservative accounting conventions which become the cause of fluctuation in profit. For distortion, management of the APMM Group used different tool such as depreciation, impairment losses and amortization expenses was used to understate the profit. We can say this because in year 2004 depreciation expenses was lowered by $62 \%$ which reduced the gap between net income (DKK 28.26 billion) and cash flow from operations (DKK 29.21 billion), while in next year's, the depreciation expenses charged by changing their policies on the basis of judgment which increased the gap again in 2005.

After the analysis of net profit and cash flow from operations of APMM Group, we found that for the development of financial statement, creditor oriented strategy has been used in order to give maximum attraction and protection to creditors.

## PART



## 8. Final Conclusion

This chapter draws the conclusion based on research questions to obtain the purpose of our chosen research topic. Furthermore, we will give the overall answer of our research questions and finding of our analysis presented in previous chapters. On the basis of this conclusion, suggestions for future research presented.

APMM Group is a well known and highly reputable position in shipping industry. A.P MollerMaersk Group's financial statements have been analyzed by applying different approaches such as Square Models approach, Ratio and Cash Flow analysis. The exact interpretation of the financial statements of such a huge company is very challenging and it becomes even more difficult when the company is one of its' kind in its industry and have a commanding position in regards to following the accounting rules and regulations.

Performance analysis of APMM Group showed that revenue increased substantially during the period from year 2004 to 2007 but net profit in the same period does not show substantial increase. In year 2005, APMM reported $62 \%$ increase in net profit but result shows that increase was due to earning management rather than operating efficiency. The analysis of APMM Group has revealed poor disclosure about accounting estimates and policies. It is observed that APMM Group is using conservatism accounting for the purpose of deriving income which indicates the efficient management operations. The strength of the APMM Group is consistently increased in sales by acquiring two big companies. The three major business segments, Container and shipping, Tanker offshore \& Oil and Gas significantly contributed to the revenue as a whole.

Moreover, major resources are consumed by container and shipping but these provide lower return, whereas Oil and Gas generated higher return by consuming fewer resources. In addition, Group invested huge amount in fixed assets which could provide future earning potential. It is observed in the financial statements that the earning quality is poor. Group implemented lose credit policies and recognized future revenue which ultimately accelerated overall profitability. Depreciation, amortization and impairment losses are taking huge proportion of revenue which reduces its overall profitability.

The cash flow of the APMM Group is fairly good from the operations. Group invested huge amount of borrowed funds to expand its business operations rather than running its day to day business operations, which are good signs for investors and creditors. But behind the positive cash flow, there are some distortions made by the management in using different tools for reporting depreciation, impairment losses and amortization expenses that were used to understate the profit. It is observed that in 2004 depreciation expenses was lowered by $62 \%$ which reduced the gap between net income and cash flow from operation while in year 2005, management changed their policies regarding depreciation on the basis of their own judgment and not giving any disclosure in the annual report which increased the gap again. Net operating cash flow along with net income shows consistent high cash flow, which clearly indicate that APMM Group is using conservative accounting policies for creditors and investors. So it can said that creditor oriented strategy is used in the preparation of financial statement.

The analysis of the balance sheet between the periods of 2004-2007 shows that more than $70 \%$ of the growth of assets is financed by liabilities. Which indicate that safety margin is decreased in the context of creditors and investors. The results of different ratios are striking. Liquidity and solvency ratios indicate significant improvement of creditworthiness of the company. Assets Utilization ratios show slight improvement because of decreasing accounts receivable by DKK 2 billion in year 2007 and also because of adoption of aggressive credit policies. ROIC ratio shows that different resources are allocated into its operation efficiently. WACC shows that rate of return demanded by the creditors and investors are acceptable. But however, the result of current ratio was not positive.

The overall analysis of APMM Group shows sufficient positive sign; however, there are some factors that will change the shape of the future for the company such as the current financial crisis development and the management's ability to reduce the cost structure.

### 8.1 Suggestions for Future Researcher

In the present circumstance the interest of investors and creditors has increased much because of safety margin. To build the confidence of different users, much needs to be done in order to increase the accountability of an organization. Our work was limited by the research question and hence elaborate observation was not possible. We used secondary data for analyzing the company's financial position. We analyzed the financial statements by using square model, cash flow, ratio analysis and balance sheet, but couldn't do the analysis of the share price of the company in the market. We would like to give an advice to new researchers of APMM Group that they should use primary data (Interview based study) along with secondary data in order to know the effect of management distortion especially on non-current depreciation, amortization and impairment expense items. As far as APMM Group is concerned new researcher should conduct

- The effects of merger and acquisition after two years.
- Analysis of APMM Group with its competitors.
- The significant relationship between research and development cost and share price.
- What are the opportunities of APMM Group in Asian countries in next decade?

We think, our research will provide the basis for appropriate approach that will make further research more useful.

## References:

## Books:

Leopold A. Bernstein, Financial Statement Analysis: theory, application, and interpretation-5 ${ }^{\text {th }}$ ed, R.R. Donnelley \& Sons Company (,=America).

Leonard C. Soffer and Robin J. Soffer (2003), Financial Statement Analysis: A valuation approach, upper saddle river, NU: Prentice Hall.

Stephen H. Penman (2003), Financial Statement Analysis and security valuation, Boston, Mass: McGrawHill/Irwin.
J.M Samuels, R.E. Brayshaw and J.M Craner(1995), Financial Statement analysis in Europe, London: Chapman \& Hall.

Stickney, clyde $\mathrm{P}(1996)$, Financial reporting and statement analysis: a strategic perspective, Forth Worth, Tex: Dryden.

Berman, Karen (2006), Financial Intelligence: a manager's guides to knowing what the numbers really mean, Boston: Harvard Business School.

Yin. Robert K. (2004). The Case Study Anthology. Sage publications, cop. Thousand Oaks, CA
Alexander David, Britton Anne, Jorissen Ann (2007) International Financial Reporting and Analysis. London: Thomson Learning.

Saunders, Mark, Thornhill, Adrian \& Lewis, Philp (2003) Research Method for Business Students. London: Prentice Hall.

Fay, John. (1997). Sources of Secondary Data. In Brannick, Teresa and K.Roche William (eds.), Business research methods, strategies, techniquesand sources (pp. 215, 220). Ireland: Oak Tree Press.

Ibert, Jerome, Baumard, Philippe, Donada, Carole, and Xuereb, Jean-Marc.(2001). Data collection and managing the data source. In Thietart,Raymond-Alain, et al. (eds.), Doing management research, acomprehensive guide (p.172). London: SAGE Publications

Isobel D, Robin L. (1999), International marketing strategy.

## Thesis:

Larsson, Hiba \& Falkemark, Christian (2007), B.M.W, A company analysis (Master thesis), Graduate Business School, Gothenburg University, Sweden.

Consolata Jepkemei Kandie and Aloysius Nnaji(2005), Corporate accounting and resources dependency theory: study on the impact of financial restructuring, shareholder activism and the associate corporate response in the oil industry (Master thesis), Graduate Business School, Gothenburg University, Sweden.

Ruchi Dube (2006), Roles of financial experts and information technology in financial fraud deterrence (Master thesis), Graduate Business School, Gothenburg University, Sweden.

Do, Linh Thuy \& Intal, Tiina (2003), Financial Statement Fraud (Master Thesis), Graduate Business School, Gothenburg University, Sweden.

Khwaja Arafat Abdullah, Muhammad Shabbir \& Shah Syed Abdul Haleem (2008), Accounting Project on A.P Moller-Maresk, Graduate Business School, Gothenburg University, Sweden.

## Internet

http://shareholders.maersk.com/uk/FinancialReports/2007/AnnualReport/InteractiveReport2007.htm
http://about.maersk.com/en/Pages/AboutHomeNew.aspx
http://www.iasplus.com/dttpubs/pocket2008.pdf
http://news.morningstar.com/classroom2/course.asp?docld=3072\&page=2\&CN=COM
http://news.morningstar.com/classroom2/course.asp?docld=3072\&page=3\&CN=COM
http://www.investopedia.com/terms/c/cash-asset-ratio.asp
http://www.investopedia.com/terms/w/workingcapital.asp
http://www.investopedia.com/terms/w/wacc.asp
http://www.solutionmatrix.com/return-on-investment.html
http://www.valuebasedmanagement.net/methods wacc.html

## Appendix No. 1

Income Statement \& Balance Sheet for Square Model
Amount in DKK million

## CALCULATION OF REVENUE

| Description | $\mathbf{2 0 0 4}$ | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 6}$ | $\mathbf{2 0 0 7}$ |
| :--- | ---: | ---: | ---: | :---: |
| Revenue | 159,544 | $\mathbf{2 0 8 , 7 0 2}$ | 260,134 | 278,872 |
| Other operating income | 1,194 | 1,204 | 1,896 | 1,588 |
| Gain on sales of ships, rigs etc. | 1,482 | 1,676 | 4,227 | 6,062 |
| Associated companies-Share of profit after tax | 361 | 3,037 | 2,881 | 3,084 |
| Financial Income | 2,842 | 1,732 | 2,952 | 2,309 |
| Value adjustment of financial assets | 5,013 |  |  |  |
| Less/Add: Profit/Loss for the year, discontinued operation | 2,026 | 404 | $\mathbf{1 3 1}$ | 533 |
| Net Revenue | $\mathbf{1 7 2 , 4 6 2}$ | $\mathbf{2 1 6 , 7 5 5}$ | $\mathbf{2 7 2 , 2 2 1}$ | $\mathbf{2 9 1 , 3 8 2}$ |
| Net revenue in billion | $\mathbf{1 7 2 . 4 6}$ | $\mathbf{2 1 6 . 7 6}$ | $\mathbf{2 7 2 . 2 2}$ | $\mathbf{2 9 1 . 3 8}$ |

## CALCULATION OF EXPENSES \& PROFIT

| External costs | 100,103 | 135,898 | 179,120 | 183,886 |
| :--- | :---: | :---: | :---: | :---: |
| Other operating cost | - | - | 731 | 1,404 |
| Staff costs | 20,068 | 24,037 | 30,987 | 30,328 |
| Depreciation, amortization and impairment losses | 12,758 | 17,755 | 19,357 | 26,213 |
| Integration cost on acquisition | - | 1,783 | 734 | - |
| Financial expenses | 2,097 | 3,853 | 5,171 | 6,356 |
| Income tax expense | 9,180 | 13,223 | 19,935 | 24,537 |
| Total Expenses | $\mathbf{1 4 4 , 2 0 6}$ | $\mathbf{1 9 6 , 5 4 9}$ | $\mathbf{2 5 6 , 0 3 5}$ | $\mathbf{2 7 2 , 7 2 4}$ |
| Profit for the year | $\mathbf{2 8 , 2 5 6}$ | $\mathbf{2 0 , 2 0 6}$ | $\mathbf{1 6 , 1 8 6}$ | $\mathbf{1 8 , 6 5 8}$ |
| Profit for the year in billion | $\mathbf{2 . 8 3}$ | $\mathbf{2 . 0 2}$ | $\mathbf{1 . 6 2}$ |  |

Balance Sheet for Square Model

| Description | 2004 | 2005 | 2006 | 2007 |
| :---: | :---: | :---: | :---: | :---: |
| Current Assets | 69.423 | 81.518 | 92.663 | 94.015 |
| Fixed Assets | 112.250 | 203.328 | 221.032 | 233.504 |
| Total Assets | 181.673 | 284.846 | 313.695 | 327.519 |
| Total Assets in billion | 182 | 285 | 314 | 328 |
| Liabilities |  |  |  |  |
| Total non-current liabilities | 33.999 | 100.183 | 114.672 | 109.370 |
| Total current liabilities | 44.968 | 60.580 | 62.312 | 71.434 |
| Total Liabilities | 78.967 | 160.763 | 176.984 | 180.804 |
| Total liabilities in billion | 79 | 161 | 177 | 181 |
| Total Equity | 102.706 | 124.083 | 136.711 | 146.715 |
| Total Equity \& Liabilities | 181.673 | 284.846 | 313.695 | 327.519 |
| Total Equity \& Liabilities in billion | 182 | 285 | 314 | 328 |

## Appendix No. 2

Information for short term liabilities Ratios
Amount in Million

| Sr.No. | Unit | Measure | Formula |  |
| :---: | :---: | :---: | :---: | :---: |
| 1 | Ratio | Current Ratio | Current Assets |  |
|  |  |  | Current Liabilities |  |
| 2 | Ratio | Acid Test Ratio | Current Assets - Inventories |  |
|  |  |  | Current Liabilities |  |
| 3 | Times | Accounts Receivable turnover | Net Sales |  |
|  |  |  | Average Accounts Receivable |  |
| 4 | Times | Inventory Turnover | Cost of good sold |  |
|  |  |  | Average Inventory |  |
| 5 | Days | Day's sales in receivable | Accounts Receivable |  |
|  |  |  | Sales / 360 |  |
| 6 | Days | Day's sales in inventory | Inventory |  |
|  |  |  | Cost of good sold / 360 |  |
| 7 | Percent | Cash to Current Assets | Cash \& Cash Balance x | 100 |
|  |  |  | Current Assets |  |
| 8 | Percent | Cash to Current Liabilities | Cash \& Cash Balance x | 100 |
|  |  |  | Current Liabilities |  |
| 9 |  | Working Capital | Current Assets - Current Liabilities |  |
| 10 | Percent | Cash provided by operation to average current liabilities | Cash from operations |  |
|  |  |  | Opening + Closing current liabilities/2 |  |


|  | 2003 | 2004 | 2005 | 2006 | 2007 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Current Assets |  | 69423 | 81518 | 92663 | 94015 |
| Current Liabilities | 38985 | 44968 | 60580 | 62312 | 71434 |
| Inventories |  | 4126 | 6152 | 8260 | 9709 |
| Net Sales |  | 159544 | 208702 | 260134 | 278872 |
| Cost of Goods Sold |  |  |  |  |  |
| External costs |  | 100,103 | 135,898 | 179,120 | 183,886 |
| Other operating expenses |  | 0 | 0 | 731 | 1,404 |
| Staff costs |  | 20,068 | 24,037 | 30,987 | 30,328 |
| Total |  | 120,171 | 159,935 | 210,838 | 215,618 |
| Cash from operations |  | 29,207 | 33,329 | 23,697 | 39,817 |
| Trade Receivable |  | 16,613 | 23,551 | 26,205 | 23,677 |
| Accounts Receivable |  |  |  |  |  |
| Receivable | 1279 | 1,500 | 1,673 | 4,315 | 3,601 |
| Trade Receivable | 15607 | 16,613 | 23,551 | 26,205 | 23,677 |
| Tax receivable |  | 515 | 334 | 1,497 | 566 |
| Others receivable | 6555 | 7,252 | 8,498 | 6,903 | 9,115 |
| Total | 23441 | 25880 | 34056 | 38920 | 36959 |
| Cash and bank balances |  | 16,678 | 20,200 | 22,888 | 22,926 |

Source: Annual Reports

Appendix No. 3
Information for Capital Structure and Solvency Ratios (Amount in DKK Million)


## Appendix No. 4

## A.P Moller- Maersk Group

Four years analysis (2004 to 2007)
Return on Invested capital (ROIC)
Amount in DKK Million

| Description | Years |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | :---: |
|  |  | 2004 | 2005 | $\mathbf{2 0 0 6}$ |  |
| Net Income | 28256 | 20206 | 16186 | 18658 |  |
| Dividend | 1978 | 2418 | 2418 | 2857 |  |
| Total Capital | 181673 | 285548 | 313695 | 327519 |  |
| Return on Invested Capital | $14.46 \%$ | $6.23 \%$ | $4.39 \%$ | $4.82 \%$ |  |

Source: Annual Report A.P Moller - Maresk Group 2005, 2006 \& 2007

Formula

$$
\text { ROIC }=\frac{\text { Net Income }- \text { Dividends }}{\text { Total Capital }}
$$

Appendix No. 5
A.P Moller- Maersk Group

Four years analysis (2004 to 2007)
Return on total assets
Amount in Dkk Million

| Amount in Dkk Million |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Description | Years |  |  |  |  |
|  | 2003 | 2004 | 2005 | 2006 | 2007 |
| Net Income |  | 28256 | 20206 | 16186 | 18658 |
| Interest Expenses |  | 1947 | 2818 | 4802 | 5977 |
| Minority interest |  | 107 | 116 | 629 | 829 |
| Total Assets | 173034 | 181673 | 284846 | 313695 | 327519 |
| Average total assets |  | 177353.5 | 233260 | 299271 | 320607 |
| Return on Invested Capital |  | 16.81\% | 9.62\% | 6.82\% | 7.48\% |

Source: Annual Report A.P Moller - Maresk Group 2005, 2006 \& 2007

| Fnrmıla |
| :--- |
| Return on total Assets |
| (RTA) |
|  |

Calculation of Return on total assets (RTA)

| Year 2007 | Year 2006 | Year 2005 | Year 2004 |
| :---: | :---: | :---: | :---: |
| 18658+5977(1-0.25)+829 | 16186+4802(1-0.25)+629 | 20206+2818(1-0.25)+116 | 28256+1947(1-0.25)+107 |
| 320607 | 299271 | 233260 | 177353.5 |
| $18658+4482.75+829$ | 16186+3601.50+629 | 20206+2113.5+116 | $28256+1460.25+107$ |
| 320607 | 299271 | 233260 | 177353.5 |
| 7.48\% | 6.82\% | 9.62\% | 16.81\% |

## APPENDIX NO.6 .Trend Analysis of Balance Sheet (For the period of 2004-07)

| Balance Sheet (Amount in Million (DKK) |  |  |  |  | 2004-05 |  | 2005-06 |  | 2006-07 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Assets | 2,004 | 2,005 | 2,006 | 2,007 | Absolute Change | Change | Absolute Change | Change | Absolute Change | Change |
| Intangible assets | 1,095 | 27,799 | 21,883 | 17,376 | 26,704 | 2438.72\% | -5,916 | -21.28\% | -4,507 | -20.60\% |
| Ships, rigs, containers, etc. | 53,283 | 96,229 | 95,286 | 102,778 | 42,946 | 80.60\% | -943 | -0.98\% | 7,492 | 7.86\% |
| Production facilities and equipment, etc | 12,928 | 22,378 | 25,905 | 27,167 | 9,450 | 73.10\% | 3,527 | 15.76\% | 1,262 | 4.87\% |
| Land and buildings | 6,652 | 9,058 | 16,612 | 19,401 | 2,406 | 36.17\% | 7,554 | 83.40\% | 2,789 | 16.79\% |
| Construction work in progress and payment on account for property, plant and equipment | 10,530 | 21,793 | 29,505 | 34,616 | 11,263 | 106.96\% | 7,712 | 35.39\% | 5,111 | 17.32\% |
| Total property, plant and equipment | 83,393 | 149,458 | 167,308 | 183,962 | 66,065 | 79.22\% | 17,850 | 11.94\% | 16,654 | 9.95\% |
| Investment in associated companies | 5,446 | 21,779 | 21,783 | 23,544 | 16,333 | 299.91\% | 4 | 0.02\% | 1,761 | 8.08\% |
| Other investments | 19,889 | 1,310 | 1,683 | 891 | -18,579 | -93.41\% | 373 | 28.47\% | -792 | -47.06\% |
| Receivables | 1,500 | 1,673 | 4,315 | 3,601 | 173 | 11.53\% | 2,642 | 157.92\% | -714 | -16.55\% |
| Total investments | 26,835 | 24,762 | 27,781 | 28,036 | -2,073 | -7.72\% | 3,019 | 12.19\% | 255 | 0.92\% |
| Deferred tax asset | 927 | 1,309 | 4,060 | 4,130 | 382 | 41.21\% | 2,751 | 210.16\% | 70 | 1.72\% |
| Total non-current assets | 112,250 | 203,328 | 221,032 | 233,504 | 91,078 | 81.14\% | 17,704 | 8.71\% | 12,472 | 5.64\% |
| Inventories | 4,126 | 6,152 | 8,260 | 9,709 | 2,026 | 49.10\% | 2,108 | 34.27\% | 1,449 | 17.54\% |
| Trade receivables | 16,613 | 23,551 | 26205 | 23,677 | 6,938 | 41.76\% | 2,654 | 11.27\% | -2,528 | -9.65\% |
| Tax receivables | 515 | 334 | 1,497 | 566 | -181 | -35.15\% | 1,163 | 348.20\% | -931 | -62.19\% |
| Value of hedges |  |  | 1,853 | 3,387 | 0 | 0.00\% | 1,853 | 0.00\% | 1,534 | 82.78\% |
| Deffered Tax assets | 0 | 0 | 0 | 0 | 0 | 0.00\% | 0 | 0.00\% | 0 | 0.00\% |
| Other receivables | 7,252 | 8,498 | 6,903 | 9,115 | 1,246 | 17.18\% | -1,595 | -18.77\% | 2,212 | 32.04\% |
| Prepayments | 1,509 | 2,589 | 2,407 | 2,591 | 1,080 | 71.57\% | -182 | -7.03\% | 184 | 7.64\% |
| Receivables | 25,889 | 34,972 | 38,865 | 39,336 | 9,083 | 35.08\% | 3,893 | 11.13\% | 471 | 1.21\% |
| Securities | 22630 | 14906 | 20,950 | 12,686 | -7,724 | -34.13\% | 6,044 | 40.55\% | -8,264 | -39.45\% |
| Cash and bank balances | 16778 | 20200 | 22,888 | 22,926 | 3,422 | 20.40\% | 2,688 | 13.31\% | 38 | 0.17\% |
| Assets held for sale | 0 | 5288 | 1,700 | 9,358 | 5,288 | 0.00\% | -3,588 | -67.85\% | 7,658 | 450.47\% |
| Total current assets | 69,423 | 81,518 | 92,663 | 94,015 | 12,095 | 17.42\% | 11,145 | 13.67\% | 1,352 | 1.46\% |
| TOTAL ASSETS | 181,673 | 284,846 | 313,695 | 327,519 | 103,173 | 56.79\% | 28,849 | 10.13\% | 13,824 | 4.41\% |


|  |  |  |  |  | 2004-05 |  | 2005-06 |  | 2006-07 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Equity and liabilities | 2,004 | 2,005 | 2,006 | 2,007 | Absolute Change | Change | Absolute Change | Change | Absolute Change | Change |
| Share capital | 4,396 | 4,396 | 4,396 | 4,396 | 0 | 0.00\% | 0 | 0.00\% | 0 | 0.00\% |
| Retained earnings | 95,842 | 116,592 | 122,230 | 130,945 | 20,750 | 21.65\% | 5,638 | 4.84\% | 8,715 | 7.13\% |
| Dividend for distribution | 1,978 | 2,418 | 2,418 | 2,857 | 440 | 22.24\% | 0 | 0.00\% | 439 | 18.16\% |
| Equity attributable to A.P. Møller - Mærsk A/S | 102,216 | 123,406 | 129,044 | 138,198 | 21,190 | 20.73\% | 5,638 | 4.57\% | 9,154 | 7.09\% |
| Minority interests | 490 | 677 | 7,667 | 8,517 | 187 | 38.16\% | 6,990 | 1032.50\% | 850 | 11.09\% |
| Total equity | 102,706 | 124,083 | 136,711 | 146,715 | 21,377 | 20.81\% | 12,628 | 10.18\% | 10,004 | 7.32\% |
| Pensions and similar obligations | 927 | 3,508 | 3,230 | 1,848 | 2,581 | 278.43\% | -278 | -7.92\% | -1,382 | -42.79\% |
| Provisions | 4,416 | 8,360 | 9,214 | 11,547 | 3,944 | 89.31\% | 854 | 10.22\% | 2,333 | 25.32\% |
| Deferred tax liability | 1,162 | 10,945 | 12,583 | 8,747 | 9,783 | 841.91\% | 1,638 | 14.97\% | -3,836 | -30.49\% |
| Bank and other credit institutions, etc. | 27,494 | 77,370 | 89,645 | 87,228 | 49,876 | 181.41\% | 12,275 | 15.87\% | -2,417 | -2.70\% |
| Total non-current liabilities | 33,999 | 100,183 | 114,672 | 109,370 | 66,184 | 194.66\% | 14,489 | 14.46\% | -5,302 | -4.62\% |
| Employee benefits | 70 | 46 |  |  | -24 | -34.29\% | -46 | -100.00\% | 0 | 0.00\% |
| Provisions | 654 | 1,953 | 1,294 | 662 | 1,299 | 198.62\% | -659 | -33.74\% | -632 | -48.84\% |
| other provision |  |  |  |  | 0 | 0.00\% | 0 | 0.00\% | 0 | 0.00\% |
| Short Term portion of long term debts |  |  |  |  | 0 | 0.00\% | 0 | 0.00\% | 0 | 0.00\% |
| Bank and other credit institutions, etc. | 14,130 | 14,201 | 14,885 | 17,302 | 71 | 0.50\% | 684 | 4.82\% | 2,417 | 16.24\% |
| Trade payables | 19,935 | 27,161 | 28,674 | 31,531 | 7,226 | 36.25\% | 1,513 | 5.57\% | 2,857 | 9.96\% |
| Corporation tax, etc. | 1,744 | 2,993 | 3,966 | 4,233 | 1,249 | 71.62\% | 973 | $32.51 \%$ | 267 | 6.73\% |
| Value of hedges, etc. |  |  | 1,614 | 4,358 | 0 | 0.00\% | 1,614 | 0.00\% | 2,744 | 170.01\% |
| Other payables | 6,869 | 9,363 | 8,214 | 7,343 | 2,494 | $36.31 \%$ | -1,149 | -12.27\% | -871 | -10.60\% |
| Deferred income | 1,566 | 2,188 | 1,462 | 1,229 | 622 | 39.72\% | -726 | -33.18\% | -233 | -15.94\% |
| Prepayments received |  |  | 674 | 2,130 | 0 | 0.00\% | 674 | 0.00\% | 1,456 | 216.02\% |
| Liabilities associated with assets held for sale |  | 2,675 | 1,529 | 2,646 | 2,675 | 0.00\% | -1,146 | -42.84\% | 1,117 | 73.05\% |
| Total current liabilities | 44,968 | 60,580 | 62,312 | 71,434 | 15,612 | $34.72 \%$ | 1,732 | 2.86\% | 9,122 | 14.64\% |
| Total liabilities | 78,967 | 160,763 | 176,984 | 180,804 | 81,796 | 103.58\% | 16,221 | 10.09\% | 3,820 | 2.16\% |
| TOTAL EQUITY AND LIABILITIES | 181,673 | 284,846 | 313,695 | 327,519 | 103,173 | $56.79 \%$ | 28,849 | 10.13\% | 13,824 | 4.41\% |

## Appendix No.7.Trend Analysis of Cash Flow (For the year period of

## 2004-07)

| Amount in Million (DKK) |  |  |  |  | 2004-05 |  | 2005-06 |  | 2006-07 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2004 | 2005 | 2006 | 2007 | Absolute Change | Change | Absolute Change | Change | Absolute Change | Change |
| Profit before financial items | 29,652 | 35,146 | 38,209 | 47,775 | 5,494 | 18.53\% | 3,063 | 8.72\% | 9,566 | 25.04\% |
| Depreciation, amortisation and impairment losses | 12,758 | 17,755 | 19,357 | 26,213 | 4,997 | 39.17\% | 1,602 | 9.02\% | 6,856 | 35.42\% |
| Other non-cash items | 301 | 2411 | 3,180 | 909 | 2,110 | 701.00\% | 769 | 31.90\% | -2,271 | -71.42\% |
| Paid integration costs |  |  | -1,742 | -163 | 0 | 0.00\% | -1,742 | 0.00\% | 1,579 | -90.64\% |
| Gains on sale of ships, rigs | -1482 | -1676 | -4,227 | -6,062 | -194 | 13.09\% | -2,551 | 152.21\% | -1,835 | 43.41\% |
| Associated companies - share of profit after tax | -361 | -3037 | -2,881 | -3,084 | -2,676 | 741.27\% | 156 | -5.14\% | -203 | 7.05\% |
| Change in working capital | -313 | -3806 | -5,331 | 2,570 | -3,493 | 1115.97\% | -1,525 | 40.07\% | 7,901 | -148.21\% |
| Financial income, received | 1955 | 3734 | 2,691 | 3,947 | 1,779 | 91.00\% | -1,043 | -27.93\% | 1,256 | 46.67\% |
| Financial expenses, paid | -2626 | -3086 | -5,023 | -6,082 | -460 | 17.52\% | -1,937 | 62.77\% | -1,059 | 21.08\% |
| Taxes paid | -10541 | -14362 | 20,536 | 26,206 | -3,821 | 36.25\% | -6,174 | 42.99\% | -5,670 | 27.61\% |
| Discontinued operations | -136 | 250 |  |  | 386 | -283.82\% | -250 | -100.00\% | 0 | 0.00\% |
| Cash flow from operating activities | 29,207 | 33,329 | 23,697 | 39,817 | 4,122 | 14.11\% | -9,632 | -28.90\% | 16,120 | 68.03\% |
| Purchase of non-current assets | -22451 | -29361 | 40,938 | 55,379 | -6,910 | 30.78\% | -11,577 | 39.43\% | -14,441 | 35.28\% |
| Disposal of non-current assets | 3243 | 3327 | 8,837 | 9,185 | 84 | 2.59\% | 5,510 | 165.61\% | 348 | 3.94\% |
| Acquisition of subsidiaries and activities | -404 | -33131 | -209 | -3,467 | -32,727 | 8100.74\% | 32,922 | -99.37\% | -3,258 | 1558.85\% |
| Disposal of subsidiaries and activities | 3379 | -51 | 819 | 391 | -3,430 | -101.51\% | 870 | -1705.88\% | -428 | -52.26\% |
| Acquisition/disposal of investments in associated companies, etc., net | -1095 | -2583 | -3,446 | -267 | -1,488 | 135.89\% | -863 | 33.41\% | 3,179 | -92.25\% |
| Other investments and receivables, net | -1007 | -113 | 616 | 534 | 894 | -88.78\% | 729 | -645.13\% | -82 | -13.31\% |
| Discontinued operations | -53 | 152 |  |  | 205 | -386.79\% | -152 | -100.00\% | 0 | 0.00\% |
| Cash flow used for capital expenditure | -18388 | -61760 | 34,321 | 49,003 | -43,372 | 235.87\% | 27,439 | -44.43\% | -14,682 | 42.78\% |
| Purchase of marketable securities | -23108 | -19206 | 18,767 | -9,997 | 3,902 | -16.89\% | 439 | -2.29\% | 8,770 | -46.73\% |
| Sale of marketable securities | 15037 | 27347 | 19,862 | 14,527 | 12,310 | 81.86\% | -7,485 | -27.37\% | -5,335 | -26.86\% |
| Cash flow used for investing activities | 26,459 | 53,619 | 33,226 | 44,473 | $-27,160$ | 102.65\% | 20,393 | -38.03\% | -11,247 | 33.85\% |
| Repayment of loans | -10306 | -10849 | -8,851 | 17,358 | -543 | 5.27\% | 1,998 | -18.42\% | -8,507 | 96.11\% |
| Proceeds from loans, etc. | 11993 | 35486 | 23,180 | 26,184 | 23,493 | 195.89\% | -12,306 | -34.68\% | 3,004 | 12.96\% |


|  |  |  |  |  | 2004-05 |  | 2005-06 |  | 2006-07 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2004 | 2005 | 2006 | 2007 | Absolute Change | Change | Absolute Change | Change | Absolute Change | Change |
| Dividends distributed | -1235 | -1852 | -2,263 | -2,263 | -617 | 49.96\% | -411 | 22.19\% | 0 | 0.00\% |
| Dividends distributed to minority interests | -162 | -81 | -166 | -210 | 81 | -50.00\% | -85 | 104.94\% | -44 | 26.51\% |
| cash merger acquisitions |  |  |  |  | 0 | 0.00\% | 0 | 0.00\% | 0 | 0.00\% |
| Others |  |  |  |  | 0 | 0.00\% | 0 | 0.00\% | 0 | 0.00\% |
| Capital increases from minority interests, etc. | 38 | 67 | 538 | 464 | 29 | 76.32\% | 471 | 702.99\% | -74 | -13.75\% |
| Discontinued operations | -623 | -521 |  |  | 102 | -16.37\% | 521 | -100.00\% | 0 | 0.00\% |
| Cash flow from financing activities | -295 | 22250 | 12,438 | 6,817 | 22,545 | -7642.37\% | -9,812 | -44.10\% | -5,621 | -45.19\% |
| Net cash flow from continuing operations | 2453 | 1960 | 2,909 | 2,161 | -493 | -20.10\% | 949 | 48.42\% | -748 | -25.71\% |
| Discontinued operations |  |  |  |  | 0 | 0.00\% | 0 | 0.00\% | 0 | 0.00\% |
| Cash flow from operating activities |  |  | 523 | -109 | 0 | 0.00\% | 523 | 0.00\% | -632 | -120.84\% |
| Cash flow used for investing activities |  |  | 1,430 | 120 | 0 | 0.00\% | 1,430 | 0.00\% | -1,310 | -91.61\% |
| Cash flow from financing activities |  |  | -1,111 | -354 | 0 | 0.00\% | -1,111 | 0.00\% | 757 | -68.14\% |
| Net cash flow for the year from discontinued operations |  |  | 842 | -343 | 0 | 0.00\% | 842 | 0.00\% | -1,185 | -140.74\% |
| Net cash flow for the year |  |  | 3,751 | 1,818 | 0 | 0.00\% | 3,751 | 0.00\% | -1,933 | -51.53\% |
| Cash and bank balance at $1^{\text {st }}$ January | 15548 | 16778 | 19,750 | 23,031 | 1,230 | 7.91\% | 2,972 | 17.71\% | 3,281 | 16.61\% |
| Effect of companies changed to subsidiaries, etc. |  |  | 1,193 |  | 0 | 0.00\% | 1,193 | 0.00\% | -1,193 | -100.00\% |
| Exchange rate adjustment of cash and bank balances, etc. | -1223 | 1948 | -1,663 | -1,737 | 3,171 | -259.28\% | -3,611 | -185.37\% | -74 | 4.45\% |
| Cash and bank balances at 31 December | 16778 | 20686 | 23,031 | 23,112 | 3,908 | 23.29\% | 2,345 | 11.34\% | 81 | 0.35\% |
| Of which classified as assets held for sale | 0 | -486 | -143 | -186 | -486 | 0.00\% | 343 | -70.58\% | -43 | 30.07\% |
| Cash and bank balances at 31 December | 16,778 | 20,200 | 22,888 | 22,926 | 3,422 | 20.40\% | 2,688 | 13.31\% | 38 | 0.17\% |

## Appendix No. 8

A.P Moller - Maersk Group

Sources of Cash
From Year 2004 to 2007

A.P Moller - Maersk Group

Uses of Cash
From Year 2004 to 2007
Amount in DKK Million


## Appendix No. 9

## A.P. Moller - Maersk Group

## Comparative Income Statement

For the period of 2004-07
Amount in Billion(DKK)

|  |  |  |  |  | 2003-04 |  | 2004-05 |  | 2005-06 |  | 2006-07 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2,004 | 2,005 | 2,006 | 2,007 | Absolute Change | Change | Absolute Change | Change | Absolute Change | Change | Absolute Change | Change |
| Revenue | 159.544 | 208.702 | 260.134 | 278.872 | 2.432 | 2\% | 49.158 | $31 \%$ | 51.432 | 25\% | 18.738 | 7\% |
| Other operating income | 1.194 | 1.204 | 1.896 | 1.588 | - 1.088 | -48\% | 0.010 | 1\% | 0.692 | 57\% | - 0.308 | -16\% |
| External costs | 100.103 | 135.898 | 179.120 | 183.886 | 3.122 | 3\% | 35.795 | 36\% | 43.222 | $32 \%$ | 4.766 | $3 \%$ |
| Other operating expenses | - | - | 1.000 | 1.000 | - | 0\% | - | 0\% | 1.000 | 0\% | - | 0\% |
| Staff costs | 20.068 | 24.037 | 30.987 | 30.328 | - 2.835 | -12\% | 3.969 | 20\% | 6.950 | 29\% | - 0.659 | -2\% |
| Profit before depreciation, amortisation and | 40.567 | 49.971 | 50.923 | 65.246 | 1.057 | 3\% | 9.404 | 23\% | 0.952 | $2 \%$ | 14.323 | 28\% |
| impairments losses | - | - | - | - | - | 0\% | - | 0\% | - | 0\% | - | 0\% |
| Depreciation, amortisation and impairment losses | 12.758 | 17.755 | 19.357 | 26.213 | - 5.006 | -28\% | 4.997 | 39\% | 1.602 | 9\% | 6.856 | 35\% |
| Gains on sale of ships, rigs, etc. | 1.482 | 1.676 | 4.227 | 6.062 | 1.482 | 0\% | 0.194 | 13\% | 2.551 | 152\% | 1.835 | 43\% |
| Associated companies - share of profit after tax |  | 3.037 | 2.881 | 3.084 | - | 0\% | - | - | 0.156 | -5\% | 0.203 | 7\% |
| Profit before integration costs | 29.652 | 36.929 | 38.943 | 47.775 | 29.652 | 0\% | 7.277 | 25\% | 2.014 | 5\% | 8.832 | 23\% |
| Integration costs on acquisitions | - | 1.783 | 0.734 | - | - | 0\% | 1.783 | 0\% | - 1.049 | -59\% | - 0.734 | -100\% |
| Profit before financial items | 30.000 | 35.000 | 38.000 | 48.000 | 8.254 | 38\% | 5.000 | 17\% | 3.000 | 9\% | 10.000 | 26\% |
| Associated companies - share of result before tax | - | - | - | - | - 0.568 | -100\% | - | 0\% | - | 0\% | - | 0\% |
| Financial income | 2.842 | 1.732 | 2.952 | 2.309 | 0.657 | 30\% | - 1.110 | -39\% | 1.220 | 70\% | - 0.643 | -22\% |
| Financial expenses | 2.097 | 3.853 | 5.171 | 6.356 | - 0.447 | -18\% | 1.756 | 84\% | 1.318 | 34\% | 1.185 | 23\% |
| Result before special items | - | - | - | - | - 21.955 | -100\% | - | 0\% | - | 0\% | - | 0\% |
| value adjustment of financial assets | 5.013 | - | - | - | 2.495 | 99\% | 5.013 | -100\% | - | 0\% | - | 0\% |
| Exchange rate adjustment of loans, etc | - | - | - | - | - 2.149 | -100\% | - | 0\% | - | 0\% | - | 0\% |
| Profit before tax | 35.410 | 33.025 | 35.990 | 43.728 | 8.788 | 33\% | - 2.385 | -7\% | 2.965 | 9\% | 7.738 | 22\% |
| Tax on profit for the year | 9.180 | 13.223 | 19.935 | 24.537 | - 0.050 | -1\% | 4.043 | 44\% | 6.712 | 51\% | 4.602 | 23\% |
| Profit for the year - continuing operations | 26.230 | 19.802 | 16.055 | 19.191 | 8.838 | 51\% | - 6.428 | -25\% | - 3.747 | -19\% | 3.136 | 20\% |
| Profit/loss for the year - discontinued operations | 2.026 | 0.404 | 0.131 | - 0.533 | 2.026 | 0\% | - 1.622 | -80\% | - 0.273 | -68\% | - 0.664 | -507\% |
| Profit for the year | 28.256 | 20.206 | 16.186 | 18.658 | 10.864 | 62\% | - 8.050 | -28\% | - 4.020 | 0\% | 2.472 | 15\% |
| Minority interests | 0.107 | 0.116 | 0.629 | 0.829 | 0.226 | -190\% | 0.009 | 8\% | 0.513 | 442\% | 0.200 | 32\% |
| A.P. Møller - Mærsk A/S's share of profit for the year | 28.149 | 20.090 | 15.557 | 17.829 | 10.876 | 63\% | - 8.059 | -29\% | - 4.533 | -23\% | 2.272 | 15\% |
| Earnings per share, DKK | 6.841 | 4.88 | 3.781 | 4.333 | 6.841 | 0\% | - 1.958 | -29\% | - 1.102 | -23\% | 0.552 | 15\% |


[^0]:    ${ }^{1}$ Master thesis 2005:27(Corporate accounting \& resources dependence theory by Consolata Jepkemei Kandie and Aloysius Nnaji.

[^1]:    ${ }^{2}$ Yin. Robert K. (2004). The Case Study Anthology. Sage publications, cop. Thousand Oaks, CA
    ${ }^{3}$ Ibert, Baumard, Donada and Xuereb, 2001, p. 172.
    ${ }^{4}$ Ibert, Baumard, Donada and Xuereb, 2001, p. 172.
    ${ }^{5}$ Fay, 1997, p. 215.

[^2]:    ${ }^{6}$ Saunders et al. (2003), p 206

[^3]:    ${ }^{7}$ Financial statement analysis: A valuation approach by Leonard C. Soffer \& Robin J.Soffer.
    ${ }^{8}$ Polesie(1991) \& Haipei Huang \& Thuan Vu Thi, Master Thesis no 2002:63: The Determinants of Capital Structure in Shipping Companies, pp. 1-2 \& Hiba Larsson \& Christian Falkemark, Master Thesis: BMW, a company analysis, pp. 11-13.

[^4]:    ${ }^{9}$ ibid

[^5]:    ${ }^{10}$ ibid

[^6]:    ${ }^{14}$ ibid
    ${ }^{15}$ ibid

[^7]:    ${ }^{16}$ Financial Statement Analysis and Reporting, Bernstein, pg 18
    ${ }^{17}$ Financial Statement Analysis and Reporting, Bernstein, pg 18
    ${ }^{18}$ Financial Statement Analysis and Reporting, Bernstein, pg 19

[^8]:    ${ }^{19}$ Financial Statement Analysis and Reporting, Bernstein, pg 21

[^9]:    ${ }^{20}$ Financial Statement Analysis and Reporting, Bernstein, pg 22-25

[^10]:    ${ }^{21}$ Financial Statement Analysis and Reporting, Bernstein, pg 32

[^11]:    ${ }^{22}$ Financial Statement Analysis and Reporting, Bernstein, pg 37

[^12]:    ${ }^{23}$ Financial Statement Analysis and Reporting, Bernstein, pg 41

[^13]:    ${ }_{25}^{24}$ Financial Statement Analysis and Reporting, Bernstein, pg 42
    ${ }^{25}$ Financial Statement Analysis and Reporting, Bernstein, pg 42

[^14]:    ${ }^{26}$ http://about.maersk.com/en/Pages/AboutHomeNew.aspx
    ${ }^{27}$ Annual Report A.P Moller - Maersk Group 2003, Page 33

[^15]:    ${ }^{28}$ Annual Report A.O Moller - Maersk Group 2007, page 54
    ${ }^{29}$ Annual Report A.P Moller - Maersk 2007, Page 55

[^16]:    ${ }^{30}$ http://www.iasplus.com/dttpubs/pocket2008.pdf

[^17]:    ${ }^{31}$ Annual Report 2005, A.P Moller Maersk Group, Page 7

[^18]:    ${ }^{32}$ Annual Report 2005, A. P Moller Maersk, Page 5
    ${ }^{33}$ Annual Report 2006, Maersk Group, Page 7

[^19]:    ${ }^{34} \mathrm{http}: / /$ news.morningstar.com/classroom2/course.asp?docId=3072\&page=2\&CN=COM
    ${ }^{35}$ http://news.morningstar.com/classroom2/course.asp?docId=3072\&page=3\&CN=COM

[^20]:    ${ }_{37}^{36}$ Annual Report A.P Moller - Maersk Group 2006, page 5
    ${ }^{37}$ Annual Report A.P Moller - Maersk Group 2006, page 22

[^21]:    ${ }^{38}$ Annual Report A.P Moller - Maersk 2005, page 5
    ${ }^{39}$ Annual Report A.P Moller - Maersk 2006, page

[^22]:    ${ }^{40}$ Financial Intelligence (A manager' guide to knowing what the numbers really mean) written by Karen Berman and Joe Knight. Page 102
    ${ }^{41}$ Financial Statement Analysis and security valuation, ${ }^{2 n d}$ Edition, by Stephen H. Penman.

[^23]:    ${ }^{42}$ Annual Report A.P Moller - Maersk 2007, Page 2

[^24]:    ${ }^{43}$ Financial Statement Analysis by Leopold A. Bernstein, $5{ }^{\text {th }}$ Edition, page 537

[^25]:    ${ }^{44}$ Financial Statement Analysis by Leopold A. Bernstein, $5{ }^{\text {th }}$ Edition, page 562

[^26]:    ${ }^{45} \mathrm{http}: / / w w w . i n v e s t o p e d i a . c o m / t e r m s / c / c a s h-a s s e t-r a t i o . a s p ~$

[^27]:    ${ }^{46}$ Financial Statement Analysis by Leopold A. Bernstein, $5{ }^{\text {th }}$ Edition, page 538
    ${ }^{47}$ http://www.investopedia.com/terms/w/workingcapital.asp
    ${ }^{48}$ Financial Statement Analysis by Leopold A. Bernstein, $5^{\text {th }}$ Edition, page 566
    ${ }^{49}$ C.Casey and N. Bartzcak, "Cash Flow—It's Not the Bottom Line, "Harvard Business Review, July-August 1984, pp. 61-66.

[^28]:    ${ }^{50}$ Financial Statement Analysis by Leopold A. Bernstein, $5{ }^{\text {th }}$ Edition, page 597

[^29]:    ${ }^{51}$ Financial Statement Analysis by Leopold A. Bernstein, $5{ }^{\text {th }}$ Edition, page 829

[^30]:    ${ }^{52}$ http://www.solutionmatrix.com/return-on-investment.html.

[^31]:    ${ }^{53}$ Annual Report of A.P Moller - Maersk Group 2007, page 57
    ${ }^{54}$ Financial Statement Analysis by Leopold A. Bernstein, $5{ }^{\text {th }}$ Edition, page 819

[^32]:    ${ }^{55} \mathrm{http}: / / \mathrm{www}$. investopedia.com/terms/w/wacc.asp
    ${ }^{56}$ http://www.valuebasedmanagement.net/methods_wacc.html

[^33]:    ${ }^{57}$ Financial Statement Analysis and security valuation, $2{ }^{\text {nd }}$ edition, by Stephen H. Penman. Page 322

[^34]:    ${ }^{58}$ Financial Statement Analysis and security valuation, $2^{\text {nd }}$ edition, by Stephen H. Penman. Page 327
    ${ }^{59}$ Annual Report A.P Moller - Maersk Group 2005, Page 31

[^35]:    ${ }^{60}$ Annual Report A.P Moller - Maersk Group 2005, Page 31

