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DEPARTMENT OF ACCOUNTING AND FINANCE

COLLEGE OF BUSINESS AND ECONOMICS

FINANCIAL PERFORMANCE ANALYSIS OF ETHIOPIAN RED CROSS SOCIETY ESSENTIAL DRUGS PROGRAMME
(A CASE STUDY OF TIGRAY REGIONAL BRANCH)

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE MASTER OF SCIENCE DEGREE

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DECLARATION

I, **CHAINA ALEMAYEHU**, here by declare that the thesis entitled "Financial Performance Analysis of Ethiopian Red Cross Society Essential Drugs Programme": A case study of Tigray Regional Branch, in submitted by me to the award of the Degree of **Msc**. in **Finance and Investment** of Mekelle University at Mekelle, is original work and it hasn't been presented for the award of any other Degree, Diploma, Fellowship or other similar titles of any other university or institution.

Place……Mekelle…………………………   Signature…………………

Date………………………………………   Name ………………………

CERTIFICATION

This is to certify that this thesis entitled "**Financial Performance Analysis of Ethiopian Red Cross Society Essential Drugs Programme**" A case study of **Tigray Regional Branch**. Submitted in partial fulfillment of the requirements for the award of the degree of **Msc**. in **Finance and Investment** to the College of Business and Economics, Mekelle University, through the Department of Accounting and Finance, done by Mr. Chaina Alemayehu, Id. No.**PR0017/01** is an authentic work carried out by him under my guidance. The matter embodied in this thesis has not been submitted earlier for award of any degree or diploma to the best of my knowledge and belief.

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ABSTRACT

This paper entitled "Financial Performance Analysis" circulates around the key issues of financial performance of Ethiopian Red Cross Society Essential Drugs Programme a case study of Tigray Regional Branch. It applies financial analysis and assesses the financial performance of the company. The objective is to evaluate the financial health of the company. The data used in the study was obtained from the financial statements of the company and through unstructured interview with the finance people. Financial statements were thoroughly investigated to analyze the financial performance trend. The objective is achieved through implementation of financial analyzing tools and techniques, mainly financial ratio analysis.

The study finding indicates that the company's liquidity ratios were very good in all branches of the years under this study. The profitability ratio and asset management of the organization for all branches was not at good position. The management of the company was no performing efficiently and effectively. The assets of the company were financed by the capital but not using debts.

Acknowledgement

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Acronyms

ACP	Average Collection Period
EBIT	Earnings before Interests and Taxes
NWC	Net Working Capital
ROA	Return on Assets
ROCE	Return on Capital Employed
ROE	Return on Equity
DRC	Danish Red Cross
ERCS	Ethiopian Red Cross Society
ERCS-EDP	Ethiopian Red Cross Society - Essential Drugs Programme
ERCS-NEC	National executive committee of the Ethiopian Red Cross Society.
FIFO	First-in-First-out.

CHAPTER ONE

INTRODUCTION

1.1 Back ground of the organization

The essential drugs programme was established in 1989 G.C by a bilateral agreement signed between the Danish Red Cross (DRC) and the Ethiopian Red Cross Society (ERCS). The aim of the programme was to provide and/or avail essential drugs to the vulnerable segment of the population at an affordable price and thus support the primary health care of the country. Accordingly, the project began by establishing pharmacies and satellites.

In 1997, the two partner societies reached an agreement that makes ERCS-EDP a relatively autonomous entity of the ERCS. Accordingly, the national executive committees of the Ethiopian Red Cross Society (ERCS-NEC) setup a board with the responsibility of overseeing the overall governance of the program and ensure the implementation of its objectives as laid down in the bilateral agreement signed by ERCS and DRC.

The legal framework that establishes and regulates the operation of ERCS-EDP is the bilateral agreement signed between the Danish Red Cross (DRC) and the Ethiopian Red Cross Society (ERCS) in July 1996. The aim of the Program as stated above is to improve the health situation of the people of Ethiopia through the provision of essential drugs at affordable prices. More specifically, the program has the following objectives:

- ➢ To support the National effort in strengthening essential drugs supply
- ➢ Promotion of rational drug use
- ➢ Support to primary health care activities
- ➢ Financial Sustainability

The program began by opening pharmacies and satellites. At present, the Ethiopian Red Cross Society Essential Drugs program is running 25 pharmacies, 7 drug stores and 4 rural drug vendors that are expected to deliver pharmaceutical services for estimated coverage of 4 – 5.5 million beneficiaries.

The Ethiopian Red Cross Society essential drugs programs Tigray branch was established in 1993 G.C. Under the Tigray branch there are three branches namely, Mekelle sub branch,

Adigrat sub branch and Axum sub branch. Mekelle sub branch established in 1993 G.C, where as the Adigrat sub branch established in 1996 G.C and Axum sub branch established in 2005 G.C.

The main objectives of the ERCS Pharmacy Essential Drugs Programme are:

A. To increase the accessibility and availability of low-cost essential drugs to the under-served population.

B. Assist Government health institutions and strengthen their utilization by having sufficient stocks of such essential drugs at all times in the pharmacies.

C. Promotion of public education and awareness of rational usage of drugs.

D. Establish a cost recovery system in order for stocks sold to be replenished.

Major Accounting Policies and Practices of ERCS Pharmacies

Accounting is the maintenance of financial records for substantiated business transactions, which are analyzed, classified and summarized by journal vouchers and accumulated in the ledger accounts for further analysis and uses.

General Policies

The accounting policies and practices of Ethiopian Red Cross Society Pharmacies are generally based on Generally Accepted Accounting Standards and Practices.

The Accounting system of ERCS Pharmacies

Decentralized Accounting System

The Ethiopian Red Cross Society Drugs (ERCS-EDP) operates a number of relatively autonomous incomes – generating pharmacies. These pharmacies are authorized to collect their income from sale of drugs, incur operating expenses, keep their own accounting records and prepare financial reports periodically.

Therefore, considering the degree of autonomy that each ERCS – pharmacy is exercising, each ERCS-pharmacy is treated as a separate accounting entity and accordingly their accounting system is organized on a decentralized basis.

Therefore, each ERCS- pharmacy is authorized to carry out the accounting functions stated hereunder:

➢ Collect Revenues

- With the approval of the Branch Secretary and the Pharmacist/Druggist, make Expenditures
- Keep complete sets of Books of Accounts
- Prepare and send financial statements periodically (annually, quarterly and/or monthly as appropriate) such as profit and loss statement, Balance Sheet, Trial Balance, and other necessary supporting summaries and schedules to the Essential Drugs Programs Head Office.
- Close its accounts every year

Recording Technique

The bookkeeping process of ERCS – pharmacies is based on the double-entry system of recording transactions in that each transaction, no matter how simple or complex it might be analyzed in terms of its dual effect, viz. Debit and Credit.

Fiscal Year

The financial year for ERCS-Pharmacies runs from 1st January to 31st December of the same year.

Basis of Accounting

ERCS-Pharmacies generally follow the accrual basis of accounting. Hence, all revenues are reported in the period in which they are earned and expenses in the period in which they are in the period in which they are incurred, consumed or expired.

Cost Principle

Cost is the basis for all accounting entries. Accordingly, acquisition of goods and services should be recoded at the actual amount paid for, except for transactions that involve donations, which must be recorded on the basis of their current market values or invoice values.

Objectivity Principle

Accounting entries or records should be based on verifiable evidences, i.e. authorized vouchers and source documents.

Valuation of Debtors

ERCS-Pharmacies sale to their drugs mostly on a cash basis. Therefore, setting a provision for doubtful debts is not required. However, when a specific receivable becomes worthless, it should be written-off on a Direct Write-off method.

Stock

Acquisition and issuance of stocks of drugs should be recorded in a general ledger inventory account and stock cards on a perpetual system basis. The receipt and issuance of these stocks should be costed on the basis of First-in-First-out (FIFO).

Depreciation

Fixed Assets used in ERCS-Pharmacies are depreciated in accordance with the depreciation policy the Ethiopian Red Cross Society. Therefore, depreciation on Fixed Assets used in ERCS – Pharmacy operations should be recorded on the basis of the following policy:

Buildings, improvements, major renewal and reconstruction	5%
Furniture and Fittings	10%
Motor Vehicle	20%
Office and other Equipments	10%
Specialist Medical Equipment	10%
Laboratory Equipment	10%
Computers	$33^{1/3}\%$
Radios and Antennae	10%

The depreciation base should be the original cost of the fixed asset category adjusted by additions and deductions made to the category during the reporting period.

Consistency Principle

The accounting policies and procedures stated in this manual should be applied consistently from period to period to provide comparability among the financial statements of different accounting periods. However, a change in accounting principle may be made only when the proposed change is supported by a valid reason and sanctioned by the department head and the Director of ERCS – EDP.

Adequate Disclosure

All pre or post-Balance sheet date events that are significant enough to influence the decisions of financial statement users should be disclosed either within the body of the financial statement or in the form of supplementary notes to the financial statements.

Custody of Documents

All printed and pre-numbered documents such as Cash Receipt vouchers, Cheque payment vouchers, petty cash payment vouchers, Goods received notes, store issue and Turn-in notes, Journal vouchers and other documents should be entered in the unused vouchers register immediately upon receipt of the documents from essential Drugs Program/or bank and handled in a safe and locked place as follows:

- Pharmacy Accountant should handle all finance related forms such as the cash sales Ticket, Cheque payment voucher, petty cash payment voucher and journal vouchers etc.
- Storekeeper should handle all documents related to stores such as the goods receiving note, and issue and Turn-in note, etc.

1.2 Background of the study

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

A basic limitation of the traditional financial statements comprising the balance sheet and the profit and loss account is that they do not give all the information related to the financial operations of a firm. Nevertheless, they provide some extremely useful information to the extent that the balance sheet mirrors the financial position on a particular date in terms of the structure of assets, liabilities and owners' equity, and so on and the profit and loss account shows the

results of operations during a certain period of time in terms of the revenues obtained and the cost incurred during the year. Thus, the financial statements provide a summarized view of the financial position and operations of a firm. Therefore, much can be learnt about a firm from a careful examination of its financial statements as invaluable performance reports. The analysis of financial statements is, thus, an important aid to financial analysis (My khan, 2007).

Financial performance analysis consists of different broad areas: fund flow analysis, cost-volume-profit analysis, ratio analysis, and common size statement analysis, productivity of capital and leverage analysis. However, this study analyzed the financial performance of ERCS – EDP using common size statements and ratio analyses.

1.3 Statement of the Problem

Financial performance analysis was intended to enable outsiders to make decisions and to regulate profit distribution. These include business enterprise, its owners, its creditors and all other parties who have an economic stake in its financial strength and profitability.

Financial statements that were relevant, complete, objective, timely and understandable were preferred by users to be credible. A good working knowledge of financial analysis was desirable simply because such analysis and numbers derived from this analysis were the primary means of communicating financial information both within and outside the firm.

There were different ways of using financial analysis information both within and outside and among different type of users. This diversity reflected the fact that financial analysis information plays an important role in many types of decisions.

As to the Ethiopian Red Cross Society Essential Drug Programme, the company does not have any concrete information related to the performance of the company's liquidity, long-term solvency; operating efficiency and profitability despite the available of financial statements.

Every human being has right to live and not only to live but live with good health. Medicines are important commodities for the life of human beings in order to survive from illness (sickness). However, medicines are supplied by government through state-owned, hospitals and available

are in open market even but affordability of those medicines at market rate is probably the major issue of concern. In this regard, it was to note worthy that ERCS- EDP was providing those medicines to beneficiaries at reasonably lower price. In order to give continuous and stable service to the society they have to be financially viable and sustainable. Hence, this became the basis of the study and the researcher tried to analyze the financial performance of ERCS-EDP. The present research was intended to study the financial statement of ERCS- EDP, (which was selling the drugs at an affordable price to member of the society) in order to see their sustainability.

1.4   Research Questions

1. What is the company's position to meet its current obligation?
2. Is the management generating adequate profits on the company's assets?
3. Is the company utilizing its assets effectively?
4. How is the company financing its assets?

1.5   Objectives of the Study

1.5.1 General Objective

The general objective of the study was to assess the financial health of Ethiopian Red Cross Society Essential Drug Program Tigray Branches.

1.5.2 Specific Objectives: The specific objectives of the study were as follows:

1. To evaluate the liquidity Position of the company.
2. To assess whether the management is generating adequate profits on the company's assets.
3. To evaluate how effectively the company is utilizing its assets.
4. To find out how the assets of company are financed.
5. To provide possible recommendations based on the conclusion.

1.6   Significance of the study

The study was significant in that of may help to understand the theoretical aspect of the financial statement and the actual performance of the organization. Besides, the study may help the decision makers to decide on the financial statement of the organization by making comparisons of the theoretical aspect with the actual practice of the organization. Finally, this research can be used as a reference for further study.

1.7   Methodology of the Study

1.7.1 Study Design

This study was a case study on ERCS Tigray branch with respect to EDP. It was both qualitative and quantitative type of research. The researcher considered the recent past five years annual financial statements of the company starting from 2005 to 2009 for the purpose of study. These five consecutive years help to have a clear picture of the company's financial performance from year to year.

To achieve the objectives set in the study required thorough explanations of all operations has been done according to methodology of the study. The methodology of financial analysis that was used here has been especially adapted for needs of the study (in a way of selection of methods that will "work" with particular financial statements).The study employed different techniques devoted to their specific needs and aims.

The analysis included studying of common size statements analysis, financial ratio analysis and Analysis of possibility of a bankruptcy of the company.

1.7.2 Data Collection Methods and Tools

The researcher used both the secondary and primary data for gathering information. The data for this study was predominantly secondary data. The secondary data was collected from the annual financial statements of the company for the year 2005 up to 2009 G.C. In order to support the secondary data, additional information was obtained from primary data gathered through conducting unstructured interview and focus group discussion.

1.7.3 Sample Methods

In order to have a better understanding on the study the researcher used Judgmental sampling method to select the interviewees. The interview was conducted with selected officials of the company for the information which was not confined in the financial statements. This judgmental sampling was taken based on who provided the best information for the study.

1.7.4 Data analysis

In order to analysis the collected data the researcher used the ratio analysis and common size statements analysis to find out the financial performance trend over the recent five years (2005-2009 G.C).

The analysis consisted of data of five years, and comparison was among each branch for each year. The analyzed information was presented by using graphs and tables that are appropriate to explain the facts.

1.8   Scope of the study

The study was confined in analyzing the financial performance of ERCS EDP for the 2005 – 2009 G.C in Tigray regional state. It covered the essential Drug shop of the Ethiopian Red Cross Society Tigray branch such as Mekelle sub branch, Adigrat sub branch & Axum sub branch in terms of geographical coverage and financial evaluation in terms of research investigation.

1.9   Limitation of the study

Limitations were time and monetary constraints in order to go to the branches, therefore, the researcher were used the reports established by the sub-branches to the head office.

1.10 Organization of the paper

This paper was sub-divided in to four chapters. Each chapter of the paper was illustrates different aspects of the research work. Chapter one deals with the introduction of the project paper. It covered background of the organization, background of the study, Objective of the study, Statement of the problem, Significant of the study, Research methodology, Scopes and limitation of the paper. Chapter two on the other hand deals review of the literature- both theoretically and empirically. Chapter three deals with the data presentation and analysis part while chapter four presents summary of conclusions and recommendations.

CHAPTER TWO

LITERATURE REVIEW

2.1 Review of Theoretical Literature

Financial analysis depends largely on the quality of data it uses. The presence of uniform system of data collection about company's property status, financial results and business activities is required as obligatory criteria for quality of the analysis. Such system does exist and financial analysts use widely public accounting statements.

One of the primary goals of financial accounting includes providing of complete and trustworthy information about economic activity, necessary both for internal (executives, shareholders, partners and proprietors of organization), and the external users (analysts, investors, creditors and other users of financial statements). The accounting has been developed to accumulate, maintain, and provide financial information regarding internal business transactions. (Jagels, et al., 2003) Thus, accounting statements can be named a permanent asset in communication between company and all involved parties because they provide credible channel of the information about financial performance. That is why quality requirements for financial statements are high.

2.1.1 Financial Statements Analysis

Analysis of financial statements is the process of evaluating the relationship between component parts of financial statements to obtain a better understanding of the firm's position and performance.

The focus of financial analysis is on key figures in the financial statements and the significant relationship that exists between them. The first task of the financial analyst is to select the information relevant to the decision under consideration from the total information contained in the financial statements .The second step is to arrange the information in a way to highlight significant relationships. The final step is interpretation and drawing of inferences and

conclusions. In brief, financial analysis is the process of selection, relation and evaluation (Khan, M Y, 2007).

Financial performance analysis is, therefore, the process of identifying the financial strengths and weakness of a firm by properly establishing relationship between the items of the balance sheet and the profit and loss account. Financial performance analysis involves careful selection of data from financial statements for the purpose of forecasting the financial health of the firm. This is accomplished by examining trends in key financial data, comparing financial data across firms, and analyzing key financial ratios. It also involves the assessment of firm's past, present and anticipated future financial condition.

2.1.2 Types of Financial Analysis

Financial analysis can be both internal and external.

Internal financial analysis:

Internal financial analysis (also known as managerial financial analysis) is necessary for meeting the own requirements of a company. It is aimed on determination of liquidity or results estimation of a last fiscal period. Usual output of internal analysis is a set of administrative decisions - combination of various measures intended for optimization of certain issue within the business. The internal analysis is typically performed inside a company by its financial department and constantly revised because of changes in macro- and microeconomic environment. Due to the nature of data sources using for the internal analysis (internal accounting books and reports), its results are always precise.

External financial analysis:

An external analyst does not have access to internal financial data and, hence, has to carry out so-called external financial analysis, when initiative does not belong to a company's management, but to a third party. The main goal and objectives of external analysis may differ from its managerial analogue. The defining a creditworthiness and investment possibilities by an investor, may serve purposes of an external financial analysis. In similar way, financial liquidity

or solvency can be of interest for a bank. To make a better decision, potential business partners wish to know maximum available information about a firm and amount of risk involved in respect of investments profitability and possible gains and losses. External financial analysis is based on published accounting statements and aimed on prediction of a possible bankruptcy, assessment of business performance and financial sustainability of a company.

Irrespective of type of the analysis, its methods are very similar in their determination and interpretation of various financial ratios, studying of changes over time and structural changes of articles. Correct application of financial analysis allows answering many questions concerning financial health of a business. (Pandey,2006)

2.1.3 Basics of financial statements

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

- A balance sheet
- An income statement
- Cash flow statement and
- Statement of shareholders' equity

Balance Sheet (also known as the Statement of Financial Position): shows what a company owns and what it owes at the certain moment of time. It provides details about company's assets, liabilities and shareholders' equity. This provides the value of firm's assets (what the firm owns), liabilities (what the firm owes to outsiders) and equity (what the inside shareholders or owners own) on a particular date. The value of assets will equal to the value of liabilities plus owner's equity (or A = L +E). Items in the balance sheet are listed based on conservative principle i.e. if estimating or in doubt of the actual value, the value of assets is not be overstated and the value of liabilities is not be understated.

Assets are things that a company owns that have value. Assets include physical property and things that nonmaterial but nevertheless exist and have value, such as trademarks and patents. In

addition, cash itself is an asset. In a balance sheet, assets are generally listed based on how quickly they can be converted (current and non current assets) into cash.

Current assets include cash, marketable securities, accounts receivable, inventory, prepaid expenses that are more liquid than the long-term/fixed assets which include equipment, land and assets that are intangible and yet valuable example, goodwill, patents, deferred charges.

Liabilities could include current liabilities (ex. bank advances, income tax payable, accounts payable, accrued expenses), deferred income taxes (difference between the tax reported on the income statement and tax reported on the tax return), Minority interest in subsidiary companies (representing outside ownership in subsidiary companies), long-term debt (ex. Bonds, capital leases).

Shareholder's Equity includes Share capital (par or stated value of shares received at the time of original issue), Paid-in-capital (when shares are sold for more than the par or stated value), retained earnings/deficit (undistributed earnings). Equity is also expressed as "residual interest" (E=A-L). If E is negative, the firm is technically bankrupt.

Net worth or Book Value refers to what is available to common shareholders and is given by:

Total Assets – Total Liabilities – Preferred Stock = Net Worth

Net worth divided by number of common shares outstanding will give us the book value per share. The market value is equal to the price per share times the number of shares outstanding (also referred to as the market capitalization of a company). We can estimate the intrinsic value of stock by using discounted cash flow models.

Limitations of Balance Sheet:

The balance sheet records the values of assets and liabilities in terms of their original cost. This is especially misleading for fixed assets (that could have significantly changed in value). It is also difficult to value intangible assets. Current assets are less troublesome; partly because of their short-term nature (inventories and marketable securities are listed at lower of their cost or market values). Liabilities are also not biased (since they are generally contractual, and market

values will be equal to their book values; For example, if the company has taken a loan, the Birr amount of loan obligation does not change with time). Also, an analyst should pay close attention to "off-balance sheet items".

Income Statement (also known as the statement of earnings or profit & loss statement or the statement of operations): The income statement provides information on the various revenue and expense items during a certain period. Thus, this statement shows the total income generated in a certain period. It is a report that shows how much revenue a company earned over specific period. An income statement also shows the costs and expenses associated with earning of that revenue. The end line of the statement usually shows the company's net earnings or losses.

Items in the income statement are based on accrual principle i.e. transactions (such as sales) are recognized when they occur and not when actual cash is received. Furthermore, the expenses are matched to when the revenue is recognized and not when the actual payment is made. The above principle makes it obvious that there could be wide discrepancy between a firm's revenue and actual cash flow.

Limitations of Income Statement:

In finance, the focus is on valuation that requires knowledge of expected cash flows rather than historical earnings. Note net income does not equal the actual cash flow. This is because the income statement reports revenue/expenses when they are earned/ accrued and not when actual cash is received. Further, several items are subjectively determined (ex. depreciation). Also, depreciation is based on historical cost of the asset.

Thus, during periods of inflation, depreciation expense will be understated as it is based on historical cost while the revenues reflect the current market price. Such non-synchronization leads to inflated earnings. Furthermore, a traditional income statement only records transactions and not opportunities.

Cash flow statement: reports a company's inflows and outflows of cash. This statement shows whether the company generated cash or not. Generally, cash flow statements are divided into three main parts. Each part reviews the cash flow from one of three types of activities:

1) Operating activities; 2) investing activities; and 3) financing activities. It shows how the company obtained cash and for what purpose they were used.

Statement of shareholders' equity: shows changes in the interests of the company's shareholders over time. It is the value that would be left if a company sold all of its assets and paid off all of its liabilities. In other words, it is a net worth of a company. It belongs to the shareholders, or to the owners of the company. (Homewood, 1987)

2.1.4 Common-size statements

Common size statement is a statement in which all items are expressed as a percentage of a base figure, useful for purposes of analyzing trends and changing relationship among financial statement items. These percentage figures bring out clearly the relative significance of each group of item in the aggregative position of the company.

Common size ratios are used to compare financial statements of different size companies or of the same company over different periods. By expressing the items in proportion to some size-related measure, standardized financial statements can be created, revealing trends and providing insight into how the different companies compare.

A common size analysis scales the financials into a percentage of sales for the income statement and a percentage of total assets on the balance sheet. The scaling effect highlights the most important expense areas and can reveal problem areas that may not have been noticed before. It also provides a way to compare year-to-year variations in financials.

The common size ratio for each line on the financial statement is calculated as follows:

Common size ratio = item of interest
                    Reference item

The ratios often are expressed as percentages of the reference amount. Common size statements usually are prepared for the income statement and balance sheet, expressing information as follows:

- ❖ Income statement items- expressed as a percentage of total revenue
- ❖ Balance sheet items – expressed as a percentage of total assets.

Hettihewa, Samantala. (1997)

2.1.5 Ratio analysis:

Ratio analysis involves the methods of calculating and interpreting financial ratios to assess the firm's performance and status. It is a widely used tool of financial analysis. It can be used to compare the risk and return relationships of firms of different sizes. Ratio analysis is defined as the systematic use of ratio to interpret the financial statements so that the strengths and weaknesses of a firm as well as its historical performance and current financial condition can be determined.

Ratio analysis is not merely the application of a formula to financial data to calculate a given ratio. More important is the interpretation of the ratio value. To answer such questions as is it too high or too low? Is it good or bad? , a meaningful standard or basis for comparison is needed (Gitman, 2004).

Ratio analysis studies levels and changes of relative measurements of financial performance. This method is the most commonly used in the world practices of financial analysis because of its relative simplicity and availability of data sources. When using the ratio analysis one can tell how profitable a business is: to show if it has enough capital to meet its obligations and even suggest whether its shareholders satisfied by an increasing value of the company or not.

Ratio analysis can also help to confirm whether a company is doing better this year than it was last year; and it can tell how a firm is performing comparing with similar firms in industry.

The proper application of a ratio depends on correct economical and financial meaning of that ratio. To be useful, both the meaning and limitations of a chosen ratio have to be understood. Meaningful ratio analysis must conform to the following elements:

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

The information contained in the main financial statements has major significance to various interested parties who regularly need to have relative measures of the company's business efficiency. Financial analysis conducted for the need of third parties is external by its nature and often called "analysis of financial statements". The analysis of financial statements is based on the use of ratios. The only data sources to ratio analysis are the firm's financial statements. (Gitman, 2004)

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

- ❖ Coverage ratios: A coverage ratio is a measure of a firm's ability to "cover" certain financial obligations. The denominator is an obligation and the numerator is the amount of the funds available to satisfy that obligation;
- ❖ Return ratios: A return ratio indicates a net benefit gained from particular investment of resources or any other similar activity. The numerator is the net result of an operation and the denominator is the resources spent for that operation;
- ❖ Turnover ratios: A turnover ratio is a measure of how much a firm gets out of its assets. It compares the gross benefit from an activity with the resources employed in it;
- ❖ Component percentage: A component percentage is the ratio of one amount in a financial statement, such as sales, to the total of amounts in that financial statement.(Fabozzi, et al., 2003)

To make correct conclusions on ratio analysis, two types of ratio comparisons should be made: cross-sectional approach and trend-analyzing method.

Cross-Sectional Analysis: involves comparison of different firms' financial ratios over the same period in time. It usually concerns two or more companies in similar lines of business. The typical business is interested in how well it has performed in relation to other firms in its industry.

One of the most popular forms of cross-sectional analysis compares a company's ratios to industry averages published by statistical agencies.

Trend Analysis (or Time-Series Analysis): In trend analysis, ratios are compared over periods, typically years. Year-to-year comparisons can highlight trends and point up possible need for action. Trend analysis works best with three to five years of ratios.

The theory behind time-series analysis is that the company must be evaluated in relation to its past performance ,developing trends must be isolated ,and appropriate action must be taken to direct the firm towards immediate long term goals .Time-series analysis is often helpful in checking the reasonableness of a firm's projected financial statements.

Certainly, the most informative approach to ratio analysis combines both cross-sectional and trend analyses. A combined view makes it possible to assess the trend in the behavior of the ratio in relation to the trend for the industry.

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

- Liquidity
- Profitability
- Efficiency or turnover
- Financial leverage

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

2.1.6 Liquidity Ratios:

The liquidity of a firm is measured by its ability to satisfy its short-term obligations as they come due (Gitman, 2004). Liquidity also stands for ability of a company to convert its assets into cash quickly and with lower costs as possible. Such liquid assets are necessary to cover any "financial emergencies" and play as a buffer in company's operations. Liquidity ratios reflect the short-term financial strength/solvency of a company.

The liquidity of a business firm is usually of particular interest to its short-term creditors since the liquidity of the firm measures its ability to pay those creditors.

Several financial ratios measure the liquidity of the firm. Those ratios are the current ratio, the quick ratio or acid test, cash ratio and net working capital.

Current Ratio: The current ratio, one of the most commonly cited financial ratios, measures the company's ability to meet its short-term obligations by using only current assets. The current assets consist of cash and assets that can easily be turned into cash and the current liabilities consist of payments that a company expects to make in the near future. Thus, the ratio of the current assets to the current liabilities measures the margin of liquidity. It is known as the current ratio. The current ratio is probably the best known and most often used of the liquidity ratios.

Current Ratio =   Current Assets
                          Current Liabilities

A satisfactory current ratio would enable a company to meet its obligations even when the value of the current assets declines. The higher the current ratio, the larger is the amount of birr available per birr of current liability, the more is the company's ability to meet current obligations and the greater is the safety of funds of short-term creditors. Thus, current ratio, in a way, is a measure of margin of safety to the creditors.

It is important to note that a very high ratio of current assets to current liabilities may be indicative of slack management practices, as it might signal excessive inventories for the current requirements due to poor inventory management, excessive cash due to poor cash management and poor credit management in terms of overextended accounts receivable. At the same time, the company may not be making full use of its current borrowing capacity. Therefore, a company should have a reasonable current ratio (Khan, M Y, 2007).

The result of very high current ratio is to have an improved liquidity and greater safety of funds of short-term creditors thereby reduced risk to creditors but a sacrifice of profitability because current assets are less profitable than fixed assets. A very lower current ratio indicates (may be caused by) opposite from the higher current ratio stated above.

Although there is no hard and fast rule, conventionally, a current ratio of 2: 1 (current assets twice current liabilities) is considered satisfactory. The logic underlying the conventional rule is

that even with a drop-out of 50 percent (half) in the value of current assets, a company can meet its obligations, i.e., a 50 percent margin of safety is assumed to be sufficient to ward off the worst of situations.

Quick (Acid-Test) Ratio: Measures liquidity by considering only quick assets. Differences in structure of assets may require calculating the quick ratio. Some assets are more liquid than others are. For example, inventories have relatively low liquidity since selling of them may require lowering prices and a business has to find a buyer if it wants to liquidate the inventory, or turn it into cash. Finding a buyer is not always easy. On the other side, cash, short-term securities, and bills that customers have not yet paid, are more liquid.

The quick ratio provides, in a sense, a check on the liquidity of a company as shown by its current ratio. The quick ratio is a more rigorous and penetrating test of the liquidity position of a company.

Quick Ratio = $\dfrac{\text{Cash + Securities + (accounts and notes receivable)}}{\text{Current Liabilities}}$

Generally, a quick ratio of 1:1 is considered satisfactory as a company can easily meet all current claims. (Khan, M Y, 2007)

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

Cash Ratio = $\dfrac{\text{Cash + (short- term securities)}}{\text{Current Liabilities}}$

Operating Cash Flow Ratio: is focused on the ability of a company's operations to generate the resources needed to repay its current liabilities. Current maturities of long-term debts along with notes payable comprise of current debt obligations.

Operating Cash Flow Ratio = $\dfrac{\text{Cash flow from operations}}{\text{Current Liabilities}}$

These measures of liquidity are just indicators of a problem financial situation and aimed to attract attention of an involved party. They are no substitutes for a detailed financial plan ensuring that a company can pay its bills. Liquidity ratios also have a negative characteristic. Because of short-term assets and liabilities are easily changed, measures of liquidity can rapidly become outdated. (Khan, M Y, 2007).

2.1.7 Profitability ratios:

Profitability is a relative term. It is hard to say what percentage of profits represents a profitable firm, as profits depend on such factors as the position of the company and its products on the competitive life cycle (for example profits will be lower in the initial years when investment is high), on competitive conditions in the industry, and on borrowing costs.

For decision-making, it is concerned only with the present value of expected future profits. Past or current profits are important only as they help to identify likely future profits, by identifying historical and forecasted trends of profits and sales. Profitability ratios measure operating efficiency and ability to ensure adequate return to shareholders.

In other words, they are used to evaluate the overall management effectiveness and efficiency in generating profit on sales, total assets and owners' equity.

The profitability ratio helps to know whether profits are generally on the rise; whether sales stable or rising; how the profits compare to the industry average; whether the market share of the company is rising, stable or falling; and other things that indicate the likely future profitability of the firm.

Profitability ratios help to measure how well a company is managing its expenses. These measurements allow evaluating the company's profits with respect to a given level of sales, a certain level of assets, or the owner's investment. It is related to the effectiveness with which management has employed both the total assets and the net assets as recorded on the balance sheet. These ratios are usually created by relating net profit, defined in a variety of ways, to the resources utilized in generating that profit. (Khan, M Y, 2007).

Gross Profit Margin: This ratio measures the percentage of sales money remaining after the firm has paid for its goods. The higher the gross profit margin, the better and the lower the relative cost of sales.

A high ratio of gross profit margin is a sign of good management as it implies that the cost of production of the company is relatively low. It may also be indicative of a higher sales price without a corresponding increase in the cost of goods sold. It also likely that cost of sales might have declined without a corresponding decline in sales price. Nevertheless, a very high and rising gross margin may also be the result of unsatisfactory basis of valuation of stock, that is, overvaluation of closing stock and /or undervaluation of opening stock (Khan, M Y, 2007).

A relatively low gross margin is definitely a danger signal, warranting a careful and detailed analysis of the factors responsible for it.

A company should have a reasonable gross margin to ensure adequate coverage for operating expenses of the company and sufficient return to the owners of the business, which is reflected in the net profit margin.

 The gross profit margin ratio is calculated as follows:

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

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

Operating Profit Margin: It measures the percentage of each monetary unit from sales remaining after all costs and expenses other than interest, taxes, and preferred stock dividends are deducted (Gitman, 2004).It represents the pure profit earned on each sales Birr. Operating profits are pure because they ignore any financial and government charges and measures only the profit earned on operations. If a company's margin is increasing, it is earning more per 1 monetary unit of sales. A high operating profit margin is preferred.

Operating profit Margin = $\dfrac{\text{Operating profits}}{\text{Sales}}$

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

The net profit margin is indicative of management's ability to operate the business with sufficient success not only to recover from revenues of the period, the cost of merchandise or services, the expenses of operating the business (including depreciation) and the cost of the borrowed funds, but also to leave a margin of reasonable compensation to the owners for providing their capital at risk. The ratio of net profit (after interest and taxes) to sales essentially expresses the cost price effectiveness of the operation (Khan, M Y, 2007).

Return on Assets (ROA): Measures the overall effectiveness of management in generating profits with its available assets. A company is efficient if it can generate an adequate return while using the minimum amount of assets. Efficiently working company does not require too much cash for everyday operations and can shift its excesses to investments in new spheres.

Consequently, the ROA is considered a critical ratio for determining a company's overall level of operating efficiency and it shows how much profit was earned on the total capital used to make that profit. Here, the profitability ratio is measured in terms of the relationship between net profits and assets. The ROA may also be called profit-to-asset ratio. The formula is as follows: (Khan, M Y, 2007).

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

Return on Equity (ROE): It is another very important measure of a company's profitability that reveals how much profit it generates with the money shareholders have invested. The return on equity measures the return earned on the owners' capital (both preferred and common stockholders') as an indicator of management's performance.

High return on equity indicates effective management performance but low return on equity indicates ineffective management performance. (Khan, M Y, 2007).

Return on Equity = $\underline{\text{Net income}}$

                               Shareholders Equity

Return on Capital Employed (ROCE): This ratio indicates the efficiency and profitability of a company's capital investments. This ratio provides sufficient insight into how efficiently the long-term funds of owners and lenders are being used. The higher the ratio, the more efficient is the use of capital employed. (Khan, M Y, 2007).

Return on Capital employed = $\underline{\text{EBIT}}$

                               Total assets – Current Liabilities

2.1.8 Activity (Utilization) Ratios:

This is another set of ratios to estimate how efficiently a company uses its working capital. Efficiency (or activity) ratios measure the speed with which various accounts are converted into sales or cash – inflows or outflows. Asset management ratios usually compare the level of sales or cost of goods sold with the level of investment in various asset accounts. They measure how efficiently or intensively a company uses its assets to generate sales. Are assets efficiently managed? How well a company's funds are utilized?

During the analysis of financial statements, it is important to look beyond measures of liquidity and to evaluate the efficiency of specific current accounts. The greater is the rate of turnover or conversion, the more efficient is the utilization of assets, other things being equal. Asset management, also called asset utilization, ratios tells companies how well their assets are working to generate sales. Cash is always the best asset but it doesn't generate any revenue. The other assets on the balance do generate sales revenue.

Those other assets are accounts receivable, inventory, and fixed assets. You may also have some other assets on your balance sheet but these are the main ones we use to calculate how efficiently your assets are working for you.

Several ratios are available from the real analysis practices for measuring the performance of the most important elements of a company. Activity ratios include inventory turnover ratio, accounts receivable turnover ratio, average collection period, fixed assets turnover ratio, total assets turnover ratio and accounts payable turnover ratio. (Khan, M Y, 2007).

Inventory Turnover: The inventory turnover ratio is one of the most important financial ratios. Of all the asset management ratios, it gives the company some of the most important financial information.

This ratio indicates the number of times inventory is replaced during the year. It shows the relationship between the cost of goods sold and the inventory level. Inventory turnover ratio measures how quickly inventory is sold. It is a test of efficient inventory management (Khan, M Y, 2007).

Generally, a high inventory ratio means that the company is efficiently managing and selling its inventory. The faster the inventory sells the fewer funds the company has tied up. Companies have to be careful if they have a high inventory turnover as they are subject to stock outs.

To judge whether the ratio of a company is satisfactory or not, it should be compared over a period of time on the basis of trend analysis. It can also be compared with the level of other companies in that line of business as well as with industry average.

It is calculated as follows:

Inventory Turnover =   Cost of goods sold
                                         Average Inventory

In general, a high inventory turnover ratio is better than a low ratio. A high ratio implies good inventory management. Yet, a very high ratio calls for a careful analysis. It may be indicative of underinvestment in, or very low level of inventory. A very low level of inventory has serious implications. It will adversely affect the ability to meet customer demand as it may not cope with its requirements. That is, there is a danger of the company being out of stock and incurring high stock out cost. It is also likely that the company may be following a policy of replenishing its

stock in too many small sizes. Apart from being costly, this policy may retard the production process as sufficient stock of materials maybe available.

Similarly, a very low inventory turnover ratio is dangerous. It signifies excessive inventory or overinvestment in inventory. Carrying excessive inventory involves cost in terms of interest on funds locked up, rental of space, possible deterioration and so on. A low ratio may be the result of inferior quality goods, overvaluation of closing inventory, stock of un saleable/obsolete goods and deliberate excessive purchases in anticipation of future increase in their prices and so on. Thus, a company should have neither too high nor too low inventory turnover (Khan, M Y, 2007).

Average Collection Period (ACP): The ACP, or age of accounts receivable, is useful in evaluating credit and collection policies. This ratio represents the approximate amount of time that it takes a company to receive payments owed, in terms of receivables, from its customers and clients. It shows how quickly receivables or debtors are converted into cash.

In other words, the average collection period of accounts receivable is the average number of days required to convert receivables into cash. In order to calculate average collection period, the number for accounts receivable comes off the company's balance sheet. Sales come off the income statement and are adjusted for credit sales. Sales are then divided by the number of days in a year to come up with average daily credit sales. The final result is a number of days, which is the average collection period.

In order to interpret the average collection period, you have to have comparative data. If you compare the average collection period to past years and it is increasing, that means your accounts receivables aren't as liquid or aren't being converted to cash as quickly. If the average collection period is decreasing, the opposite is true.

You also have to look at the company's credit policy. The average collection period should be compared with the firm's credit policy to see how well the firm is doing. If the average collection period, for example, is 45 days, but the firm's credit policy is to collect its receivables in 30 days, then the management needs to fix the company's collection efforts.

Average Collection Period = $\dfrac{\text{Average Accounts Receivable}}{\text{Average Sales per Day}}$

The shorter the average collection period, the better is the trade credit management and the better is the liquidity of debtors, as short collection period implies prompt payment on the part of debtors. On the other hand, long collection period reflect delayed payments by debtors. In general, short collection period is preferable. It is not; however, very prudent for a company to have either a very short collection period or a very long one. The average collection period is meaningful only in relation to the company's credit terms. (Lawrence D.Schall and Charles W.Haley. (1991)).

Total Assets Turnover: The total assets turnover ratio measures the ability of a company to use its assets to generate sales. This ratio indicates how much Birr in sales the company squeezes out of Birr it has invested in assets. It considers all assets including <u>fixed assets</u>, like plant and equipment, as well as <u>inventory</u> and <u>accounts receivable</u>.

It measures a company's efficiency at using its assets in generating sales or revenue - the higher the total assets turnover ratio, the more efficient is the management and utilization of the assets while low total assets turnover ratios are indicative of underutilization of available resources and presence of idle capacity. The lower the total asset turnover ratio, as compared to historical data for the firm and industry data, the more sluggish the firm's sales (Gitman, 2004). This may indicate a problem with one or more of the asset categories composing total assets - inventory, receivables, or fixed assets. The company should analyze the various asset classes to determine where the problem lies.

It also indicates pricing strategy: companies with low profit margins tend to have high asset turnover, while those with high profit margins have low asset turnover.

Total assets turnover = $\dfrac{\text{Sales}}{\text{Total assets}}$

Fixed Assets turnover: The fixed assets turnover ratio measures the company's effectiveness in generating sales from its investments in plant, property, and equipment. It is especially important

for a manufacturing firm that uses a lot of plant and equipment in its operations to calculate its fixed asset turnover ratio.

Fixed Assets turnover =   Sales
                        Fixed assets

If the fixed asset turnover ratio is low as compared to the industry or past years of data for the firm, it means that sales are low or the investment in plant and equipment is too much. This may not be a serious problem if the company has just made an investment in fixed asset to modernize. Lawrence D.Schall and Charles W.Haley. (1991)

Accounts Payable Turnover: The ratio that shows to potential investors how many times per period a company pays its average payable amount. Lawrence D.Schall and Charles W.Haley. (1991)

Accounts Payable turnover =   Cost of goods sold
                            Average accounts payable

Accounts Receivable Turnover: This ratio represents the number of times the amount of accounts receivable is collected throughout the year. It indicates how many times, on average, accounts receivables are collected during a year.

The accounts receivable turnover ratio works with the average collection period ratio to determine the quality of a firm's receivables and the efficiency of the firm's collection and credit policies.

A high turnover ratio is generally a good thing since it means that customers are paying their bills on time. If the turnover ratio is too high as compared to the industry the company is in, it may mean, however, that the company is too restrictive in its credit and collection policies and not extending credit to enough customers.

A ratio substantially low may suggest that a company has: More liberal credit policy (i.e., longer credit period), poor credit selection, and inadequate collection effort or policy which could lead

to accounts receivable to be high and higher bad debt or uncollectible receivable, more restricted cash discount that could make sales to be too low. As a result of the above factors the company could have poor liquidity and profitability position. The company's funds would be tied up in receivables as payments by customers are delayed. The outcomes of the higher accounts receivable turnover could be:

- Avoidance of the risk of bad debts
- Increase the company's liquidity and profitability position
- Small funds tied-up in accounts receivable
- The company's volume of sales may adversely affected
- Customers pay quickly

The formula is as follows:

$$\text{Accounts receivable turnover} = \frac{\text{Sale}}{\text{Average accounts receivable}}$$

The sales figure is taken off the firm's income statement and the accounts receivable figure is taken off the firm's balance sheet. The result, number of times, is the number of times, each year, the firm's accounts receivables are collected or "cleaned up."

In "Business Analysis and Valuation", one can find a supplementary way to evaluate the efficiency of a company's working capital management. There are three following ratios: Days in Receivables, Days in Inventory, and Days in Payables. (Palepu, 2006)

Days in Receivables: The Days in Receivables ratio provides an estimate of the number of days, on average, what it takes for customers to pay their account (if for a company, how many days are needed to collect their revenues). Lawrence D.Schall and Charles W.Haley. (1991)

$$\text{Days in receivables} = \frac{\text{Average accounts receivable}}{\text{Average sales}} * 365$$

The Inventory Holding Period: shows the average age of inventory or the length of time (in days or months) takes to sell inventory.

Inventory holding period =   Days in a year
                              Inventory turnover ratio

Inventory holding period is the average number of days a company held an inventory before a sale. A low number of inventory days are desirable.

A high number of days imply that management is unable to sell existing inventory stocks. The Days in Inventory gives an idea of how long it takes a company to turn their inventory into sales while production process. Lawrence D.Schall and Charles W.Haley. (1991)

The Days in Payables: shows a company's average payable period. It is the indicator of how long a company is taking to pay its trade creditors.

Days in payables = Average accounts payable   * 365
                        Average costs of sales

2.1.9 Leverage ratios:

Financial leverage ratios are also called debt ratios. You may also find them called long-term solvency ratios. They measure the ability of the company to meet its long term debt obligations, such as interest payments on debt, the final principal payment on debt, and any other fixed obligations like lease payments.

These debt ratios allow the management of the company to determine how well the business can meet its long-term debt obligations. These ratios are worth nothing, or very little, in isolation. You have to be able to do trend and industry analysis in order to be able to determine how well you are managing your debt position.

"When a company borrows money, it agrees to make a series of fixed payments in the future. Because their shareholders get only what is left after the debt holders have been paid, the debt is said to create financial leverage. In extreme cases, if crisis times come, a company may be unable to pay its debts" (Brealey, 2003). Financial leverage enables a company to have an asset base larger than its equity. A company can finance its assets with equity or with debt.

Usual practice is expanding the equity through borrowings and the creation of other liabilities like accounts payable, accrued liabilities, and deferred taxes. Financial leverage increases the company's ROE as long as the cost of the liabilities is less than the return from investing these funds. "While a company's shareholders can potentially benefit from financial leverage, it can also increase their risk" (Palepu, 2006).

Debt ratios show the extent to which a firm is relying on debt to finance its investments and operations, and how well it can manage the debt obligation, i.e. repayment of principal and periodic interest. If the company is unable to pay its debt, it will be forced into bankruptcy. On the positive side, use of debt is beneficial as it provides tax benefits to the firm, and allows it to exploit business opportunities and grow.

Total debt includes short-term debt (bank advances + the current portion of long-term debt) and long-term debt (bonds, leases, notes payable).

Contrasting with equity, liabilities have predefined payment terms, and the company may face risk of financial distress if it fails to meet these obligations. There are some ratios to evaluate the degree of risk coming from a financial leverage (Palepu, 2006). There are two types of financial leverage ratios:

- Component percentages
- Coverage ratios.

Component percentages compare a company's debt with either its total capital (debt plus equity) or its equity capital. Coverage ratios reflect an ability to satisfy fixed financial obligations, such as interest, principal repayment, or lease payments (Fabozzi, 2003). Leverage ratios include debt-ratio, debt-equity ratio, times-interest earned ratio, and fixed-payment coverage ratio.

Total Debt to Assets Ratio: This component ratio is also-called "Debt Ratio" and measures the proportion of total assets financed by company's creditors. This ratio reflects the relative claims of creditors and shareholders against the assets of the company. Alternatively, this ratio indicates the relative proportions of debt and equity in financing the assets of the company.

The Debt Ratio tells the percent of funds provided by creditors and to what extent the company's assets protect creditors.

The higher the debt ratio, the greater the amount of other people's money being used in an attempt to generate profit and the higher the financial costs and restrictions from creditors.

The ratio is calculated as follows:

Debt ratio =   Total liabilities

                Total assets

Creditors prefer moderate or low debt asset ratio because the lower the ratio the greater the caution of liquidation. That is, low or moderate debt asset ratio provides creditors more protection in case a company experiences financial problems.

The higher Total Debt to Assets Ratio, the greater degree of indebtedness and the more financial leverage a company has. . A low Debt Ratio would indicate that the company has sufficient assets to cover the debt load. Creditors and management favor a low Debt Ratio. Lawrence D.Schall and Charles W.Haley. (1991)

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

Debt to Equity is the ratio of total debt to total equity. This ratio indicates the relationship between the long-term funds provided by creditors and those provided by the company's owners. It compares the funds provided by creditors to the funds provided by shareholders. As more debt is used, the debt to equity ratio will increase. Since the company incur more fixed interest obligations with debt, risk increases.

On the other hand, the use of debt can help improve earnings since the company get to deduct interest expense on the tax return. So the company wants to balance the use of debt and equity such that it maximizes profits, but at the same time manage the risk.

Debt to equity ratio =   Average liabilities

Average book value of shareholder's equity

In general, the lower the ratio, the more conservative (and probably safer) the company is. However, if a company is not using debt, it may be foregoing investment and growth opportunities. A frequently cited rule of thumb for manufacturing and other non-financial industries is that companies should not finance more than 50% of their capital through external debt (http://bizfinance.about.com/od/financialratios).

Times-Interest Earned Ratio: The times interest earned ratio is another debt ratio that measures the long-term solvency of a business. It measures how well a company can meet its interest expense obligations.

The first coverage ratio, which provides the information about how well a company can cover or meet the interest payments associated with its debt. The ratio compares the funds available to pay interest (EBIT) with the interest expense. The number of times indicates how well the firm meets its interest obligations. The higher the number, the better the firm can pay its interest expense on debt.

Usually, if the debt to assets ratio is high, you will find that the times interest owned ratio is low since the business has a lot of debt.

Times interest –covered ratio = $\dfrac{\text{EBIT}}{\text{Interest expense}}$

This shows the firm's ability to cover fixed interest charges (on both short-term and long-term debt) with current earnings. The margin of safety that is acceptable varies within and across industries, and also depends on the earnings history of a firm (especially the consistency of earnings from period to period and year to year).

As a rule the times interest earned ratio of at least 3 times and preferably closed to 5 times be suggested. The greater the interest coverage ratio, the better is ability to pay interest expense.

A high ratio suggests that the company has sufficient margin of safety to cover its interest charges and the company's earnings could decline without jeopardizing the company's ability to make interest payments.

A low ratio suggests, other things remain constant;

- Creditors are more at risk in relation interest due
- Failure to meet interest can bring legal action by creditor possibly resulting in bankruptcy
- The company may face difficulty in raising additional financing through debt as it is more risky than similar companies.

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

Long-term debt to total assets = Average long-term liabilities

Average total assets

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

Long-term debt to fixed assets = Average long-term liabilities

Average fixed assets

Fixed-Payment Coverage Ratio:

The fixed-payment coverage ratio measures the company's ability to meet all fixed payment obligations, such as loan interest, principal, lease payments and preferred stock dividends. Like the times-interest earned ratio, the higher this value the better.

Fixed-payment coverage ratio =

EBIT +Lease Payment

Interest+ Lease payment+ [(principal payments) *(1/1-T)]

Where T is the corporate tax rate applicable to the company's income. The term 1/(1-T) is included to adjust the after tax principal and preferred stock dividend payments back to a before-tax value of all other terms. Fixed payment coverage ratio measures risk. The lower the fixed coverage ratio, the greater the risk to both lenders and owners, and the greater the ratio, the lower the risk. If the ratio is lower, creditors and preferred stockholders view the company as more risky and the company may be unable to meet its fixed chares of earnings decline and may be forced into bankruptcy. A high ratio suggests a larger cushion of protection in the events of worsening financial position. (Pandey, 2006)

2.1.11 Limitations on using financial ratios

Financial ratios have certain limitations in their use and are not meant to be applied as definitive answers. They are usually used to provide additional details in the determination of the results of financial and managerial decisions. They can provide clues to the company's performance or financial situation.

However, on their own, they cannot explain whether performance is good or bad. As for the external financial analysis, ratios also play a role of basic indicators, showing just an overview of studying business entity. Ratios have to be interpreted carefully. Some of the limitations about using ratios in financial analysis are:

➢ Ratios with large deviations from the norm only indicate symptoms of a problem. It is essential always to carry out additional analysis based on internal data to isolate the causes of the problem. Ratio analysis just directs attention to potential weak spots. It does not provide conclusive evidence and only shows the existence of a problem;

➢ There is considerable subjectivity involved, as there is no "correct" number for the various ratios. Further, it is hard to reach a definite conclusion when some of the ratios are favorable and some are unfavorable;

➢ Ratios may not be strictly comparable for different firms due to a variety of factors such as different accounting practices or different fiscal year periods. Furthermore, if a firm is engaged in diverse product lines, it may be difficult to identify the industry category to which the firm belongs. Also, just because a specific ratio is better than the average does

not necessarily mean that the company is doing well; it is quite possible rest of the industry is doing very poorly;

➢ Ratios are based on financial statements that reflect the past and not the future. Unless the ratios are stable, it may be difficult to make reasonable projections about future trends. Furthermore, financial statements such as the balance sheet indicate the picture at "one point" in time, and thus may not be representative of longer periods;

➢ Financial statements provide an assessment of the costs and not value. For example, fixed assets are usually shown on the balance sheet as the cost of the assets less their accumulated depreciation, which may not reflect the actual current market value of those assets;

➢ Financial statements do not include all items. For example, it is hard to put a value on human capital (such as management expertise). And recent accounting scandals have brought light to the extent of financing that may occur off the balance sheet;

➢ Results can be distorted by inflation, which can cause the book values of inventory and depreciable assets to differ greatly from their true (replacement) values. Additionally, inventory costs and depreciation write-offs can differ from their true values, thereby distorting profits. Without adjustment, inflation tends to cause older firms (older assets) to appear more efficient and profitable than newer firms (newer assets);

➢ Difficulty to decide the proper basis of comparison. The problem of standards of comparison is usually an important case. It is also impossible to compile an industry wide averages or ratios that serve as a useful standard to measure all firms;

The standard of comparison do not consider the different technological, social, market, etc. , conditions of a company; (Pandey, 2006)

2.2 Review of previous Empirical studies

Below are a summary of previous Empirical studies on financial performance analysis in the context of different countries.

Stanislav Sokolov (2008) in his study of financial analysis on Russian forest product companies concluded that all studied companies' liquidity was negatively associated with profitability. Profitability of studied companies was connected with returns on assets and profit margins.

McComick, (1999) claimed that firms in the developing economies have many problems such as being small in size (in terms of volume of investment and sales) and lack of resources. Because of their small size, firms may quickly be exposed to problems of production capacity to satisfy the demand they may have for their products and this makes inventory management more relevant.

Cote and Latham (1999, p. 261) argued the management of receivables, inventory and accounts payable have tremendous impact on cash flows, which in turn affect the profitability of firms.

Shin and Soenen (1998) highlighted that efficient asset management is very important for creating value for the shareholders.

Marc Deloof, Faculty of Applied Economics UFSIA-RUCA University of Antwerp in his study of 2000 Belgian firms for the period 1991–96 found that there is a significant negative relation between gross operating income and the number of days accounts receivable, inventories and accounts payable of Belgian firms.

Vijaykumar and A. Venkatachalam (1995) in their study on Tamil Nadu sugar industry with regard to relationship ship between working capital management and profitability concluded that liquidity was negatively associated with profitability.

Dr Santanu Kr. Ghosh and Santi Gopal Maji (2003) conducted a study on working capital management efficiency from the viewpoint of Indian cement industry and indicated that there is a relationship between effective utilization of current assets and profitability of the companies

under study, although there seemed to be a wide range in the degrees of such relationship between company to company.

Bardia (2004) in his study on steel giant SAIL for the period from 1991–92 to 2001–02 concluded that there is a positive relationship between liquidity and profitability.

The Research gap was that many researchers have done about the financial performance of many companies. However till now no one studied about the financial performance of Ethiopian Red Cross Society Essential Drug Programm, so the researcher wants to show the financial performance of it.

CHAPTER THREE

DISCUSSIONS AND ANALYSIS

In this part of the paper detail discussions and analysis of the study findings are presented. The financial performance analysis is obtained by thoroughly analyzing the company's financial statements and by making unstructured interview and focus group discussion. The analysis is presented in the following sequence, first the common size statements analysis followed by the ratio analysis and calculating average industry as a base of the three Branches for each year.

3.1 Common Size Statements Analysis

A statement in which all items are expressed as a percentage of a base figure, useful for purposes of analyzing trends and the changing relationship between financial statement items.

Table 3.1
Common size income statement of ERCS-EDP Tigray Branch   (figure in percentages)

Particulars	2005			2006			2007			2008			2009		
	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum
Drug Sales	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Cost of Drug Sold	80	81	81	80	80	80	80	80	80	80	80	80	80	80	80
Gross profit	20	19	19	20	20	20	20	20	20	20	20	20	20	20	20
Operating expenses	27	23	35	25	28	39	34	33	53	24	24	53	26	24	61
Other income	6	3	1	2	0	0	3	5	1	3	4	12	3	4	8
Net profit(loss)	-5	-1	-14	-4	-8	-20	-13	-8	-32	-2	1	-21	-4	0	-33

Source: Financial Statements of ERCS-EDP

Table 3.1 shows the proportion of cost of drugs, gross profit, operating expense, other income & net profit (loss) to sales of drug. The explanation for each costs and expenses are as follows:

Cost of drugs sold: cost of drug sold refers to the purchasing price which is brought from the head office of the organization. That means all branches purchased drug first by transferring money to the head office of the company and then according to their needs of specifications the head office will purchase the drug and then distributed every quarter.

As it can be seen from the table 3.1 above and figure 3.1 bellow cost of drug sold has a major portion of the income statement of ERCS – EDP in the years under the study. The cost of drug sold in 2005 for Mekelle branch is lower than Adigrat and Axum by 1%. Finally for 2006, 2007, 2008 and 2009 the cost of drug sold was the same in all branches for five years.

Gross profit: gross profit has an inverse relationship with the cost of drugs sold. As the cost of drug sold decreased or increased the gross profit also increased or decreased. Gross profit of ERCS – EDP in 2005 for Mekelle branch was higher than Adigrat and Axum by 1 %. Finally 2006, 2007, 2008, 2009, are the same.

Operating expenses: operating expenses in 2005 for Axum branch has the highest as compared with mekelle and Adigrat. The lowest operating expenses in all years were incurred in Adigrat branch. The middle place has been mekelle branch.

Net Income (loss): The net incomes (loss) of the company are almost negative in all branches of the years, but Adigrat branch has only positive net income in the year 2008 and 2009.This negative net income would lead the company to bankruptcy.

The researcher concludes that, almost all branches are at net loss that is occurred due to high operating expense and decentralized purchase & distribution of the drugs. This decentralized purchase & distribution may affect the need and capacity of each branch.
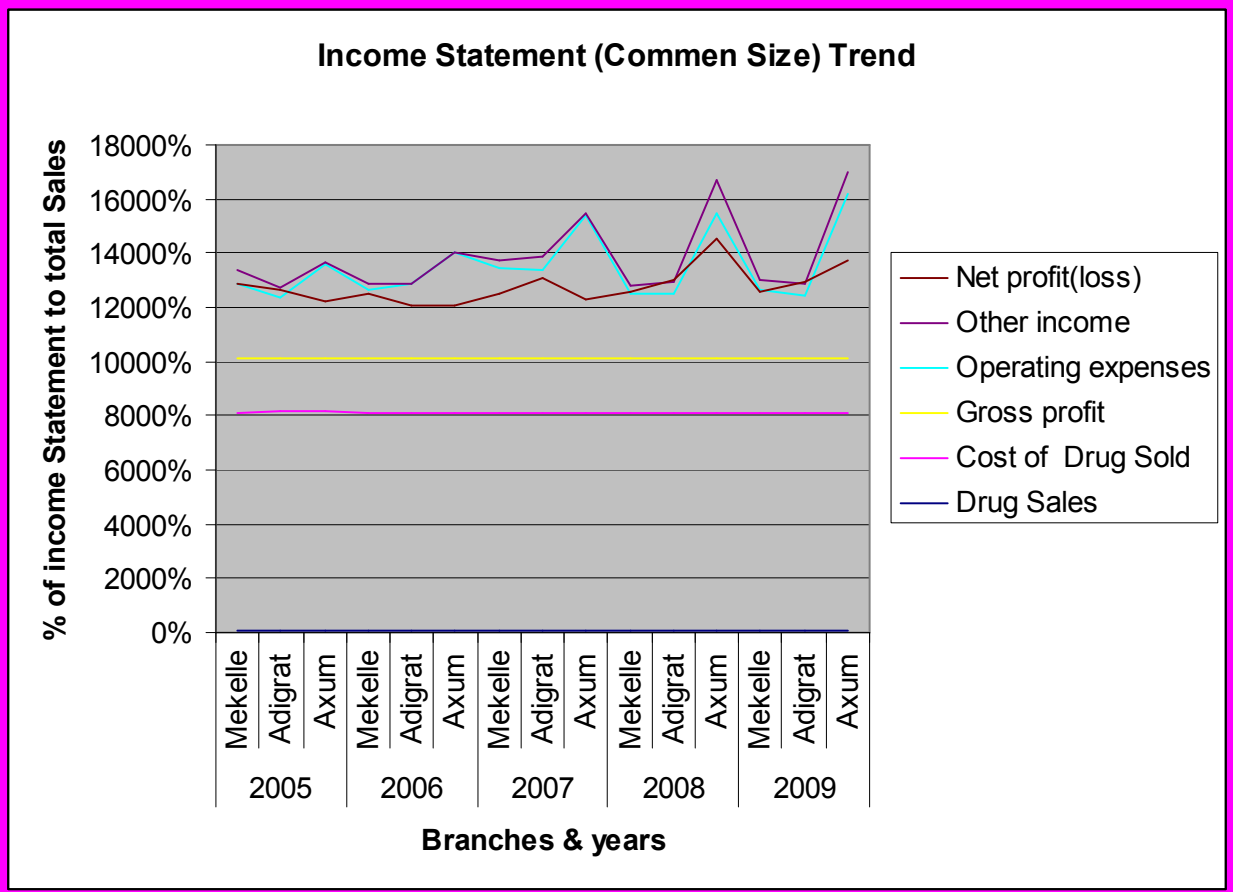
Figure 3.1 Common size income statement trend of ERCS-EDP

Table 3.2

Common size Balance Sheet of ERCS-EDP Tigray Branch   (figure in percentages)

Particulars	2005			2006			2007			2008			2009		
	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum
Total assets	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Inventory	84.38	15.13	15.97	42.14	7.07	18.33	43.40	15.97	12.46	28.31	39.52	19.34	36.51	38.60	19.81
Receivables	-26.30	50.80	53.90	4.59	55.08	32.23	15.78	31.30	51.90	24.81	32.03	48.03	26.38	30.32	42.34
Current Assets	97.99	98.58	68.39	98.76	98.65	68.89	99.55	98.12	81.58	99.90	97.09	83.17	99.91	97.56	85.40
Tangible fixed assets-net	2.01	1.42	31.61	1.24	1.35	31.11	0.45	1.88	18.42	0.10	2.91	16.83	0.09	2.44	14.60
Current liabilities	1.57	31.26	6.18	1.41	41.67	5.68	2.82	9.13	44.34	1.77	14.41	49.08	2.31	16.48	56.75
Accumulated Profit	-16.45	-8.9	-3.74	-20.49	-9.63	-3.67	-30.75	-17.24	-8.62	-34	-15.38	-10.5	-38.88	-16.17	-12.35
Pharmacy Capital	114.89	77.64	97.56	119.08	67.97	97.99	127.94	108.11	64.27	132.23	100.98	61.43	136.56	99.68	55.60

Source: Financial Statements of ERCS-EDP

Table 3.2, states that the proportion of current assets, fixed assets, current liabilities, accumulated profit (loss) and pharmacy capital to total assets of the company. The largest portion was covered by current assets. As it was shown five years data 97.99% to 99.91% for Mekelle, 97.09% to 98.65% for Adigrat and 68.39% to 85.40% for Axum, where as inventory & receivables are a ratio to total current assets of the company. It has also largest portion from the current asset

The total current asset was increased by 0.77% in 2006 for Mekelle branch as compared to 2005. In 2007 increased by 0.55% compared with 2006, in 2008 increased by 0.35% compared with 2007 and in 2009 increased by 0.01% compared with 2008. Totally the current assets were increased from 2005 to 2009 by 1.91%.

Total current asset was increased by 0.07% in 2006 as compared to 2005 for Adigrat, in 2007 decreased by 0.53% as compared to 2006 for Adigrat, in 2008 decreased by 1.03% as compared to 2007 for Adigrat and in 2009 increased by 0.47% as compared to 2008 for Adigrat.

Total current asset was increased by 0.5% in 2006 as compared to 2005 for Axum, in 2007 increased by 12.69% as compared to 2006 for Axum, in 2008 increased by 1.59% as compared to 2007 for Axum and in 2009 decreased by 5.83% as compared to 2008 for Axum. However, the amount of capital invested in current assets range from 68.39% to 99.91%, i.e., investment in fixed asset is only 0.10% to 31.61% of the total assets. In consequence of this, it is expected that the organization scarifies certain profit opportunity.

Inventories and receivables to get the ratio of 46.16% to 62.84% for mekelle of the total current assets, 46.39% to 69.47% for Adigrat of the total current assets & 34.84% to 65.01% for Axum of the total current asset which indicates larger portion of the company's current assets are in the form of inventories and receivables that implies fewer current assets are in the form of cash and others. Inventories proportions in the current assets indicated trend in all the years under the study.

Non- current assets: relatively constitutes smaller portion of the total assets 0.09% to 2.01 for the mekelle, 1.35% to 2.91% for the Adigrat and 14.60% to 31.61% for Axum. In the studied period, non-current assets continuously decreased from 2005 to 2009 for Mekelle and Axum where as for Adigrat starting from 2005 to 2006 decreased and from 2007 to 2008 increased finally in 2009 decreased. Tangible fixed assets have covered the major portion of the non-current assets.

Current liabilities: had shows a mixed trend during the study in all Branches of the years. There was a declining in 2006 by 0.16% from 2005 for Mekelle, increased in 2007 by 1.41% from 2006 for mekelle, declining in 2008 by 1.05% from 2007 for mekelle, finally increased in 2009 by 0.54% from 2008 for mekelle.

There was an increasing in 2006 by 10.41% from 2005 for Adigrat, declining in 2007 by 32.54% from 2006 for Adigrat, increasing in 2008 by 5.28% from 2007 for Adigrat, finally increased in 2009 by 2.07% from 2008 for Adigrat.

There was a declining in 2006 by 0.5% from 2005 for Axum, increased in 2007 by 38.66% from 2006 for Axum, increased in 2008 by 4.74% from 2007 for Axum. Finally increased in 2009 by 7.67% from 2008 for Axum.

Mekelle pharmacy capital: percentage to total assets had indicated an increasing in 2006 by 0.15% from 2005, decreased in 2007 by 1.4% from 2006, an increased in 2008 by 1.04% from 2007, and finally decreased in 2009 by 0.55% from 2008.

Adigrat pharmacy capital: percentage to total assets had indicated a decreasing in 2006 by 10.4% from 2005, an increasing in 2007 by 32.53% from 2006, and finally decreasing in 2009 by 2.09% from 2008.

Axum pharmacy capital: percentage to total assets had indicated an increasing in 2006 by 0.5% from 2005, a decreasing in 2007 by 38.67% from 2007, a decreasing in 2008 by 4.72% from 2007, and finally decreasing in 2009 by 7.68% from 2008.

To sum up service giving company is expected to invest lager portion of its capital in current assets especially in the form of inventory and receivables. This is because Inventory and receivables are believed to be the main sources of revenue for service giving company. Generally there was growing trend in the current assets of the company at all branches, where as a decrease in the tangible fixed assets to the total assets. This shows that there is no more investment on fixed assets rather than in current assets. Liability and capital of the company generally have shown for all branches a decrease from year to year, especially for the capital it was on the risk position.
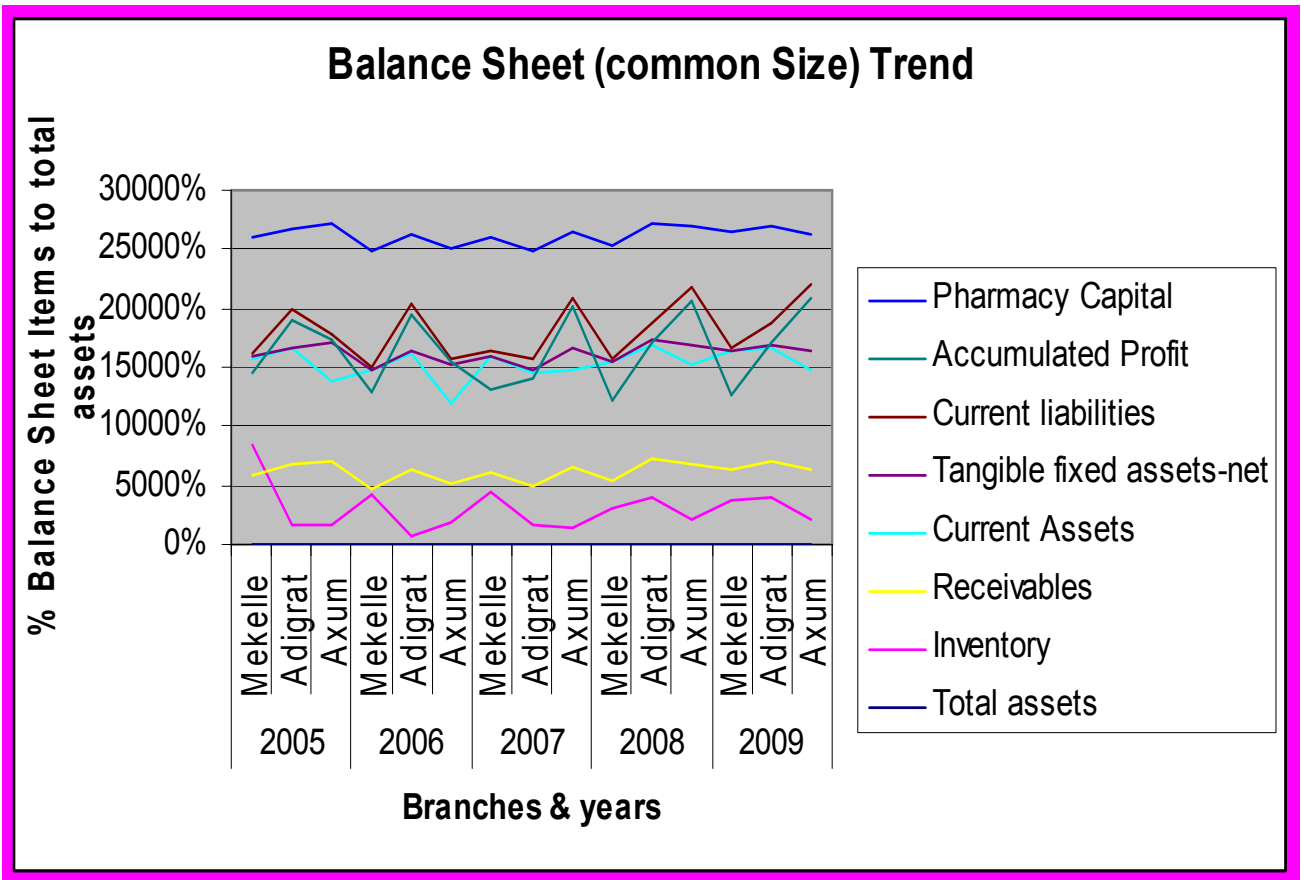
Figure 3.2 common size balance sheet trend of ERCS-EDP

3.2 Ratio Analysis

As it was already mentioned, ratios help to evaluate financial strengths and weaknesses of a company and its business trends. All the major ratios are undertaken in the present study, so as to reveal the profitability, liquidity, turnover and capital structure of the ERCS-EDP. It has to be noted that the researcher could not get standard ratio (or industry average) for ---- industry nor the management has set any bench mark for the purpose of comparison.

3.2.1 Liquidity Ratios:

Liquidity is the ability of the firm to convert assets into cash. The liquidity of a business firm is usually of particular interest to its short-term creditors since the liquidity of the firm measures its ability to pay those creditors.

Several financial ratios measure the liquidity of the firm. Those ratios are the current ratio, the quick ratio or acid test and cash ratio.

Current Ratio: The current ratio of a company measures its short-term solvency, i.e., its ability to meet short-term obligations.

Although there is no hard and fast rule, conventionally, a current ratio of 2: 1 (current assets twice current liabilities) is considered satisfactory. The logic underlying the conventional rule is that even with a drop-out of 50 percent (half) in the value of current assets, a company can meet its obligations, that is, a 50 percent margin of safety is assumed to be sufficient to ward off the worst of situations.

Current Ratio =   Current Assets

                        Current Liabilities

Table 3.3

Current ratio trend of ERCS-EDP   (Amount in Birr)

Particulars	2005			2006			2007			2008			2009		
	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum
Current assets	757,221.02	1,039,273.52	868,219.24	736,284.57	1,208,872.70	837,342.11	690,818.25	755,918.64	1,572,125.79	670,732.94	816,223.35	1,698,637.91	650,059.66	830,797.88	1,926,867.22
Current liabilities	12,108.27	329,587.36	78,520.51	10,520.55	510,583.22	69,079.66	19,545.95	70,364.93	854,560.99	11,877.90	121,111.59	1,002,309.08	15,038.19	140,367.20	1,280,501.59
Current ratio	62.54	3.15	11.06	69.99	2.37	12.12	35.34	10.74	1.84	56.47	6.74	1.69	43.23	5.92	1.50

Source**:** Financial Statements of ERCS-EDP

It can be further noticed from Table 3.3, that the current ratios almost the whole branches have shown above the norm as it was observed from mekelle and Adigrat under the study. In each branches of the year, the company had at least 2.37 birr in current assets available for every birr in current liabilities. Where as in Axum branch below the norm on the year 2007, 2008, and 2009. In each year, the company had at least 1.84 birr, 1.69 birr, and 1.50 in current assets available for every birr in current liabilities respectively for each year.

Generally As it was shown that in the current ratios almost for all branches are definitely higher than the norm value, but it does not mean that it is exactly better because holding large amount of not fast moving current assets reduce profitability.

Quick (Acid-Test) Ratio: This ratio measures liquidity by considering only quick assets. The quick ratio is a more rigorous and penetrating test of the liquidity position of a company. A quick ratio of 1:1 or greater is usually recommended.

Quick (Acid-Test) Ratio =   Current Assets -Inventories

                                Current Liabilities

Table 3.4

Quick ratio trend of ERCS-EDP   (Amount in Birr)

Particulars	2005			2006			2007			2008			2009		
	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum
Quick assets	400,364.52	882,020.48	729,563.33	425,979.87	1,123,329.41	683,801.05	390,967.65	635,142.66	1,376,229.66	480,846.10	493,651.02	1,370,049.20	412,948.20	510,092.59	1,545,085.56
Current liabilities	12,108.27	329,587.36	78,520.51	10,520.55	510,583.22	69,079.66	19,545.95	70,364.93	854,560.99	11,877.90	121,111.59	1,002,309.08	15,038.19	140,367.20	1,280,501.59
Quick ratio	33.07	2.68	6.29	40.49	2.20	9.90	20.00	9.03	1.61	40.48	4.08	1.37	27.46	3.63	1.21

Source**:** Financial Statements of ERCS-EDP

The quick ratio of the branches was above the acceptable standard in all branches of the year under this study. It has almost 50% of the current ratio which indicates that inventory only consists of above 50% of total current assets. Holding too much inventory implies that huge capital of the company is tied up in inventory, which results to opportunity cost, deterioration in value and also leads to expired for inventory.

The writer under stood that as the pharmacist or druggists of the branches recognized that more drugs are expired, in order to reduce this expenses it has been planned to sale drugs (medicines) with a minimum price for those patients which are sleeping in hospitals and clinics, because in order to recover some of it's costs.

Service giving companies have large amount of current assets than fixed assets, in the case of pharmacy not only that but also brought fast moving drugs. When drugs are stored for long period of time and not fast moving it may be expired. So that it may affect profitability & quick ratio has been dwindle.

To summarize the quick ratios of all branches have above the norm, this shows that the company has at good position when it compared with the standards.

Cash Ratio: The cash ratio measures liquidity by considering only cash and short term securities stated in the balance sheet at the end of each period. If the cash ratio of a company is 0.20 to 0.50, it is considered to be acceptable.

Cash Ratio =   <u>Cash +shot-term securities</u>

Current Liabilities

Table 3.5

Cash ratio trend of ERCS-EDP   (Amount in Birr)

Particulars	2005			2006			2007			2008			2009		
	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum
Cash and bank	175,318.57	353,944.73	261,432.41	243,869.22	456,733.98	413,951.58	116,040.35	443,888.81	560,218.55	136,016.61	301,364.18	553,715.99	679,730.00	318,838.75	729,074.45
Current liabilities	12,108.27	329,587.36	78,520.51	10,520.55	510,583.22	69,079.66	19,545.95	70,364.93	854,560.99	11,877.90	121,111.59	1,002,309.08	15,038.19	140,367.20	1,280,501.59
Cash ratio	14.48	1.07	3.33	23.18	0.89	5.99	5.94	6.31	0.66	11.45	2.49	0.55	45.20	2.27	0.57

Source**:** Financial Statements of ERCS-EDP

 As it was observed the cash to current liability is good as it was shown on Table 3.5 almost all branches have above the standard. If the cash ratio is between 0.20 & 0.50 considers that it is acceptable.

The researcher concludes that all companies have a good position in the cash ratio trend, but doesn't mean that the firm has well in the profitability. This shows that the ability to pay for the current liability was good as shown from the table.

Figure 3.3 Liquidity ratios trend of ERCS-EDP

Table 3.6

Industrial Average for ERCS-EDP Liquidity Ratios Trend   (figure in %)

Particulars	2005	2006	2007	2008	2009
Current ratio	25.58	28.16	15.97	21.63	16.88
Quick ratio	14.01	17.53	10.21	15.31	10.77
Cash ratio	6.29	10.02	4.30	4.83	16.01

Source**:** Financial Statements of ERCS-EDP

There was no stock market in our country, but as a base industrial average of the company was shown in Table 3.6. For all branches the current ratios has above the norm, but as you compared with the industrial average Adigrat and Axum have been below the average for each year. The writer observes for the quick ratio also the same as current ratio. As it indicated in the Table the cash ratio for Adigrat & Axum has been below the average except in 2007. At the year 2007 only Axum branch has below the average. Generally the liquidity ratio of the company was good as it observed from the above tables, but it doesn't mean that it was profitable. Because this liquidity ratio shows that how much current ratio to current liability, Quick ratio to current liability & cash ratio to current liability.

3.2.2 Profitability Ratios:

Profitability Ratios measure the level of earnings in comparison to a base, such as assets, sales, or capital employed.

Gross Profit Margin: The gross profit margin ratio indicates management's effectiveness in product pricing, generating sales and controlling production costs.

Gross profit margin =   Gross profit * 100

                                        Sales

Table 3.7

Gross profit margin ratio trend of ERCS-EDP   (Amount in Birr)

Particulars	2005			2006			2007			2008			2009		
	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum
Gross profit	125,291.25	64,266.13	49,191.99	137,519.65	63,408.57	45,640.98	99,986.75	61,527.31	46,190.94	123,746.69	88,979.62	45,882.78	138,267.61	96,752.35	47,358.67
Sales of Drug	626,456.25	336,526.45	257,937.45	687,598.25	317,042.85	228,204.98	499,933.75	307,636.55	230,954.70	618,733.45	444,898.10	229,413.90	691,338.05	483,761.75	236,793.35
Gross profit margin (%)	20	19	19	20	20	20	20	20	20	20	20	20	20	20	20

Source**:** Financial Statements of ERCS-EDP

As it can be further observed from Table 3.7 the gross profit margin has shown almost an equal trend for all branches of each year. So this was happen due to the same purchases price for all branches, but not included the transportation cost and also the same selling price to all branches. The head office was found at Addis Ababa. It purchased the medicines (drugs) for all branches under its specifications. Then it distributed to the branches with out adding the transportation cost. The transportation cost of the drugs was covered by the head office of the company. The branches added the 25 % to the purchased price.

Net Profit Margin: The net profit margin measures the percentage of each sales Birr remaining after all costs and expenses.

Net profit margin =   Net Income (Loss)

<u>Net Income (Loss)* 100</u>

Sales

Table 3.8

Net profit margin ratio trend of ERCS-EDP   (Amount in Birr)

Particulars	2005			2006			2007			2008			2009		
	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum
Net Income(Loss)	-33,482.23	-2,315.18	-37,229.28	-25,612.31	-24,349.47	-44,630.60	-63,094.42	-24,418.77	-72,855.69	-14,797.08	3,156.14	-48,417.20	-28,359.33	1,802.29	-77,411.79
Sales of Drug	626,456.25	336,526.45	257,937.45	687,598.25	317,042.85	228,204.98	499,933.75	307,636.55	230,954.70	618,733.45	444,898.10	229,413.90	691,338.05	483,761.75	236,793.35
Net profit margin (%)	-5.34	-0.69	-14.43	-3.72	-7.68	-19.56	12.62	-7.94	-31.55	-2.39	0.71	-21.10	-4.10	0.37	-32.69

Source: Financial Statements of ERCS-EDP

A table 3.8 shows that during the year 2008 & 2009 for Adigrat branch has been positive net profit margin, where as others have negative. The net profit margin for Adigrat in 2008 gets a 0.71% and in 2009 increase's to 0.37%. The negative were occurred due to more drugs are expired before selling. The drugs were purchased at the Head office level so, that's why the branches do not get the drugs as proposed then the loss will occurred. If the purchase was made by the branches them salve the negative would be changed to positive.

The company should be changed for the purchasing policy of from Decentralization to centralization. The negative net profit margin would be changed to positive. Other wise the company was not at good positions in the profitability.
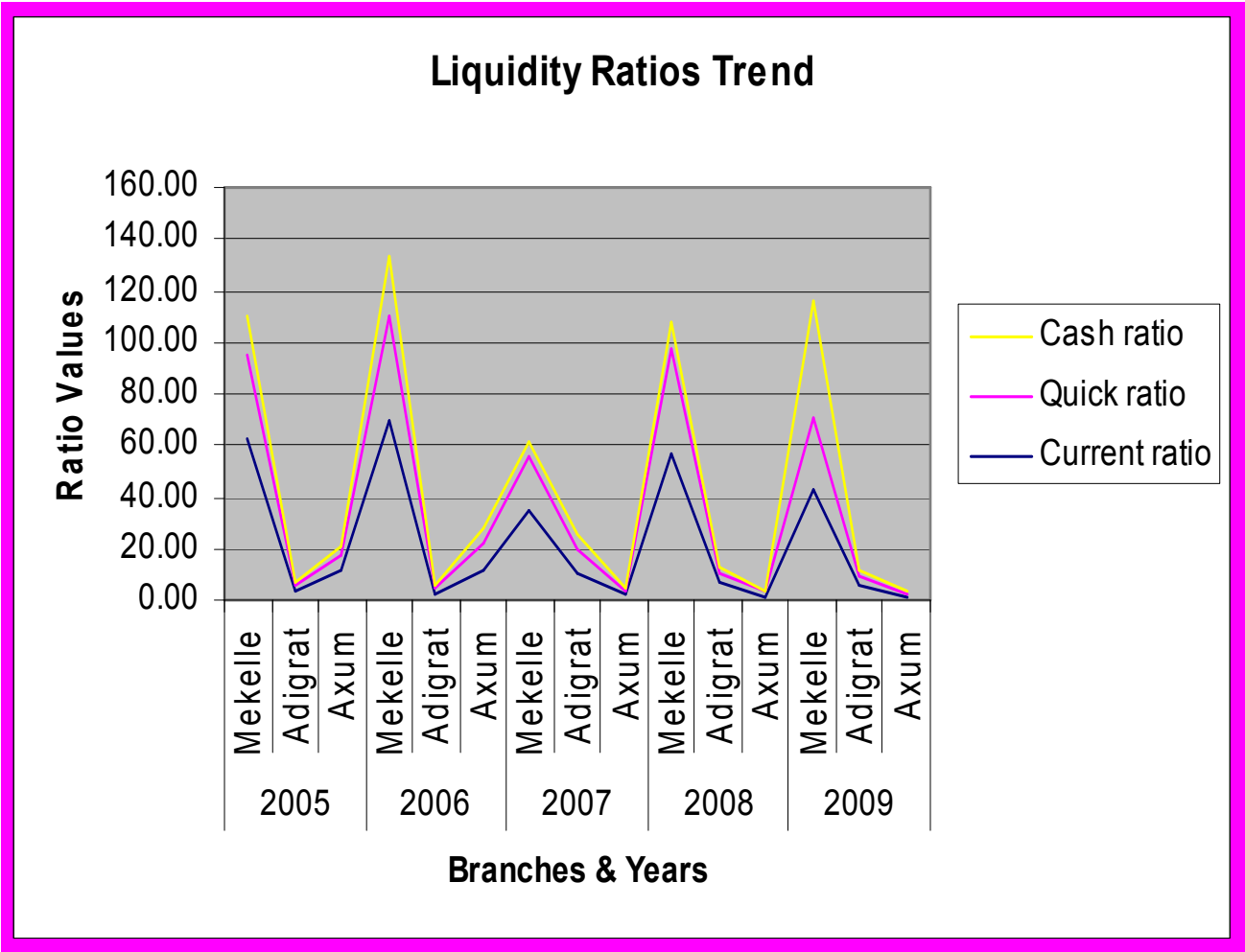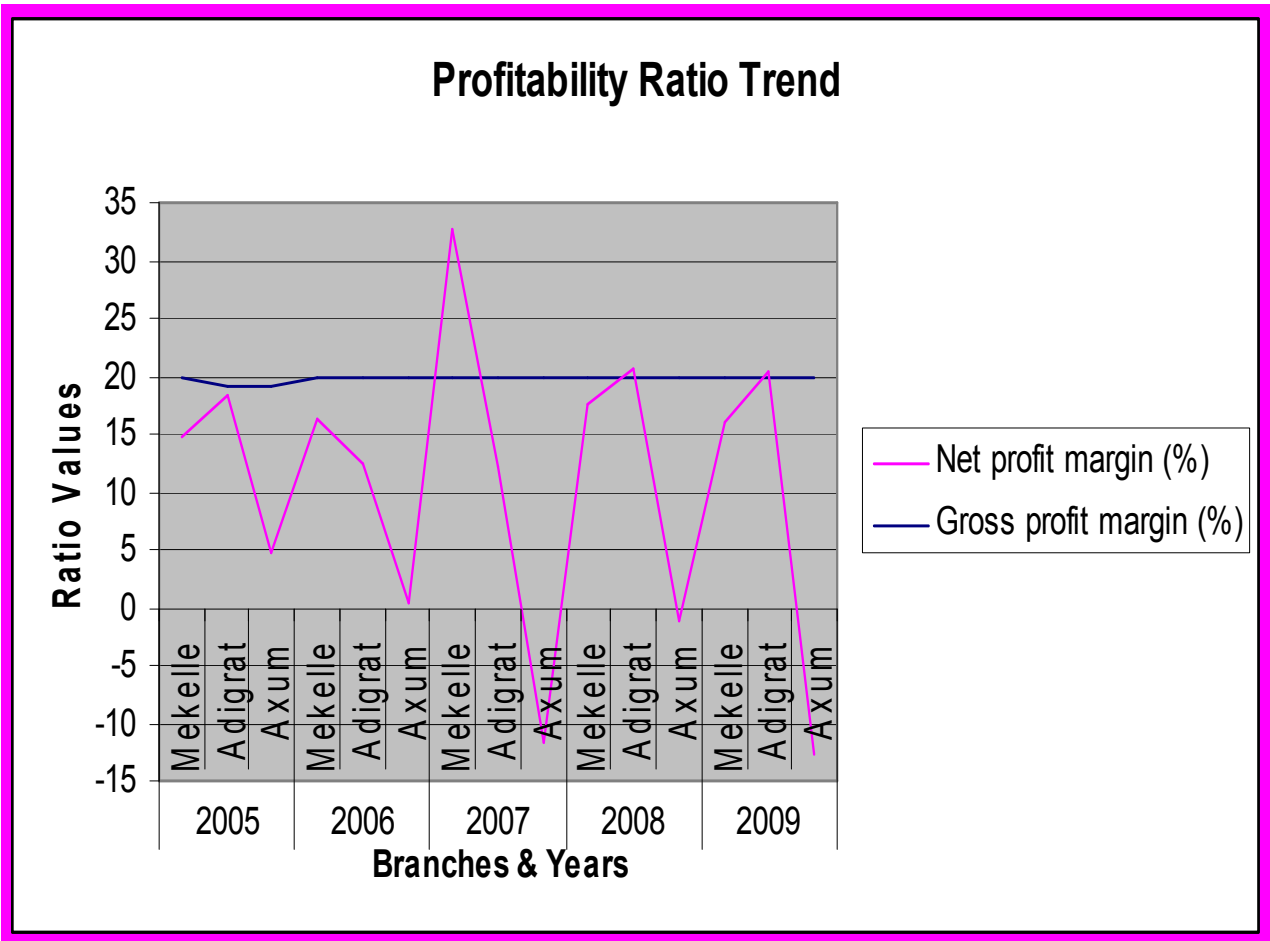
Figure 3.4 Profitability ratios trend of ERCS-EDP

Table 3.9

Industrial Average for ERCS-EDP Profitability Ratios Trend   (figure in %)

Particulars	2005	2006	2007	2008	2009
Gross profit margin (%)	19	20	20	20	20
Net profit margin (%)	-6.82	-10.32	-8.96	-7.59	-12.14

Source: Financial Statements of ERCS-EDP

The data shown on Table 3.9 the industrial average on Profitability Ratio Trend between each branches of the year are shown, so that the industrial average of gross profit margin was equal to with all branches. Where as the net profit margin generally shows as negative, there for the company was at risk.

The writer concluded that the company should have to do changing of the purchasing policy of the firm in order to get positive net profit margin for all branches.

Return on Assets: The return on assets measures the overall effectiveness of management in generating profits with its available assets.

Return on Assets =   <u>Net profits * 100</u>

Total Assets

Table 3.10

Trend of return on assets in ERCS-EDP   (Amount in Birr)

Particulars	2005			2006			2007			2008			2009		
	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum
Net profits	-33,482.23	-2,315.18	-37,229.28	-25,612.31	-24,349.47	-44,630.60	-63,094.42	-24,418.77	-72,855.69	-14,797.08	3,156.14	-48,417.20	-28,359.33	1,802.29	-77,411.79
Total assets	772,719.50	1,054,252.14	1,269,573.68	745,525.45	1,225,430.48	1,215,502.23	693,907.21	770,435.94	1,927,091.59	671,378.16	840,662.16	2,042,371.68	650,059.66	851,558.54	2,256,345.89
Return on assets (%)	-4.33	-0.22	-2.93	-3.44	-1.99	-3.67	-9.09	-3.17	-3.78	-2.20	0.38	-2.37	-4.36	0.21	-3.43

Source**:** Financial Statements of ERCS-EDP

The company's ROA has shows in table 3.8 and almost all branches of each year has shows a negative ROA, but only Adigrat has a positive ROA in 2008 38 cents profit earned from one birr of assets and in 2009 21 cent profit earned from one birr of assets. The negative shows that instead of adding earning makes loss to the assets of the company. This means that for example Mekelle losses 4.33 birr from one birr of assets in 2005. The effectiveness of the management in generating profits had declined due to incremental in operating expense. This affects the over all profitability of the company.

Most of ROA of the company has not effectively managed by the management of the company; this affects the profitability of the company.

Return on Equity: The return on equity measures the return earned on the owners' capital as an indicator of management's performance.

Return on Equity =   Net income * 100

                             Pharmacy equity

Table 3.11

Return on equity trend of ERCS-EDP   (Amount in Birr)

Particulars	2005			2006			2007			2008			2009		
	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum
Net income	-33,482.23	-2,315.18	-37,229.28	-25,612.31	-24,349.47	-44,630.60	-63,094.42	-24,418.77	-72,855.69	-14,797.08	3,156.14	-48,417.20	-28,359.33	1,802.29	-77,411.79
Pharmacy Capital	760,611.23	724,664.79	1,191,053.17	735,004.90	714,847.27	1,146,422.57	674,361.26	700,071.02	1,072,530.60	659,500.26	719,550.58	1,040,062.60	635,021.47	711,191.35	975,844.30
Return on equity (%)	-4.40	-0.32	-3.13	-3.48	-3.41	-3.89	-9.36	-3.49	-6.79	-2.24	0.44	-4.66	-4.47	0.25	-7.93

Source**:** Financial Statements of ERCS-EDP

It can be observed from Table 3.11 The company's ROE has almost a negative for all branches of each year, but only Adigrat has a positive in 2008 shows 0.44 and in 2009 also shows 0.25.This shows that 44 cents in 2008 & 25 cents in 2009 has earned respectively to the invested capital.

Almost all companies have shown negative ROE, this shows that instead of return earnings from net income launch to consume from its capital. The positive ROE shows that or measures that the return earned on the capital as an indicator of management's performance so, generally the management of the company does not perform good in ROE.

Return on Capital Employed: This ratio provides sufficient insight into how efficiently the long-term funds of owners and lenders are being used. The higher the ratio, the more efficient is the use of capital employed.

Return on Capital Employed =   EBIT * 100

                                                      Total assets-Current liabilities

Table 3.12

Return on capital employed trend of ERCS-EDP   (Amount in Birr)

Particulars	2005			2006			2007			2008			2009		
	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum
EBIT(Net Income(Loss))	-33,482.23	-2,315.18	-37,229.28	-25,612.31	-24,349.47	-44,630.60	-63,094.42	-24,418.77	-72,855.69	-14,797.08	3,156.14	-48,417.20	-28,359.33	1,802.29	-77,411.79
Total Assets-Current Liabilities	760,611.23	724,664.78	1,191,053.17	735,004.90	714,847.26	1,146,422.57	674,361.26	700,071.01	1,072,530.60	659,500.26	719,550.57	1,040,062.60	635,021.47	711,191.34	975,844.30
ROCE (%)	-4.40	-0.32	-3.13	-3.48	-3.41	-3.89	-9.36	-3.49	-6.79	-2.24	0.44	-4.66	-4.47	0.25	-7.93

Source: Financial Statements of ERCS-EDP

The company was not able to use efficiently the long-term found of the capital and lenders. It was better in using the funds at Adigrat in 2008 and 2009 even though the return on capital employed started declining by 0.19% in 2009 from 2008 for Adigrat. The mekelle and Axum branches of each year have shown negative Return on Capital Employed.

Almost all branches have a negative return on capital employed trend this shows that the company doesn't use loge term liabilities. So that the higher the ratio of Return on Capital Employed, the more efficient is the use of capital employed, but the lowest the ratio, the lest efficient in use of capital employed. There for generally all branches have poor use of return on capital employed.
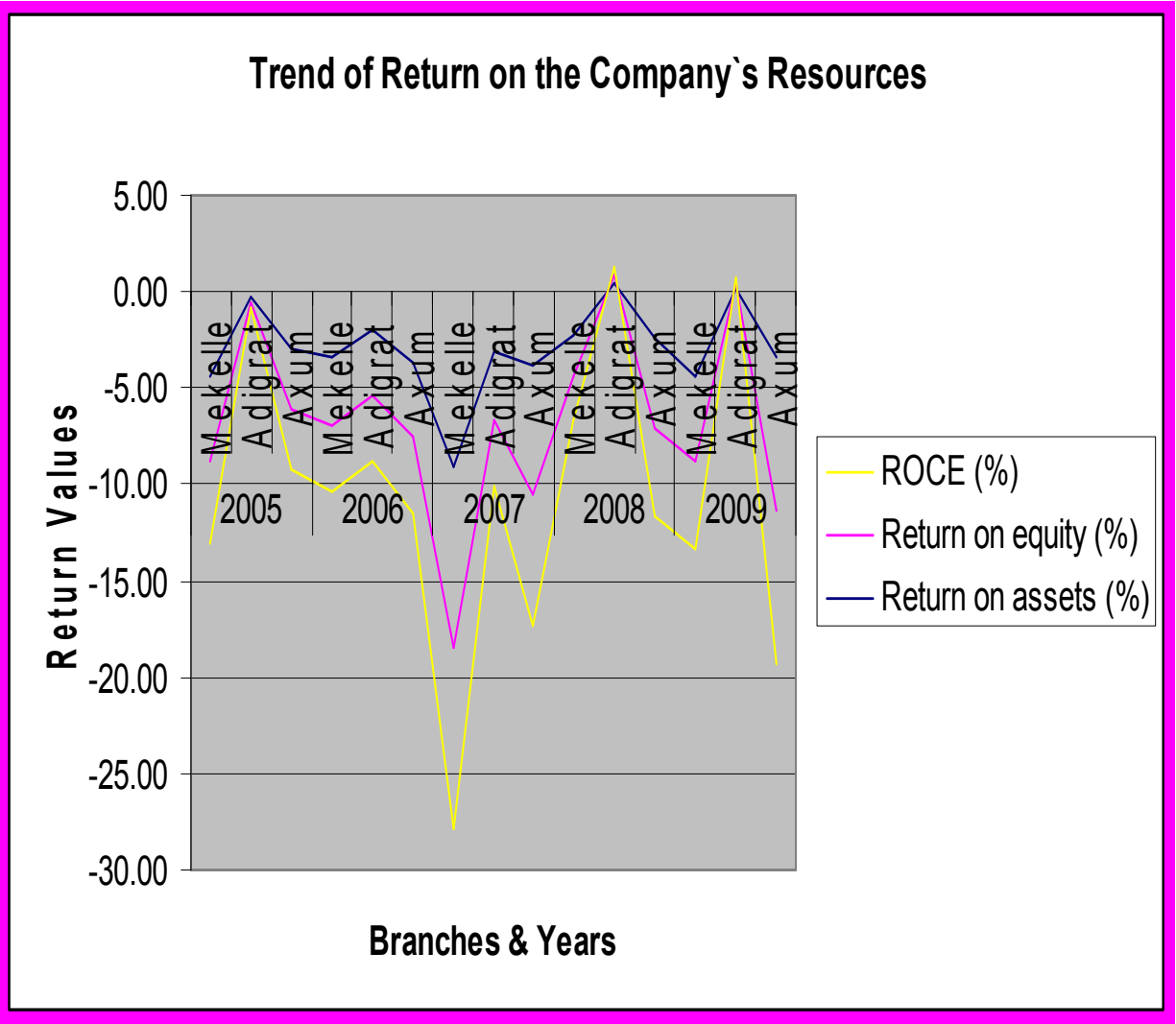
Figure 3.5 Return trends on ERCS-EDP resources

Table 3.13
Industrial Average for ERCS-EDP Trend of Return on the Company's Resources

(Figure in %)

Particulars	2005	2006	2007	2008	2009
Return on assets (%)	-2.49	-3.03	-5.35	-1.40	-2.53
Return on equity (%)	-2.62	-3.59	-6.55	-2.15	-4.05
ROCE (%)	-2.62	-3.59	-6.55	-2.15	-4.05

Source: Financial Statements of ERCS-EDP

Generally it can be further noticed from Table 3.13, that Adigrat branch has the highest & better in ROA, ROE & ROCE for each years as it compared with the industrial average, even though it shows a negative trend. The higher the ratio in ROA, ROE & ROCE, than the more efficient in the use of return on the company's resources.

The industrial average trend of return on the company's resources almost for all branches shows negative figure. This means that instead of earning profit incurred loss, so the company starts to consume its resources. Finally it doesn't have a good condition for the company.

3.2.3 Asset Management Ratios:

Asset management, also called asset utilization or turnover ratios, tells a company that how well its assets are working to generate sales.

Inventory Turnover: The inventory turnover ratio measures the efficiency of the business in managing and selling its inventory. This ratio gauges the liquidity of the firm's inventory. There is no generally accepted figure for this ratio, but the main idea is to turn inventories as fast as possible. Some experts agree that a ratio of six or seven times is considered satisfactory.

Inventory is defined here the cost of drugs on hand at the end of each period.

Inventory Turnover = $\underline{\text{Cost of goods}}$

                        Average Inventory

Table 3.14

Inventory turnover trend of ERCS-EDP   **(Amount in Birr)**

Particulars	2005			2006			2007			2008			2009		
	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum
Cost of goods sold	501,165.00	272,260.32	208,745.46	550,078.60	253,634.28	182,264.00	399,947.00	246,109.24	184,763.76	494,986.76	355,918.48	183,531.12	553,070.44	387,009.40	189,434.68
Average inventory	319,454.50	78,626.52	69,327.96	155,152.35	42,771.65	76,770.53	149,925.30	60,387.99	97,943.42	94,943.42	161,286.17	164,294.36	118,555.73	160,352.65	190,890.83
Inventory turnover(times)	1.57	3.46	3.01	3.55	5.93	2.37	2.67	4.08	1.89	5.21	2.21	1.12	4.67	2.41	0.99

Source**:** Financial Statements of ERCS-EDP

Further, it is observed from Table 3.14 the Inventory turnover for mekelle branch has been below 2 & 5 times in 2005 & 2006, 2007, 2009 respectively and 2009 and in 2008 below 6 times. Adgirat and Axum branches have below 6 times in each year. This inventory turnover shows that for how much inventory turn over from store to Dispensary. The company has applied inventory management techniques this is FIFO (First in First out) in the term of Drug shops first expired first serve techniques, so far it uses this techniques. Same experts agree that a raid of 6 or 7 times it considered satisfactory. This has negatively affected the liquidity and profitability of the company.

As same experts agree that a raid of 6 or 7 times has considered satisfactory, generally all branches have not get it. This has a negative effect on the liquidity and profitability of the company.

Inventory Holding Period: Shows the average age of inventory or the length of time (in days or months) takes to sell inventory.

Inventory holding period =   <u>Days in a year</u>

Inventory turnover ratio

Table 3.15

Inventory holding period trend of ERCS-EDP   (Figure in days)

Particulars	2005			2006			2007			2008			2009		
	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum
Days in a year	365	365	365	365	365	365	365	365	365	365	365	365	365	365	365
Inventory turnover ratio	1.57	3.46	3.01	3.55	5.93	2.37	2.67	4.08	1.89	5.21	2.21	1.12	4.67	2.41	0.99
Inventory holding period(days)	232.48	105.49	121.26	102.82	61.55	154.01	136.70	89.46	193.12	70.06	165.16	325.89	78.16	151.45	368.69

Source**:** Financial Statements of ERCS-EDP

Table 3.15 shows that the inventory holding period for mekelle branch for the average age of inventory had almost less than a year for 2005, less than 6 month for 2006, 2007 & 2008, less than 3 months in 2009. For Adgrat branch also the average age of inventory had less than 6 months for 2005, 2008 & 2009, less than 3 months for the year 2006 & 2007. While Axum branch the average age of inventory almost less than 6 months for the year 2005, 2006 and 2007. For the year 2008 the average age of inventory nearly one year, where as in 2009 it was greater than one year.

Generally the inventory holding period for the company has almost fluctuated from year to year, but when it comes to the actual every three month brought from head office to each branch. So it is not correct, because all branches have different inventory holding period.

Receivables Turnover: The accounts receivable turnover ratio indicates how many times, on average, accounts receivables are collected during a year.

Receivables turnover =   Sales

                          Average accounts receivable

Table 3.16

Receivables turnover trend of ERCS-EDP   (Amount in Birr)

Particulars	2005			2006			2007			2008			2009		
	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum
Sales of Drug	626,456.25	336,526.45	257,937.45	687,598.25	317,042.85	228,204.98	499,933.75	307,636.55	230,954.70	618,733.45	444,898.10	229,413.90	691,338.05	483,761.75	236,793.35
Average accounts receivable	-99,588.89	264,037.88	234,065.46	16,905.75	332,935.59	134,939.74	54,516.64	118,330.00	408,005.56	83,233.45	130,727.30	408,005.56	85,683.20	125,957.69	408,005.56
Receivables turnover(times)	-6.29	1.27	1.10	40.67	0.95	1.69	9.17	2.60	0.57	7.43	3.40	0.56	8.07	3.84	0.58

Source**:** Financial Statements of ERCS-EDP

As shown on Table 3.16 mekelle branch had shown a fluctuating trend. It had shown a progress from 2005 to 2006. From 2007 to 2008 on words, it had started declining and in 2009 start to increased. Adigrat branch had shown a fluctuating trend. It had shown a declining from 2005 to 2006. From 2006 to 2009 an increasing trend. It had started progress from years to year. Axum branch had shown a fluctuating trend. It had shown a progress from 2005 to 2006. From 2007 to 2008 on words, it had started declining and in 2009 start to increased.

Generally the reason for fluctuating in receivables turn over from year to year is that the company does not have any credit standards that would help to increase receivables turn over. This affects the liquidity of the company. This fact is supported by the average collection period of the company on Table 3.17 below.

Average Collection Period: The average collection period, or average age of accounts receivable, is useful in evaluating credit and collection policies. It represents the average length of time a company must wait to receive cash after making sales.

Average collection period = $\dfrac{\text{Days in a year}}{\text{Receivables turnover}}$

Table 3.17

Average collection period trend of ERCS-EDP   (Figure in Days)

Particulars	2005			2006			2007			2008			2009		
	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum
Days in a year	365	365	365	365	365	365	365	365	365	365	365	365	365	365	365
Receivables turnover	-6.29	1.27	1.10	40.67	0.95	1.69	9.17	2.60	0.57	7.43	3.40	0.56	8.07	3.84	0.58
ACP	-58.03	287.40	331.82	8.97	384.21	215.98	39.80	140.38	640.35	49.13	107.35	651.79	45.23	95.05	629.31

Source: Financial Statements of ERCS-EDP

As it observed from Table 3.17 Mekelle branch was 58.03 days in 2005, 8.97 days in 2006, 39.80 days in 2007, 49.13 days in 2008 and 45.23 days in 2009 for the average collection periods. Adigrat branch was 287.40 days in 2005, 384.21 days in 2006, 140.38 days in 2007, 107.35 days in 2008 and 95.05 days in 2009 for the average collection periods. Axum branch was 331.82 days in 2005, 215.98 days in 2006, 640.35 days in 2007, 651.79 days in 2008 and 629.30 days in 2009.

Generally the lengthy collection period of the company was as a result of weak credit policy. As per the interaction and discussion with the finance officials of the company. The researcher has identified that the company does not have any specific standard time set for the collection of receivables. Thus the company's liquidity and profitability have adversely been affected.

Accounts Payable Turnover: This ratio indicates how many times the company pay to its creditors during a year.

Accounts payable Turnover =   Cost of sales

Average accounts payable

Table 3.18

Accounts payable turnover trend of ERCS-EDP   (Amount in Birr)

Particulars	2005			2006			2007			2008			2009		
	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum
Cost of sales	501,165.00	272,260.32	208,745.46	550,078.60	253,634.28	182,264.00	399,947.00	246,109.24	184,763.76	494,986.76	355,918.48	183,531.12	553,070.44	387,009.40	189,434.68
Average accounts payable	6,054.14	164,793.68	39,260.26	5,260.28	255,291.61	34,539.83	9,772.98	35,182.47	427,280.50	5,938.95	60,555.80	501,154.54	7,519.10	70,183.60	640,250.80
Accounts payable turnover(times)	82.78	1.65	5.32	104.57	0.99	5.28	40.92	7.00	0.43	83.35	5.88	0.37	73.56	5.51	0.30

Source: Financial Statements of ERCS-EDP

As it was seen at Table 3.18 mekelle branch had shown a fluctuating trend. It had shown a progress from 2005 to 2006. From 2006 to 2007 on words. It had started declining and make inclined in 2008 and in 2009 declining. Adigrat branch had shown a fluctuating trend. It had declining in 2006 from 2005, in 2007 increased from 2006, in 2008 decreased from 2007 and in 2009 decreased from 2008. Axum branch had shown a fluctuating trend. It had decaling in 2006 from 2005 declining in 2007 from 2006.

Generally the accounts payable turn over is higher than the receivables turnover. This indicates that in mekelle branch in all years the accounts payable turn over is higher than the receivables turnover. This indicates that the company has to pay is creditors before collecting its receivables. In Adigrat branch also the same as the above. In Axsum branch in the year 2005 to 2007 the accounts payable turnover is higher than the receivables turnover while in the year 2008 to 2009 the account receivables turnover is higher than the accounts payable turnover. This indicates that the company has to pay its creditors after collecting its receivables.

Days in Payables: This ratio represents the average length of time a company can wait to pay cash to its creditors.

Days in Payables =   Average payables * 365

Cost of sales

Table 3.19

Days in payables trend of ERCS-EDP   (Amount in Birr)

Particulars	2005			2006			2007			2008			2009		
	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum
Average payables	6,054.14	164,793.68	39,260.26	5,260.28	255,291.61	34,539.83	9,772.98	35,182.47	427,280.50	5,938.95	60,555.80	501,154.54	7,519.10	70,183.60	640,250.80
Cost of sales	501,165.00	272,260.32	208,745.46	550,078.60	253,634.28	182,264.00	399,947.00	246,109.24	184,763.76	494,986.76	355,918.48	183,531.12	553,070.44	387,009.40	189,434.68
Days in payables	0.01 days	0.61 days	0.19 days	0.01 days	1.01 days	0.19 days	0.03 days	0.14 days	2.31 days	0.01 days	0.17 days	2.73 days	0.01 days	0.18 days	3.38 days

Source**:** Financial Statements of ERCS-EDP

The length of time ERCS-EDP can wait to pay to its creditors was less than the average collection period of its receivables, 0.61 days to pay to creditors   in 2005 compared to 287.40 days for ACP in the same year for Adigrat which potentially affects the liquidity of the company.
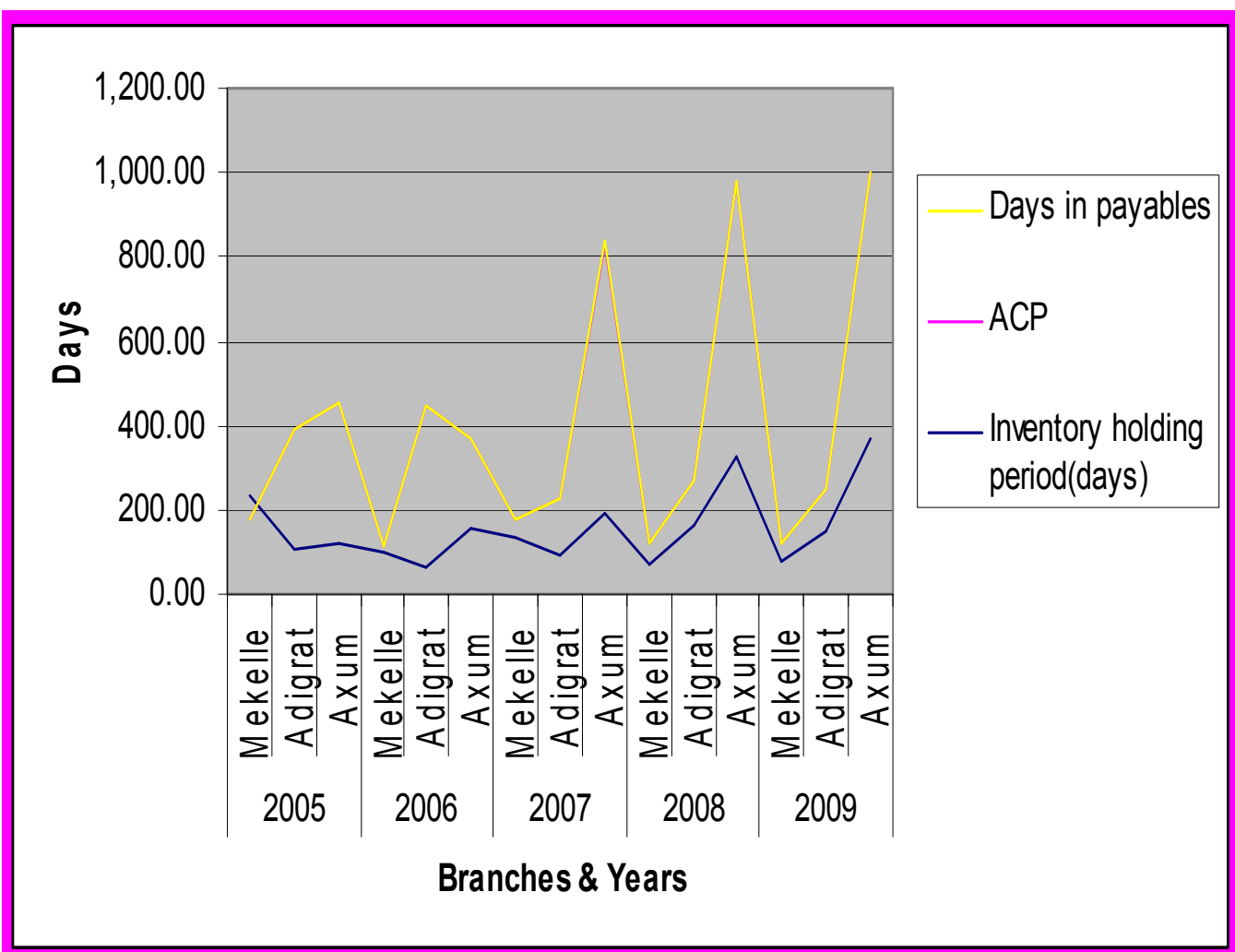
**Figure 3.6 ACP, inventory holding period and days in payables trend of
ERCS-EDP**

Table 3.20
Industrial Average ACP, Inventory holding Period & days in payables Trend
(Figure in days)

Particulars	2005	2006	2007	2008	2009
Inventory holding period(days)	153.10	106.13	139.76	187.04	199.43
ACP	187.10	203.05	273.51	269.42	256.53
Days in payables	0.27	0.4	0.83	0.97	1.19

Source: Financial Statements of ERCS-EDP

It can be further noticed from Table 3.20 the industrial average for inventory holding period and ACP have almost less than four months, but when you observe individually some of them greater than the average and others also less than that. The days in payables are almost less than a day averagely.

Total Assets Turnover: This turnover ratio indicates how much Birr of sales revenue is generated per Birr of investment in assets. Generally, the higher a company's total assets turnover, the more efficiently its assets have been used. In capital-intensive industries (steel, autos and heavy manufacturing companies) total asset turnover ratio is typically less than one because the denominator in the equation below which include machineries and equipments are expensive ones.

Total Assets turnover =   Sales

                            Total Assets

Table 3.21

Total assets turnover trend of ERCS-EDP   (Amount in Birr)

Particulars	2005			2006			2007			2008			2009		
	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum
Sales of Drug	626,456.25	336,526.45	257,937.45	687,598.25	317,042.85	228,204.98	499,933.75	307,636.55	230,954.70	618,733.45	444,898.10	229,413.90	691,338.05	483,761.75	236,793.35
Total assets	772,719.50	1,054,252.14	1,269,573.68	745,525.45	1,225,430.48	1,215,502.23	693,907.21	770,435.94	1,927,091.59	671,378.16	840,662.16	2,042,371.68	650,059.66	851,558.54	2,256,345.89
Total assets turnover	0.81	0.32	0.20	0.92	0.26	0.19	0.72	0.40	0.12	0.92	0.53	0.11	1.06	0.57	0.10

Source**:** Financial Statements of ERCS-EDP

Table 3.21 indicates that each birr has been generated less than one birr revenue in all the study years' .the cause for such too low revenue generation might be due to excess investment in current assets.

The total assets turnover of ERCS-EDP of mekelle branch was in increased in2006 by 11 cents from 2005. Decreased in 2007 by 2 cents for 2006 .increased in2008 by2 cents   from 2007 finally increased in 2009 by 14 cents for 2008. Adigrat branch was decreased in 2006 by 6 cents from 2005. Increased in 2007 by 14 cents from 2006. Increased in 2008 by 13 cents from 2007. Finally increased in 2009 by 4 cents from 2008.Axum branch was decreased in 2006 by 1 cent from 2005 decreased in 2007 by 7cents from 2006 decreased in 2008 by 1 cent from 2007 finally decreased in 2009 by 1 cent from 2008.

Hence, the mixed trend of total assets turnover in the years under the study was a result of low sales this shows that the inventory will be taid up.

Fixed Assets turnover: The fixed assets turnover ratio measures the company's effectiveness in generating sales from its investments in plant, property, and equipment.

Fixed Assets turnover =   Sales

Net Fixed assets

Table 3.22

Fixed assets turnover trend of ERCS-EDP   (Amount in Birr)

Particulars	2005			2006			2007			2008			2009		
	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum
Sales of Drug	626,456.25	336,526.45	257,937.45	687,598.25	317,042.85	228,204.98	499,933.75	307,636.55	230,954.70	618,733.45	444,898.10	229,413.90	691,338.05	483,761.75	236,793.35
Fixed assets(net)	15,498.48	14,978.63	401,354.44	9,240.88	16,557.79	378,160.12	3,088.96	14,517.31	354,965.80	645.22	24,438.82	343,733.77	577.24	20,760.66	329,478.67
Fixed assets turnover	40.42	22.47	0.64	74.41	19.15	0.60	161.85	21.19	0.65	958.95	18.20	0.67	1,197.66	23.30	0.72

Source**:** Financial Statements of ERCS-EDP

The fixed assets turnover for mekelle branch was increasing from year to year. The fixed assets turnover of ERCS-EDP of Adigrat was decreasing in2006 by 3.32 birr from 2005. Increasing in 2007 by birr 2.04 from 2006, decreasing in 2008 by birr 2.99 from 2007, finally increased in 2009 by birr 5-10 from 2008 the fixed assets turnover of Axum branch was decreased in 2006 by 4 cents from 2005,increased in 2007 by 5 cents from 2006, increased in 2008 by 7 cents from 2007, increased in 2009 by 5 cents from 2008, this is generally indicates that most of the fixed assets of the company deprecated there is no purchase of new fixed assets this will be affected the profitability of the company .
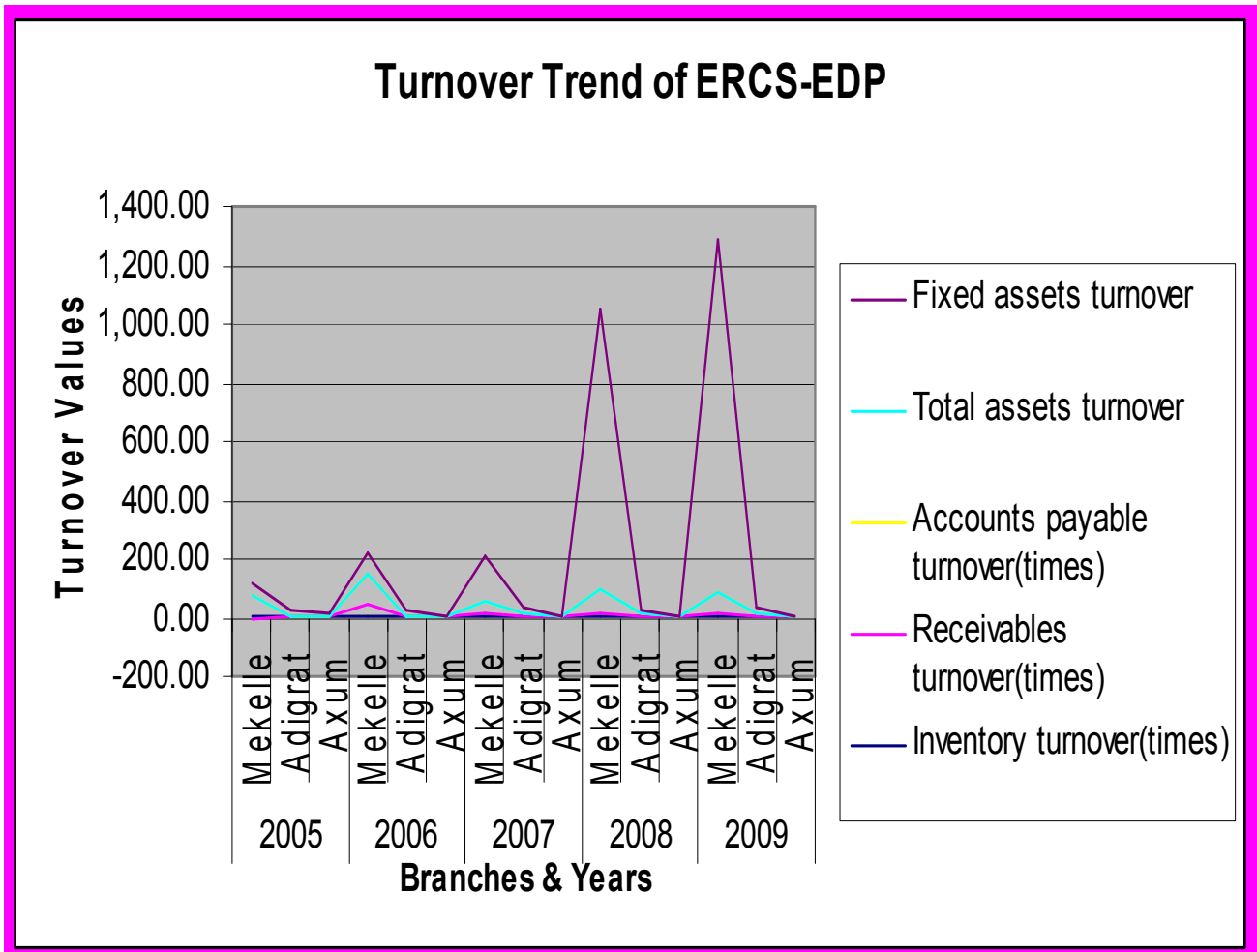

Figure 3.7 Turnover trend of ERCS-ED

Table 3.23

Industrial Average Trend of Return on the Company's Resources   (Figure in times)

Particulars	2005	2006	2007	2008	2009
Inventory turnover(times)	2.68	3.95	2.88	2.85	2.69
Receivables turnover(times)	-1.31	14.44	4.11	3.80	4.16
Accounts payable turnover(times)	29.92	36.95	16.11	29.87	26.46
Total assets turnover	0.44	0.46	0.41	0.52	0.58
Fixed assets turnover	21.18	31.39	61.23	325.84	407.23

Source**:** Financial Statements of ERCS-EDP

As it is shown from Table 3.22 the average inventory turnover fluctuates from year to year at lest less than 4 times a year. The receivables turn over has also almost the same as the above, but in the year 2006 has the highest receivables turnover. Account payable turnover has the highest when you compare with others turnover, so totally the company has long in the case of payables. The total assets turnover was the lowest in each year. The fixed assets turnovers have high almost at all years, so that the company doesn't purchase the fixed assets.

3.2.4 Leverage Ratios:

Leverage ratios measure the ability of the company to meet its long term debt obligations, such as interest payments on debt, the final principal payment on debt, and any other fixed obligations like lease payments.

Debt Ratio: Debt ratio measures the proportion of total assets financed by the company's creditors. This ratio reflects the relative claims of creditors and shareholders against the assets of the company.

Debt Ratio =   Total debt * 100

                          Total assets

Table 3.24

Debt ratio trend of ERCS-EDP (Amount in Birr)

Particulars	2005			2006			2007			2008			2009		
	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum
Total debt	12,108.27	329,587.36	78,520.51	10,520.55	510,583.22	69,079.66	19,545.95	70,364.93	854,560.99	11,877.90	121,111.59	1,002,309.08	15,038.19	140,367.20	1,280,501.59
Total assets	772,719.50	1,054,252.14	1,269,573.68	745,525.45	1,225,430.48	1,215,502.23	693,907.21	770,435.94	1,927,091.59	671,378.16	840,662.16	2,042,371.68	650,059.66	851,558.54	2,256,345.89
Debt ratio (%)	1.57	31.26	6.18	1.41	41.67	5.68	2.82	9.13	44.34	1.77	14.41	49.08	2.31	16.48	56.75

Source**:** Financial Statements of ERCS-EDP

The debt ration of mekelle branch indicates a mixed trend, assets financed by debt capital ranges from about 1.4% in 2006 to 2.82% in 2007 it was declined in 2007 by 1.41% from 2006 it was a declined in 2008 by 1.05% from 2007 finally it was an increasing in 2009 by 0.54% from 2008 . Adigrat sub-branch indicates a mixed trend assets financed by debt capital ranges from about 31.26% in 2005 to 41.67% in 2006. It was declined in 2007 by 32.54% from 2006 it was increasing in 2008 by 5.28% from 2007.it was increased in 2009 by 2.07% from 2008.Axum branch indicates a mixed trend. Assets financed by debt capital ranges from about 6.18% n 2005 to 5.68% in 2006. It was an increasing in 2007 by 38.66% from 2006. It was an increasing in 2008 by 4.74% from 2007. Finally it was an increasing in 2009 by 7.67% from 2008.

Generally the ratio varies from year to year. How ever the mekelle branch has used debts to finance its assets maximum to the extent of 2.82% in all the years under the study. Adigrat branch has used debts to finance its assets maximum to the extent of 41.67% in all the years under the study. Axum branch has used debts to finance its assets maximum to the extent 0f 56.75% in all the years under the study. Even tough there is no commonly accepted standard for the proportion of debt to total assets, especially for mekelle branch is very low, where as Adigrat and Axum branch are using debt to total assets are at good level.

Debt to Equity Ratio: The debt equity ratio indicates the relation ship between the long term funds provided by creditors and those provided by the company's owners. A frequently cited rule of thumb for manufacturing and other non-financial industries is that companies should not finance more than 50% of their capital through external debt.

Debt to Equity Ratio =   Total debt *100

                                                Pharmacy's Capital

Table 3.25

Debt-equity ratio trend of ERCS-EDP   (Amount in Birr)

Particulars	2005			2006			2007			2008			2009		
	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum	Mekelle	Adigrat	Axum
Total debt	12,108.27	329,587.36	78,520.51	10,520.55	510,583.22	69,079.66	19,545.95	70,364.93	854,560.99	11,877.90	121,111.59	1,002,309.08	15,038.19	140,367.20	1,280,501.59
Pharmacy Capital	760,611.23	724,664.79	1,191,053.17	735,004.90	714,847.27	1,146,422.57	674,361.26	700,071.02	1,072,530.60	659,500.26	719,550.58	1,040,062.60	635,021.47	711,191.35	975,844.30
Debt to equity ratio (%)	1.59	45.48	6.59	1.43	71.43	6.03	2.90	10.05	79.68	1.80	16.83	96.37	2.37	19.74	131.22

Source**:** Financial Statements of ERCS-EDP

Table 3.25 Creditors for mekelle provided about 2 cents in 2005 and 1 cents in 2006 in financing from every birr contributed by the capitals this was increased to 3 cents in 2007; the ratio was declined in 2008 to approximately 1 cent but again rose to 2cents in 2009. Creditors of ERCS-EDP for Adigrat provided about 45cents in 2005 and 71cents   in 2006 in financing from every birr contributed by the capitals. This was decreased to 10 cents in 2007. The ratio was   increased in 2008 to approximately 7 cents but again rise to 20

Cents in 2009.Creditors of ERCS-EDP for Axum branch provided about 7 cents in 2005 and 6 cent in 2006 financing from every birr contributed by the capitals. This was increased to 80 cents in 2007. The ratio was increased in 2008 to approximately 17 cents but again rose to 130 cents in 2009.
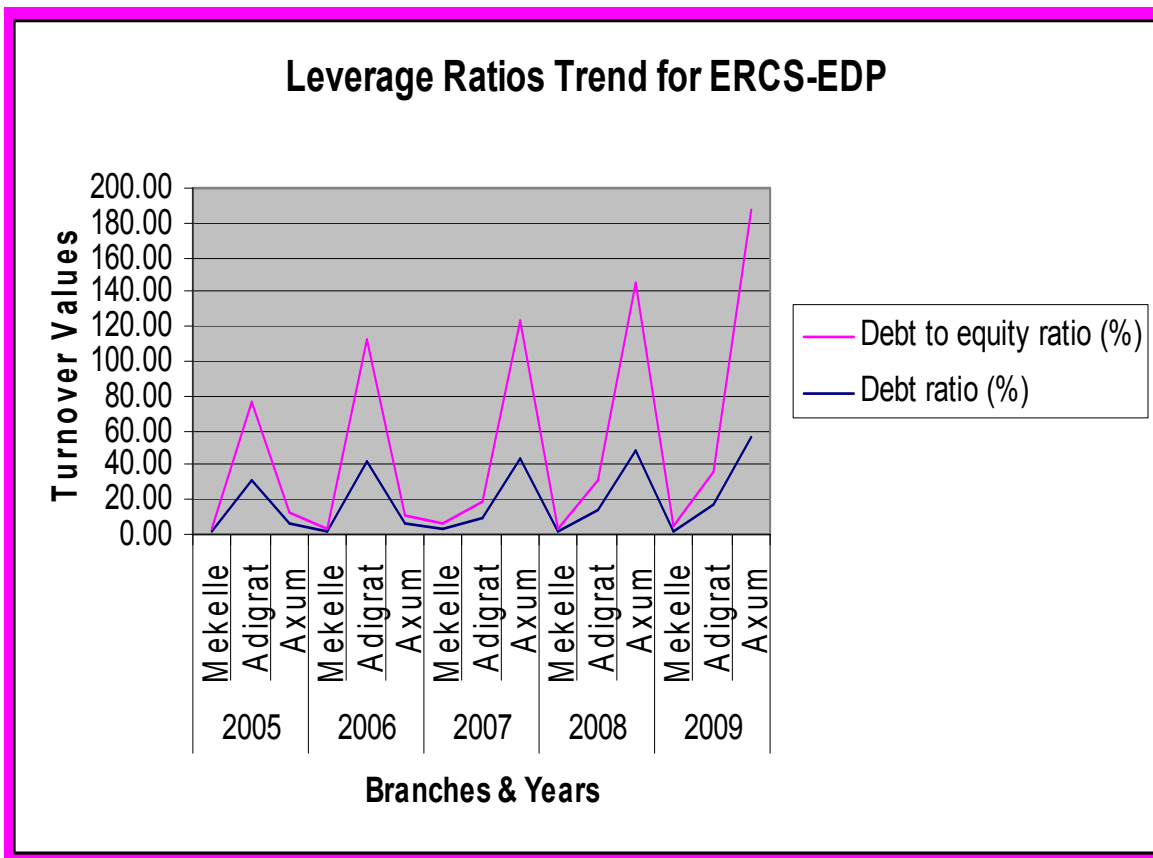

Figure 3.8 Leverage ratios trend of ERCS-EDP

Table 3.26

Industrial Average for ERCS-EDP Leverage Ratios Trend   (Figure in %)

Particulars	2005	2006	2007	2008	2009
Debt ratio (%)	13.00	16.25	18.76	21.75	25.18
Debt to equity ratio (%)	17.89	26.30	30.88	38.33	51.11

Source**:** Financial Statements of ERCS-EDP

As it shows in figure 3.26 the debt ratio and equity ratio was increasing from 2005 to 2009 as it shown in the industrial average for leverage ratio trend.

CHAPTER FOUR

CONCLUSIONS AND RECOMMENDATIONS

Based on the data discussion and analysis, the following conclusions are drawn:

4.1 Conclusions

At this point, the financial analysis has been made in attempting to draw some rough conclusions on the financial performance of ERCS-EDP Tigray Branch. One of the main points to understand about the financial analysis is that all the information that would be conclusive judgment about what is going on in the company is found in the financial statements and interview with the finance people of each branches.

From the brief explanation and illustrations of five years, financial statements of ERCS-EDP have been used to analyze the financial performance and their trend for each branch and year under this study (2005-2009).

➤ From the common size analysis of Income Statement, the researcher concludes that, almost all branches are at net loss that is occurred due to high operating expense and decentralization purchase & distribution of the drugs. This decentralization purchase & distribution may affect the need and capacity of each branch.

➤ The common size analysis of Balance Sheet, Generally the service giving company has expected to invest lager portion of its capital in current assets especially in the form of inventory and receivables. This is because Inventory and receivables are believed that the main sources of revenue for service giving company. There was a growing trend in the current assets of the company at all branches, where as a decreased in the tangible fixed assets to the total assets. This shows that there is no more investment on fixed assets rather than in current assets. Liability and capital of the company generally has shown to all branches was decreasing from year to year, especially for the capital it was on the risk position.

➢ From the ratios analysis, the liquidity ratio (quick ratios, cash ratio & current ratios) of all branches have above the norm; this shows that the companies have a good position when it compared with the standards, but doesn't mean that the firm has well in the profitability. This shows that the ability to pay for the current liability was good.

➢ The profitability ratio (Net profit margin, ROA, ROE, ROCE) of the company should be changed for the purchasing policy from centralization to Decentralization. The organization's net profit margin would be changed from negative to positive due to a change in purchasing policy. Other wise the companies were not at good positions in the profitability ratio. Most of ROA of the company has not effectively managed by the management of the company; this affects the profitability of the company. Almost all companies have shown negative ROE, this shows that instead of return earnings from net income launch to consume from its capital. The positive ROE shows that or measures that the return earned on the capital as an indicator of management's performance so, generally the management of the company does not perform good in ROE. Almost all branches have a negative return on capital employed trend this shows that the company doesn't use log term liabilities. So that the higher the ratio of Return on Capital Employed, the more efficient is the use of capital employed, but the lowest the ratio, the least efficient in use of capital employed. Therefore generally all branches have poor use of return on capital employed. Most of the fixed assets of the company was depreciated, there is no purchase of new fixed assets this will be affected the profitability of the company.

➢ The asset management ratio as some experts agrees that a raid of 6 or 7 times has considered as satisfactory, generally all branches have got less than the standards. This has a negative effect on the liquidity and profitability of the organization. The inventory holding period for the company has almost fluctuated from year to year, but when it comes to the actual every three month brought from head office to each branch. So it was not correct, because all branches have different inventory holding period. The reason for fluctuating in receivables turn over from year to year is that the company does not have any credit standards that would help to increase receivables turn over. This affects the liquidity of the company. This fact is supported by the average collection period of the company. The lengthy collection period of the company was as a result of weak credit

policy. The researcher has identified that the company does not have any specific standard time set for the collection of receivables. Thus the company's liquidity and profitability have adversely been affected. The accounts payable turn over is higher than the receivables turnover. In mekelle & Adigrat branches in all years the accounts payable turn over is higher than the receivables turnover. This indicates that the company was paid to creditors before collecting its receivables. In Axum branch in the year 2005 to 2007 the accounts payable turnover is higher than the receivables turnover while in the year 2008 & 2009 the account receivables turnover is higher than the accounts payable turnover.

➢ In debt ratio the ratio varies from year to year. How ever in mekelle, Adigrat & Axum branches were used debts to finance its assets maximum to the extent of 2.82%, 41.67% & 56.75% respectively in all the years under this study. Even tough there is no commonly accepted standard for the proportion of debt to total assets, especially for mekelle branch is very low, where as Adigrat and Axum branches were used at a good level.

4.2 Recommendations

➢ The researcher recommends that in order to minimize the risk, the management should take action, such as the purchasing procedure i.e., changing the system of purchasing from centralized to decentralize.

➢ The organization should reduce operating expense & cost of drugs as much as possible. The company should also use the long term debt in order to expand the availability of drugs.

➢ The company was no more investment on fixed assets rather than in current assets. The current asset should have to use those drugs which have more demand by the customers.

➢ Capital of the company was shown decreasing from year to year; the organization should avoid the decreasing trend by increasing sales of drugs.

➢ The organization should have fluctuating in receivables turn over from year to year, because of the company does not have any credit standards that would help to increase receivables turn over. So the company has to prepare the credit standard.

➢ The lengthy collection period of the company was as a result of weak credit policy, the organization has to identify the specific standard time set for the collection of receivables.

➢ The inventory holding period for the company has almost fluctuated from year to year, but when it comes to the actual every three month brought from head office to each branch. So it was not correct, because all branches have different inventory holding period. The company's head office should have to serve as their own inventory holding period.

➢ The company should have to consider the credit activities, because the company used that before paying the payables should have to collect the receivables.

➢ Finally the company should have to use long term debts in order to expand their activities.

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APENDIX