Indebtedness analysis of Morrison Supermarket Company

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1. Introduction
2. Description of the Financial Analysis Methodology
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4. Indebtedness Assessment
5. Conclusion
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Annexes
1 Introduction

Generally, people will take an advantage of financial analysis to get a good understanding of a company’s financial condition. We can get the overall information of one company through its financial statements, which contain balance sheet, income statement, and cash flow statement. And for better understanding, we can apply financial ratios to know the profitability, solvency, and activities situation of a company. What’s more, DuPont analysis is preferred to help people decompose the factor. And in this way, managers can adjust the strategies and change the specified factor to improve the condition of the company.

The aim of this thesis is to analyze the indebtedness situation of Morrison Supermarket Company from 2008 to 2012.

We will take a deep look at the financial statements of Morrison Supermarket Company from 2008 to 2012 and use financial ratios to analyze and compare the performances during the selected period.

There are five parts in the thesis. The first part will be introduction, where a clue of the thesis is going to be introduced.

The second part is the theoretical part. In this part, we will introduce several methods of financial analysis, and pay attention to the structure of financial statements through which we can have a good understanding of the financial condition of the company.

The third part is the practical part, where we will apply the methods described in the second part to evaluate the financial condition of Morrison Supermarket. At first, there is a brief introduction about the history of Morrison Supermarket. Then, we will use SWOT method to assess the strengths, weaknesses, opportunities and threats of Morrison Supermarket. Further, we will focus on financial statements by applying common-size analysis. Later, we will
calculate profitability ratios, liquidity ratios, solvency ratios and activity ratios based on the data from financial statements and make the assessment.

The forth part is focus on the solvency analysis about Morrison Supermarket. In this part, we use DuPont method, to decompose the ROE in order find out how the financial leverage influences the ROE to know the solvency about Morrison Supermarket. For the further analysis, the financial leverage is decomposed more. So, can find how the short-term liabilities and long-term liabilities influence the financial leverage. After that, we can find out the final reason drives the change of financial leverage, to have an objective view about the solvency condition about the Morrison Supermarket.

The fifth part is the conclusion about the whole thesis, to conclude the result of the previous outcome, the analysis of the whole analysis process, and give the suggestion for future development.
2 Description of the Financial Analysis Methodology

There are three contents in this part, first of all we will introduce what is financial analysis, and then we will discuss what financial statement is, the last part is the methods of financial analysis. We will introduce three kind of financial analysis: common-size analysis, ratio analysis and pyramidal decomposition and influence quantification method.

2.1 Introduction of financial analysis

Financial analysis is a process of selecting financial data, and use mathematics method to evaluate and explain financial data. Through financial analysis we can evaluate company’s operations, expenditure management, credit policy and credit worthiness, etc. Managers and investors through financial analysis to acquire the financial condition of a company, to judge where are problems of the company and whether it is worth to invest.

The aim of financial analysis is to assessment the company’s present and future financial position. Generally, we focus on three aspects, profitability, solvency and liquidity. Profitability is for company’s ability to get profits; we usually found the data from income statement. Solvency is to measure whether a company has enough assets, to meet its liabilities, and liquidity is the capital that is available for investment and selling to convert cash.

2.2 Financial statements

Source of financial data are from financial statement, they are balance sheet, income statement and cash flow statement. Moreover, these three financial statements are vital for managers and investors. It is the basic information to analyze a company’s financial condition of assets, cash flow, and daily activities.
2.2.1 Balance sheet

Balance sheet is means in a specified period (usually for a year), a company’s financial condition about assets, liabilities and owner’s equity. The relationship between assets, liability and owner’s equity is:

\[
Total\ assets = Liability + Owners’\ equity.
\] (2.1)

It indicates a structure and condition of a company’s assets and liabilities. The structure reflects the characteristics of its production and operation process, is benefit to the managers to analysis the stability of the company.

Usually we divided assets into fixed assets and current assets. Fixed assets also called long-term assets, it include equipment, lands, buildings and so on. Current assets means the assets with higher liquidity, it include cash, inventories, receivables and so on.

Liabilities can also be divided into current liabilities and long-term liabilities. Current liabilities is the maturity which within one year, it include account payables, account expenses and short-term notes, and so on. On the contrary, long-term liability means the liabilities more than 1 year, it is not necessary for the company must pay it timely.

Equity is represents the shareholder’s invest investment, or the claim on the residue assets. It contributes by the people who buy company’s share and company’s profits.

2.2.2 Income statement

Income statement is used to reflect the company’s profits and loss during a certain period (usually a year), through income statement we can analysis the reason why the revenues are increase or decrease, and know the details information about company’s operating costs, make the investment value evaluation.
From income statement, the operating activity and financial activity are two main subtotals were presented.

Operating activities are the activities about daily operating. Operating activities include revenues and cost, which concentrate on sale of products, goods and service, so the operating cost included salaries and wages paid to employees, raw material consumption, administration cost and so on.

Financial activities are revenues and cost concentrate on interest, bonds and stocks, etc. The financial revenues include interest received, dividends from owned securities, etc. The cost include paid for interest and coupons. The sum of operating and financing income is the profits of the company.

2.2.3 Cash flow statement

Cash flow statement is expressed in a fixed period about the cash inflows and outflows condition. In the short term, the cash flow statement can be used to evaluate a company has enough cash to cope with overhead.

Generally, we categorized the activities of cash flow statement into three part, they are cash flow from operating activities, cash flow from investing activities and cash flow from financial activities. Operating activities means cash inflows and outflows from company’s daily activities. Such as, sales of goods, products, services, pay for the inventory, salary and wages payments, etc. Investments activities of outflows include invest in tangible assets and intangible assets, such as equipment, long-term investment in the shares and bonds, and patents, etc. Financial activities of inflows include cash from shares or bonds, and the out flows include pay for dividends, repay credit etc.

From cash flow statement we can know cash condition about the company, and the ability to deal with the short-term liabilities, if a company has more cash and cash equivalents it has
stronger abilities to cover the short-term debts; we can also know the liquidity of the assets, the more cash and cash equivalents it means the liquidity of a company’s assets is better.

2.3 Methods of financial analysis

In this part we will introduce the methods of financial analysis. There are three method of financial analysis, they are common-size analysis, financial ratio analysis, and pyramidal decompositions and influence quantification. Different methods have different characteristic, and applied into different levels of analysis.

2.3.1 Common-size analysis

Common-size analyses are to assessment and compare the financial data of company from different times of period. By using common-size analysis could be much easier to know the trend of the financial data, and it is more clearly to see the proportion of different factors. Managers usually use this method to analysis the trend and find out the major differences, and compare with the whole industry, even predict the future trend of the data. There are two types of common-size analysis: horizontal common-size analysis and vertical common-size analysis.

Horizontal common-size analysis

Horizontal analysis is a common and frequently used financial analysis method. Usually it used for compare the same factor’s change during a long time period, usually use the line chart to show visualized. Compared with just observe the sheet, combine the line chart and horizontal analysis it is easier to see the trend of data for a period. So, we can feel more intuitive the change of trend, and make a better evaluate.
Vertical common-size analysis

Vertical common-size analysis is used for analysis the different factors’ proportion during selected benchmarks, usually applied for histogram. In this way we can easier to see the accounted factors, and relative annual factors, to find the main changes.

2.3.2 Financial ratio analysis

Financial ratio analysis is to compare some important financial data from the same financial statement, and get the result to analyze and evaluate the company’s present and historical financial condition, and forecast the future financial condition of the company. Financial ratio analysis is the most basic financial analysis tools.

Managers and investors use financial ratios analysis to have a better understanding of strengths and weaknesses of a firm, to adjust the strategy or decide whether it is worth to invest. What’s more, ratios can as an important warning indication that reminding you to solve problems advanced.

There are four groups of financial ratios: profitability ratios, liquidity ratios, solvency ratios and activity ratios. From these ratios we can know the most important parts of the company, the ability of get profits, and the ability of pay back the obligations, and efficiency turnover of the company.

a) Profitability ratios

Profitability ratio is to measure a company’s ability to generate earnings and remove the cost and other relative expanse during a period of time. The higher the profitability ratio is the stronger the company’s ability to get profit from invested capital, that the company is more competitiveness among the industry.
Usually there are four types profitability ratios, they are operating profit margin, net profit margin, ROA and ROE.

**Operating Profit margin**

Operating profit margin is measure on the each dollar of sales, how much company can gain. It reflect a situation that ignore the costs and expense of the operating activities, the ability of a company generate money. The higher the ratio is, indicate that the firm has great ability in profitability.

The formula of operating profit margin is:

\[ Operating\text{-}profit\text{margin} = \frac{Operating\text{profit}}{Revenues} \]  \( (2.2) \)

**Net operating profit margin**

Similar to the operating profit margin, the net operating profit margin is also measure how much money a company is actually making. But it more strictly, because it should consider the expenses and costs, such as wages and materials, administrative cost, etc. The high ratio means the revenues are left enough after the fixed costs and variable cost of operating activities, so it is a good financial condition for company.

Net profit margin can be calculated by using the formula,

\[ Net\text{-}operating\text{margin} = \frac{Net\text{operating}\text{profit}}{Revenues} \]  \( (2.3) \)

**ROA**

ROA is also called return on assets. It is measure how much profits can get from one unit of assets. From ROA we can see how efficient the company uses its total assets. The higher ROA means the company has the ability to earn more money with fewer assets, the lower result
means the company maybe generates the profit with its liabilities. So, the higher ROA ratios, the investors are more willing to invest to the company.

*ROA* can be computed by applying the formula,

\[
ROA = \frac{\text{Net profit}}{\text{Assets}}.
\]  

(2.4)

**ROE**

*ROE* is the acronym of return on equity. It can be evaluate how well the company is generate a profit relative to its stockholder have been invested. Because of it consider without liabilities, so, compared with *ROA* it reflects the ability of company use its net assets to get profits. Same as *ROA* the higher the ratio is, indicate a better company ability to generate net profit with net assets.

The formula of *ROE* is:

\[
ROE = \frac{\text{Net profit}}{\text{Equity}}.
\]  

(2.5)

**b) Liquidity ratios**

Liquidity ratios is measure a company’s ability to meet its short-term debts and obligations. In other words is to turn its short-term assets into cash to meet current debts. Generally the high liquidity means the company has strong ability to pay back the short-term debts, and its safety for borrowers, but if the liquidity ratio is too high, means the company does not make the assets efficient. There are three main types of liquidity ratio, they are current ratio, quick ratio and cash ratio.
**Current ratio**

Current ratio is measure whether the current assets can cover the short-term liabilities. The high ratio means the liquidity of assets is good, so the risk for its short-term obligation is less.

Current ratio can be calculated by using the formula:

\[
\text{Current Ratio} = \frac{\text{Current assets}}{\text{Current liabilities}}. \quad (2.6)
\]

**Quick ratio**

Quick ratio measures the company’s short-term liabilities with its most liquid assets, so it is not include inventories. It indicated how much current assets can cover one currency liabilities. The higher ratio is means the less risk for its short-term liabilities, means more unit of current assets can cover one unit liabilities.

Quick ratio can be computed by applying the formula,

\[
\text{Quick Ratio} = \frac{\text{Cash + Short-term marketable investment + Receivables}}{\text{Current liabilities}}. \quad (2.7)
\]

**Cash ratio**

Cash ratio is similar like quick ratio, but cash ratio may reflect more reality about the condition, because the cash ratio does not include receivables. So the cash ratio is the company’s total cash and cash equivalent to cover its current liabilities.

The formula of current ratio is:

\[
\text{Cash Ratio} = \frac{\text{Cash + Short-term marketable investment}}{\text{Current liabilities}}. \quad (2.8)
\]
C) Solvency ratios

Solvency ratio is to measure a company’s ability to meet its long-term liabilities. It is an important symbol of the financial position and operating ability. It is to see whether the company has enough current assets and fixed assets to meet its total debts. Usually the high result means the company is operating risk, and it has the higher possibility to default.

There are four main types of solvency ratio: they are debt-to-assets ratio, debt-to-equity ratio, financial leverage and interest coverage.

Debt-to-assets ratio

Debt-to-assets ratio can reflect how much debts are making up in the total assets, means how many total assets are financed with debts. If the ratio is close to 1, means quite of assets are funded by debts rather equity, so the company put itself at a risk of default. And investors are not willing to invest, so company will have difficult to collect more money.

The formula of debt-to-assets ratio is

\[
Debt\text{-to}\text{-assets ratio} = \frac{Total\ debt}{Total\ assets}.
\]

Debt-to-equity ratio

Debt-to-equity ratio is to measure the relative proportion between equity and debt. It can as an indicator for managers and investors to show that the company has too many debts that the company has risk to default. So it can provide early warning for leaders to adjust the policy of the company. The small ratio means the low degree of capitalization of the company debt, so it has smaller pressure on long-term debt.

Debt-to-assets ratio can be computed by applying the formula:
\[
Debt-to-equity ratio = \frac{Total \ debt}{Equity}
\]  

(2.10)

**Financial leverage**

Financial leverage is the relationship between assets and equity. It measures how well the company finances its assets relative to its equity. From financial leverage ratio we can see the company’s ability to meet its long-term debt, such as interest payments, and lease payment, etc. A high ratio means the company has higher risk to meet its debt with asset.

The formula of financial leverage is:

\[
Financial \ leverage = \frac{Assets}{Equity}
\]  

(2.11)

**Interest coverage**

Interest coverage ratio is measure a company’s profit before interest and tax (EBIT) can pay back its interest payment in the specified period. When the interest coverage is lower than 1, which means the company have its problems on generate enough cash flow to satisfy interest expenses. On the contrary, if the ratio is above 1, which indicate the company’s EBIT is high enough to cover its expenses.

Interest coverage can be calculated by using the formula,

\[
Interest \ coverage = \frac{EBIT}{Interest \ payment}
\]  

(2.12)

d) **Activity Ratio**

Activity ratio is measure how well a company use its assets. In detail, it means the company’s ability to convert its assets into cash or revenues. It indicated a company’s efficiency to
generate revenue in form of cash and sales based on the balance sheet. It is an important reference point to measure how well the managers to manage the company.

Usually there are three main types of activity ratio: they are fixed assets turnover, total assets turnover, and inventory turnover.

**Fixed assets turnover**

Fixed assets turnover is the relationship between revenues and fixed assets. It reflects the company’s turnover on its fixed assets, and measures the utilization efficiency of fixed assets. A high ratio show that the high utilization of fixed assets, the effect of use fixed assets is good.

The formula of fixed assets turnover is:

\[
\text{Fixed asset turnover} = \frac{\text{Revenue}}{\text{Average fixed assets}}. \tag{2.13}
\]

**Total assets turnover**

Total assets turnover is the relationship between revenues and total assets in a specified period. Total assets turnover can as a comprehensive evaluation for evaluate a company’s assets management quality. The faster the turnover rate, it shows the greater total assets turnover, reflect the stronger sales ability.

The formula of fixed assets turnover is:

\[
\text{Total asset turnover} = \frac{\text{Revenue}}{\text{Total assets}}. \tag{2.14}
\]
Inventory turnover

Inventory turnover is the relationship between cost of goods sold and average inventory. It used to reflect the efficiency of inventory turnover, that to measure the inventory footprint is reasonable, improve the efficiency of the use of funds.

Generally speaking, the faster the inventory turnover is, the lower the inventory occupied level is, the stronger the liquidity, so the speed of inventory converted into cash or accounts receivable is faster.

The formula of inventory turnover is:

$$\text{Inventory turnover} = \frac{\text{Cost of goods sold}}{\text{Average inventory}}.$$  (2.15)

2.3.3 Pyramidal decompositions and Influence quantification

Pyramidal decompositions is decomposed a basic ratio into several different factors, to analyze what drives the value of financial ratios changed. Usually we can decompose the basic ratio into several levels, so we can analyze the basic factor level by level. In this way, we can know the details of what drives the ratio change, and which factor has the biggest influence on the basic ratio, so that managers can change the plan to improve the financial condition of the company.

The most typical example of pyramidal decompositions is DuPont analysis. Take ROE for example, as we can see in chart 2.3.1, we can decompose ROE into net profit margin, assets turnover and financial leverage. So, if the ROE changed, we can analysis these three parts, to find out which factor has the biggest influence on the change of ROE.
From chart 2.3.1, it is clearly to see that ROE can be decomposed as net profit margin, assets turnover, and financial leverage. So, if the basic factor ROE changed, we can find the reason from these three factors. Besides, for the further decomposition we can divide financial leverage into $1 / (1-D/A)$, in this way we can analyze how the debt-to-assets ratio influences the financial leverage. For more deeply analyze, total assets can be divided into current liabilities and non-current liabilities. So if the managers want to change the condition of return on equity or financial leverage, they can observe and change the bottom level factor, in order to reach the goals they want.

To analysis which one has the biggest influence on the basic ratio, we should use influence quantification, there are four methods of influence quantification, and they are method of gradual changes, methods of decomposition with surplus, logarithmic decomposition method and functional decomposition method.
Gradual changes methods are used for the decomposition with 3-component ratios, it uses the factors’ absolute change and relative change to calculate which component ratio result the change of basic ratio.

The formula of gradual change method is:

\[
\begin{align*}
\Delta x_{a_1} &= \Delta a_1 \cdot a_{2,0} \cdot a_{3,0} \\
\Delta x_{a_2} &= a_{1,1} \cdot \Delta a_2 \cdot a_{3,0} \\
\Delta x_{a_3} &= a_{1,1} \cdot a_{2,1} \cdot \Delta a_3
\end{align*}
\] (2.16)

The \( \Delta x \) is the absolute change in the basic ratio, and \( a \) is the component ratio, and \( \Delta a \) is the absolute change in the component ratio.

Logarithmic decomposition method is use logarithm to calculate component. The advantage of this method is that we just need one formula for the impact quantification regardless of how many component ratios we have. So if we have more than three component ratios, we can use logarithmic decomposition methods, to order the component ratio.

The formula of logarithmic decomposition method is:

\[
\Delta X_{a_i} = \frac{\ln I_{a_i}}{\ln I_x} \cdot \Delta X.
\] (2.17)

The \( X \) is the basic ratio, and \( \Delta X_{a_i} \) is the absolute change in the basic ratio, the \( I_x = X / X_0 \) is the index of change in basic ratio, and the \( I_{a_i} = a_i / a_0 \) is the index of change in component ratio.
Method of decomposition with surplus is the decomposed factor by surplus of the total increment, *is based on the ratio of the partial indicator’s increment relative to the total increment*.\(^1\)

The formula of decomposition with surplus is:

\[
\Delta x_i = \frac{\Delta a_i}{\sum_i \Delta a_i} \cdot \Delta y. \tag{2.18}
\]

The \(\Delta a_i\) is the absolute change of component ratio, and the \(\Delta y\) is the sum of change of component ratio.

---

3 Financial analysis of Morrison supermarket company

In this part, first of all we will introduce the history and financial condition about William Morrison Company. Then use the SWOT analysis to assessment the company, and through the result of ratio to analysis financial condition about the company. According to this part we can know the basic information about Morrison, and know the condition of three financial statements.

3.1 Brief introduction of the Morrison Supermarket Company

William Morrison is the UK’s fourth largest food retailer, raking 252 in the world and with over 400 stores. The history of the Morrison supermarket is more than 100 years. And it mainly engaged in fresh foods and drugs.

What is the unique is that most of the fresh food of Morrison sells through their own manufacturing facilities, so it guarantee the quality of the food, at the same time it reduce the cost of production. Being “better than ever” is the principle of William Morrison. Make best fresh food, offering outstanding service and being more efficient is also the principle which Morrison insist.

History of the William Morrison supermarket company

The history of the William Morrison is really long. It started in 1899, the Morrison’s originator is an egg and butter merchant decided to develop supermarket retailing. With the rapid development, in 1967, Morrison became a public company. In 1978, it merger Whelan Discount store, another important year for Morrison is 1980, after this year, Morrison started to built fresh food factory, trading as a wholly owned subsidiary of Morrison. At the end of the 20th century, Morrison started going national, the branches are all over the country, such as Scotland, Wales, and the south of England so on.
In 2008, Morrison became the top supermarket in the United Kingdom, and Morrison supply 100% British’s eating meat. And in this year the branches of Morrison reached more than 370 across the UK. What’s more, the customer for Morrison reached around 9 million for every week.

In 2012, Morrison has 91,760 employees, and owned $16,687.4 million assets, compared with 2008 it increase $4828 millions, in addition, form 2008 to 2012 the assets are growing year by year. At the same time, the incomes are also increase, in 2012 the income of Morrison has reached $28,778.50 million, and the profits are $1,027.80 million.

To sum up, William Morrison is the one of leading supermarket in the United Kingdom. In the past few years, Morrison innovate a new way of retail provide the best fresh food. And today, they are trying to innovate new mode service, modern their infrastructure and backroom systems to drive their business. Only in this way, they can meet the demand of the customers in the future.

3.2 SWOT analysis of Morrison Supermarket Company

SWOT analysis is the approach form utilizes the evaluation four different part to analysis a company, which is strength, weakness, opportunity and threaten. From this part we can know a company comprehensive.

The “S” represent for strength which means some internal factors that may affect the goal of the company, such as good reputation, organization, management and so on. As we all know, the Morrison Supermarket is a company which has a very long history, and always trying to offer the freshest product, so the reputation of the company is always good. And compared with other retails Morrison has its own planting base, it can guarantee the quality of the food.
The “W” represents for weakness which means some internal weakness exist in the company. For Morrison the weakness is the supply chain is too long, from product to sell the food, it cost too much vigor to manage this part, so the cost of administration would quite high. At the same time, the high cost of administration is also affect the revenue of the company.

The “O” represents for opportunity, it is an external factors of the company to reach the goals. For Morrison in 2008 it open the e-shop to sell fresh food on the internet. It’s a very good opportunity for Morrison to attractive new customers especially for young people. It is also a new model for Morrison to transfer their traditional sells model to increase the profits. They transfer the food from factor just for home, it also reduce the cost of management and risk of inventories.

The “T” represents for threaten; it is also an external factors of the company to reach the goals. Morrison’s main competitor is not the comprehensiveness supermarket like Carrefour and Wal-Mart is the retail market which is only focus on food like Asda and Sainsbury, they are also the retail supermarket in UK. Especially Asda, is Morrison’s most powerful competitors, like Morrison Asda also provide fresh food to customers at lower price. The difference between Morrison and Asda is 24hours opening supermarket, and it not produce food by themselves but have “a bargain” with suppliers, to get a stable and low price, in this way they can reduce the cost on produce, renting land and transportation, so the price is also very low. What’s more the managers can get more attention on operation. It is an obvious advantage for Morrison.

### 3.3 Financial analysis of Morrison Supermarket Company

In this part we will analysis Morrison Supermarket Company with two different ways, horizontal analysis will be applied on chart 3.1, to observe the trend of financial data; and vertical analysis will be applied on chart 3.2 to analyze the proportion change of financial
data. Through these two methods, we can acquire the basic information from the three financial statements and have a basic knowledge of Morrison Supermarket Company.

### 3.3.1 Common analysis for general information

General information of financial statement is about financial data from balance sheet, income statement and cash flow statement. And this part, we will analysis financial statement by the way of horizontal analysis and vertical analysis, to know the basic information and the trend of data.

**General situation of balance sheet from 2008 to 2012**

The first part is some basic financial information of Morrison Supermarket Company from the balance sheet during 2008 to 2012 period. In this part we will analysis the tendency of the main components of the balance sheet, and analysis the reason causing it. What’s more, we will also analysis the details of the balance sheet, to figure out the trend and make a suggestion for the future.

**Chart 3.1 Total assets, total liabilities and equity**

![Chart 3.1 Total assets, total liabilities and equity](image)
From the Chart 3.1 we can see that, Morrison’s total assets are increasing year by year, and from 2011 to 2012 increased most is £710m. The reason why the total assets are growth steady is that every year Morrison opened new branches store around UK, so the fixed assets are increased year by year. In detail, in 2009 Morrison opened 9 new stores, in 2010 it opened 11 new stores, and until 2011 the new opened store reached 15. So, the increase of fixed assets is the main subjects contribute to the increase part.

At the same time the total liabilities are keep the stable trend during the five years. The increase is due to a combination of increased capital expenditure, strategic investments in growth opportunities in online and manufacturing, increased dividend payments and the initiation of an equity retirement plan. So Morrison borrowed a lot of money to complete the profit. For total equity, it increasing until 2011, but in 2012 it decreased a little.

Chart 3.2 Structure of total assets

From chart 3.2 we can see that, property, plant and equipment make up the main part of the total assets, and it keeps a stable proportion from 2008 to 2012, which indicated that the number of stores is very stable. However, the proportion of cash and cash equivalents is more

\[2\] Wm Morrison Supermarkets PLC (2011/12).
changeable, and in 2009 it has the biggest proportion among the assets. Cash and cash equivalents include cash in hand, cash at bank and bank overdrafts. In 2009, Morrison got a short-term bank loan, so the cash in 2009 cash and cash equivalents increased, as the result the proportions of it also increased.

Chart 3.3 Structure of total liabilities

Chart 3.3 indicated that, creditors is the main part of liabilities from 2008 to 2012, and it belongs to the current assets, so it means that Morrison has a heavily pressure on its short-term liabilities. Another apparent factor is other financial liabilities for long-term debts, the form of other financial liabilities are mainly from the non-current bonds and loan notes. Although the number of other financial liabilities was increased year by year, but the proportion is different during this period, this is because the total liabilities are also increased, but the speed of the increase is different.

**General situation of income statement from 2008 to 2012**

The second part is the information about income condition from operating activities. From the income statement we can learn the business situation about the net income and revenues. By
comparing the detailed data we can know which cost spend the most, so we can try to reduce the cost to improve the net income.

Chart 3.4 Total revenue and total net income

The chart 3.4 show us that the total revenue is increased year by year and the proportion of net income is occupied very little of total revenue. The increase of revenue is due to the Morrison open the e-shop, increases the shop numbers and at the environment of fuel price increased. So people would like to save the spent of fuel to shop on-line, at the same time it attract more young customers. Another benefit for the e-shop is that, Morrison can save amount of money from inventory managements, salaries, administrations and so on. Moreover, some transportation fee should have paid by Morrison, convert to the consumers through e-shop, in this way, it shorten the supply chain and reduce the cost. The increase of fuel drive people would buy more goods when they go to Morrison once.

On the other hand, we can concluded that, the net income just make up very few of the total revenue, which means the cost of operation activities is a huge amount of money for Morrison, and the company should try to figure out more method except e-shop to reduce the cost to increase the ability to get net profits.
From chart 3.5 we can know that the biggest cost for Morrison is cost of good sales, and the proportion of cost of sales are nearly make up 80% of the total costs. So, it is urgent to reduce the cost of sales to improve the net profits. In order to reduce the cost, Morrison through of few methods to solve it, one of the good ways is e-shop to shorten the supply chain, so, it can save the fee for transport to stores.

The basic cost of sales consists of manufacturing, transportation and warehouse. However the store depreciation and store overheads and store based employee costs are also concluded. So we suggested Morrison could reduce the cost from these processes, for example make full use of inventories to reduce the cost of warehouse management fee, use bigger truck to reduce the cost of transportation.

**General situation of Cash Flow Statement from 2008 to 2012**

The third part is the condition of cash flow statement. From this statement we can analysis the condition of three main activities of Morrison, cash of financing conditions, cash of
investment conditions and cash of operating activities conditions to know the cash inflows and cash outflows of the whole company.

Chart 3.6 General information of cash flow statement

From consolidated cash flow statement, we can see that net cash from operating activities is always positive, this means the company’s revenues is always more than its expenses, company is always get profits. But the net cash flow form operating activities is not very sable, which indicated that the cash inflows ot cash outflows is not very stable.

From the cash from investing activities, we can see the condition of purchasing and selling investments. All the number of investing activities is negative, because Morrison invests a lot of new stores and invests some infrastructure equipments to payment for the purchase of the assets.

The most changeable data is cash from financing. In 2008 the data is negative, in 2009 and 2010 the data is positive, but in 2011 it has a sharply decrease. Which means in 2008 the payment of dividends and bonds are more than receives from issuing stocks or bonds. But in
2009 to 2010 it changed, means Morrison reduce the risk of the company, maybe it reduce the payment of dividends and bonds, and separate more money for investment activities.

Chart 3.7 Cash out flows and cash inflows from operating activities

From chart 3.7, we can see that cash generated from operation activities increased year by year. It is a very good condition for company, means Morrison has a very strong abilities to generate profit from operating activities. Besides the interest paid for Morrison is very stable, but the payment for tax increased year by year.

The increase of the tax is due to the tax policy of UK government, they require more in-house tax, in addition, the increase of the land for new stores also contribution to the increase of the tax.

3.3.2 Financial ratio analysis

Financial ratio analysis is a very important and useful analysis method to evaluate a company’s business conditions. In the following content, we will use profitability ratio, liquidity ratio, solvency ratio and activities ratio which have been described above to have a
comprehensive analysis for Morrison’s business condition from 2008 to 2012. Through this part, we can have a deeper understanding of the financial condition for Morrison Supermarket.

**Profitability Ratios**

In this part we will analysis the company’s ability to generate profit. Through operating profit margin, net operating profit margin, ROE, and ROA, we can know the exactly Profitability condition about Morrison. And according to the result of ratios to make the conclusion and give some advice. The formula of these ratios is according to (2.2), (2.3), (2.4), (2.5).

Chart 3.8 Profitability ratio

![Chart 3.8 Profitability ratio](image)

From chart 3.8 we can conclude that the operating profit margin and net operating profit margin are both very stable. It indicated that the profit from operating activities of Morrison is very stable. However, ROE and ROA is more changeable.
From 2008 to 2009 all the lines were decreased, this is because in 2009 the profit after tax decreased 94£m, so it show that the payment for taxes in 2009 was really high is 195£m compared with 58£m for last year. The high taxes is due to in 2008 UK government reduce the rate of Value Added Tax to 15% in order to help boost retail sales during the current economic downturn\(^3\), and in 2009 it regain the tax on previous rate. So, compared with 2008 the tax in 2009 is very high.

ROE line is not very stable from 2008 to 2011, from 2008 to 2009 it has a sharply decreased, it is a very dangerous sign for Morrison, and indicated that company’s ability to get profits exist some problems, and may affect the confidence of investors. The main reasons for the decrease of ROE is also for the big decreased for EAT from 2008 to 2009. From 2010 to 2011 the ROE decreased again, it is due to the increase speed of EAT is slower than the increase of equity in this period. From2010 to 2011 \(EAT\) increased 5.69%, but the equity increased 9.52%, so the result of the ROE decreased in this period.

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\(^{3}\) Wm Morrison Supermarkets PLC （2009/10）.
To sum up, according to S&P Capital IQ, Bloomberg and the Fed we can know that the ROE for the retail supermarket industry is 10.91%, and Morrison is around this level. Besides based on ROI (The Retail Owners Institute) we can see that the industry level of ROA from 2008 to 2012 is 6.72%, in four years Morrison was above this level. So we can see that the profitability for Morrison is higher than the industry, it has the ability to generate profits, but we suggest it can let the tax police has a less influence on the profit.

**Liquidity Ratio**

This sector we will through current ratio and quick ratio to analysis the Morrison’s ability to deal with its short-term liabilities. The formula (2.6), (2.7), (2.8) will be used.

![Chart 3.10 Liquidity Ratio](image)

From chart 3.4 cash ratio and quick ratio has similar trend. From 2008 to 2010 it increased first and in the later period it decreased a lot. The trend of current ratio keeps increase, which indicated that, the increase of current assets if quicker than the increase of current liabilities, so the company has enough liquidity assets to cover its short-term debts.
The reason of the quick ratio increased from 2008 to 2009 due to the big increase for cash, although the receivable decreased, but it’s offset by the increase of cash. The reason why the cash increased nearly 182£m, is due the strong cash generation in this year-with cash from operations increased 28%, and with no bank overdraft so the cash in 2009 increased a lot. However in 2010, cash decreased again, this is because Morrison opened new stores so purchase of property, plant equipment and investment property increased compared with 2009, and taxation paid in 2010 is also increased twice.

From 2008 to 2010, receivable has a sharply decreased. This is because from 2008, the continuing fall in bank interest rates during the adversely impact interest receivable on cash on deposit\(^4\).

In conclusion, Morrison’s ability to deal with its short-term liabilities exist some problems, the cash for Morrison is not stable enough, so we suggest Morrison should increase some short-term investments which has a little higher yield than bank interest, less risk, higher

\(^4\)Wm Morrison Supermarkets PLC (2009/10).
liquidity to reduce the influence for bank interest, but at the same time ensure the liquidity and safety for assets.

**Solvency Ratio**

In this part, we can through debt-to-assets ratio, debt-to-equity ratio and interest coverage ratio to analysis a company’s solvency for long-term liabilities. We will use formula (2.9), (2.10), (2.11).

Chart 3.12 Solvency ratio

From the Chart 3.5 we can see the trend of three ratios, the trend of the debt-to-assets ratio and debt-to-equity is the same, up and down together, but the trend of interest coverage ratio on the opposite way.

From the debt-to-assets line we can see that from 2008 to 2009 the debt-to-assets ratio keeps a stable condition. It implies the liabilities make up in total assets is stabilized and the company’s abilities to pay back the long-term liabilities are stabilized.
Although the total assets is increasing year by year (see the table 3.1), but the total liabilities is also increase, from the chart 3.6 we can see the main part and the main increasing part about the total liabilities is other financial liabilities. There are two reasons about the financial liabilities, the first one is trade and other creditors are stated at fair value, the second is from borrowings, interest-bearing loan and overdrafts for open more new chains bring the pressure of loans.

Chart 3.13 Structure of total liabilities

From these analysis we can concluded that, the total amount of assets and liabilities are both growth, and maintain a relatively stable proportion, although the financial liabilities keep a high level, but the debt-to-assets ratio is very stable, which means the new stores are started to gain profit, so the company have the ability to absorb the external money, and have the ability to make full use of external funds. So, it exist some solvency risk, but not lose the ability to pay back the liabilities.

As for the debt-to-equity, from 2011 to 2012 its increased most its 13.9%, this is because of the total debt in 2012 was increased 733£m reached 4462£m, 19.7% (refer to the table 3.1),
but the equity for 2012 decreased 23£m (refer to table 3.1). Although from 2009 to 2011 both have the trend to increased but the growth speed of the equity is faster than total liabilities, so from 2009 to 2011 the assets to equity is decreased. In generally the condition of Morrison is fine, which indicated that less risk for default, and have potential for collect more money.

Chart 3.14 EBIT and Interest payment

The condition of the interest coverage ratio is optimistic; from 2008 to 2011 it keeps a steady growth. But in 2012 it decreased a little. This is because from 2008 to 2011 the EBIT of the company is increasing, and the interest payment is decreasing. The reasons why the EBIT increasing is due to the planned acceleration in store opening plan, and started get profits. What’s more the fuel price was increasing since 2008, also make great contribution to operating profits, but at same time it also makes customers come to Morrison less. The big decrease of interest payment in 2011 is for the interest paid on bonds dropped £9m following the repayment of €250m Euro bonds in April 2010. To sum up, the interest coverage is always above 1, which indicated the company has enough money to payback interest; the risk of solvency is very low.

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5 Wm Morrison Supermarkets PLC (2011/12)
Activity Ratio

In this part we will through activity ratios to analysis assets efficiency of Morrison supermarket. The formula (2.13), (2.14), (2.15) will be used to calculate the result.

Chart 3.15 Activity Ratio

From chart 3.14 we can see that fixed assets turnover keep the trend of increase, and total assets turnover present a parabola line. What’s more, both total assets turnover and fixed assets turnover do not changed very much. However, the absolute change for inventory turnover from 2008 to 2012 was increased 746%. It is a very big change during this period.
Fixed assets turnover has a sharply increase from 2008 to 2009, this is because of the revenue of from 2008 to 2009 increased 1559£m, and compare with the increase of other years it increased most. This is because from 2008 Morrison opened e-shop, it attract more customers, and the fuel price moved over 1£/ liter, consumers became highly price conscious and shopped around for value. So revenue in 2009 has a very big increase. But from 2009 to 2010 the price of fuel and fresh for shopping online is fade out, so the increase of revenues is smaller than increase of long-term assets so it decreased 18%.

From 2008 to 2010 the total assets turnover have a trend for increase, its 10.3%. It is benefit for the revenue from 2008 to 2010 increased 18.8%. After 2010 it got stable. The inventory turnover keep an increasing trend, which means the effective of using inventories have some problems, maybe the inventory of the Morrison is over than what the customers need.

The inventory turnover, from 2008 to 2010 is decreased 272.5%, but from 2011 to 2012 it increased 545%, this is because from 2008 to 2012 although the cost of goods sold was increased, but the speed of increase was slower and slower, and from 2011 to 2012 the average inventory decreased 8.4%, so finally from 2011 to 2012 the inventory turnover increased. The reason of the decrease of average inventory, is due to Morrison create a new
produce solution: provides advanced, centralized planning and scheduling; order from the sales management system; checks raw material inventory and creates a demand for manufacturing and replenishment stocks from suppliers; and sets hourly schedules for production lines\(^6\).

In summary, the efficient of assets for Morrison is not very well, the increase of fixed assets turnover and inventory turnover indicated that, the liquidity of the assets exist some problems, maybe we can suggest Morrison decrease the number of fixed assets to generate more current assets.

\(^6\)Wm Morrison Supermarkets PLC (2010-2011).
4 Indebtedness assessment of Morrison supermarket company

In this part, we will use DuPont method to analysis the ratio which has been composed in part 2. And the analysis will focus on how the financial leverage influence the debt-to-assets ratio, and to find out which factor has the biggest influence on financial leverage. For the further analysis, the influence from long-term liabilities and short-term liabilities will be analyzed. According to the result, managers can adjust the proportion of the long-term liabilities and short-term liabilities to improve the financial leverage.

4.1 Decomposition of financial leverage

In part 2 we have already introduced that we can compose ROE (see chart 2.3.1) into net operating profit margin, total assets turnover and financial leverage. So we can analyze how the financial leverage affects the ROE, to evaluate the solvency ability for Morrison.

Chart 4.1 The relative change of basic ratio and component ratio

From chart 4.1 we can see that, the line of net operation profit margin and ROE are nearly have the same trend, which means the net operation profit margin has a very close influence
And the line of total assets turnover and financial leverage has less influence on ROE.

Chart 4.2 The component ratio of ROE

Chart 4.3 the impact of component ratio of ROE
Based on the formula (2.16) we can calculate the impact component of ROE. From chart 4.3 we can see that from 2008 to 2009, net operation profit margin has a big negative impact on ROE, and total assets turnover and financial leverage has a few positive impacts on ROE. This means from 2008 to 2009 the negative impact affect of net operating profit margin is the main reason of the decrease of ROE. So from 2008 to 2009 we can suggest Morrison try to increase the net income, to improve the net operating profit margin.

From 2009 to 2010, the net operating profit margin has a positive impact on the ROE, which means maybe the manager adjust the operating strategy, to improve the net income in this period. In fact, the net income from 2009 to 2010 increased 138£m(see chart 3.9), this is benefit for the increasing of customer number and the investment for new retail space, and lower tax rate compared with 2008 to 2009.

After 2010, we can see that net operating profit margin has a less influence on ROE, which is due to the stable trend for operation profit margin after 2010. So we can concluded that managers try to make the net income and revenues more stable, and keeps a stable growth, reduce the influence on tax policy. And we suggested that, Morrison should pay more attention on keeping the stable trend of net income, reduce volatility. Should be increase the profit by attract customers and fresh food, good service, rather than increase the net income by the surprise opportunity.

From chart 4.3 it is clear to see that financial leverage has a very little impact on the ROE. From 2008 to 2009, it has a positive impact on ROE, which is due to the increase of the financial leverage in this period. But from 2009 to 2011, financial leverage has the negative impact on ROE, which indicated that the financial leverage decreased from 2009 to 2010, and shows the increase of liabilities in this two periods is slower than the equity. Although the bigger ROE ratio means the greater profitability for company, but in fact that, if the number of financial leverage is too big would result the heavy obligation pressure. For this condition we suggested that Morrison should control the positive impact of financial, but at the same
time, if the financial leverage has too much negative impact, which means the company’s ability to attract capital from external is not very well.

So, from the chart 4.4, we can see that the best combination is from 2009 to 2010 period. Although financial leverage has negative impact on ROE, but offset the positive impact on ROE, during this period, Morrison still has a strong ability to get profit.

To conclusion, from 2008 to 2012, the positive impact of net profit margin is very unstable, so we suggest Morrison should try to increase the EAT by decrease the cost and have less affected on tax policy, attract more customers to increase the operating profit. On the other hand, Morrison should control the impact from financial leverage, should keep the impact of financial leverage in a proper proportion.

### 4.2 Further decomposition of financial leverage

From part 2, we can know that we can continue to decompose financial leverage have relevance to debt-to-assets ratio. So we can analyze how debt-to-assets ratio has the influence on financial leverage.

Chart 4.4 Financial leverage and Debt-to-assets ratio
It is clear to see that, financial leverage and debt-to-assets are both have the same trend from 2008 to 2012, which indicated that, debt-to-assets ratio has a big influence on financial leverage.

Chart 4.5 The impact of component ratio on financial leverage

From 2008 to 2009, and 2011 to 2012 these two periods, the factor has a positive impact on financial leverage, because in these two periods, debt-to-assets ratio has a trend to increase.

From 2009 to 2011, the factor has the negative impact on financial leverage, which is because of the decrease of debt-to-assets ratio. The decrease of debt-to-assets is due to from 2009 to 2011 the increase speed of assets is faster than the increase of liabilities. Which indicated that during this period, Morrison’s ability to deal with its liabilities become stronger is has more assets to cover the liabilities.

We suggested that, Morrison can keep the condition during this period. After 2012, Morrison should decrease the increase speed of liabilities and keep the speed in a property level. In detail, it is not mean to not get liabilities from the external, it means the increase speed of liabilities should less than the increase speed of assts. Only in this way, Morrison has the
ability to attract more money from investors, at the same time, also has the ability to deal with its liability.

For more details analyze, the debt-to-assets can have a further decompose, specifically, can divide liabilities into long-term debt and short term assets. So, we can see which one has a bigger influence on debt to assets. And managers can adjust the proportion of short-term assets and long-term assets to get a proper financial leverage, to control the number of liabilities.

Chart 4.6 Debt-to-assets, Short-term debt/assets, and Long-term debt/assets

From chart 4.6, we can see that the trend of three lines are nearly the same, which means both of the short-term debts and long-term debts have a big influence on debt to assets ratio. What’s more, both short-term debt-to –assets ratio and long term debt-to –assets ratio is very stable, which indicated that the number of short term debts and long term debts didn’t change a lot.
From chart 4.8, we can see that from 2008 to 2009, both current liability and long-term liabilities have a positive impact on debt-to-assets ratio. This is because from this period, the long-term liabilities increased 19.7%, and the current liabilities increased 9.2%, less than long-term liabilities, so the this period the long-term liabilities has a bigger negative impact on debt-to-assets ratio.
However, from 2009 to 2011, these two periods both long-term liabilities and current liabilities have the negative impact on debt-to-assets ratio. From 2009 to 2010, current liabilities almost have no impact on debt-to-assets ratio, but long-term liabilities have a negative impact on debt-to-assets ratio. This is in this period the increase of speed for current liabilities is close to the previous one. And the long-term liabilities have the trend to decrease from 2009 to 2010, so it has a negative impact on debt-to-assets ratio.

The reason is due to in 2010 the UK Government changed pension policy; announced the increases will be measured in the future, by changing the benchmark index to the Consumer Price Index rather than the Retail Price Index. *Both the Trustees and the Company consulted legal and actuarial advisors to assess the impact of this change on the two schemes and this resulted in the current liabilities of the schemes being reduced by £72m*.

But from 2011 to 2012, both current liabilities and non-current liabilities have a sharply increase, which due to the big positive impact on debt-to-assets ratio. The increase of current liabilities is for the reason of creditors in 2012 increased £111m, therein the trade creditors increased £9m, other taxed and social security payable increased £1m, and other creditors increased £16m, and accruals and deferred income increased £75m.

To sum up, we can see that, after 2011 the liabilities of Morrison increased, so we suggested that both current liabilities and long-term liabilities should be control. In addition, we suggest first of all, it should control the increase of current liabilities, because these liabilities should be paid within one year, so it is really urgent. As for the long-term liabilities, Morrison should control it for a long-term project.

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7 Wm Morrison Supermarkets PLC (2010-2011).
5 Conclusion

The aim of the thesis is to utilize the financial analysis to evaluate the financial condition of Morrison Supermarket Company from 2008 to 2012, especially its solvency abilities. Meanwhile, we predict the future condition, and give the suggestion based on a series analysis.

There are five parts in the thesis. The first part is the introduction of the whole thesis. The second part is the theoretical introduction of financial analysis, which includes common-size analysis, financial ratio analysis and pyramidal decompositions and influence quantification method.

In the third chapter, we introduce the history of Morrison Supermarket Company, and make a SWOT analysis for it, and the comparison against its competitors is included. We can say Morrison has a competitive advantage in supplying more high quality fresh food through producing them itself; however, the disadvantage is that the supply chain is so long that results high cost.

What’s more, we describe the basic financial conditions from its financial statements. From a series of analysis, we find that the assets, liabilities and equity are keeping the trend of increasing. And for the total assets, property, plant and equipment have made up more than half of the total assets from 2008 to 2012, so we can say that the structure of assets is very stable, and the number of stores is increasing year by year. To total liabilities, creditors are the main part of total liabilities. According to the general information of income statement, we can know that the cost of sales is the major part of cost, and in order to increase operating profit, Morrison must control the cost of sales. From general information of cash flow statement, we can see the cash outflow from investment is increasing year by year, which indicates the number of stores is continuously growing. Ratio analysis about Morrison, from profitability ratios analysis we can conclude that the profitability of Morrison is excellent which leads the whole industry, but it would be better if the management can pay more...
attention to the cost. We can find out that Morrison has some problems in dealing with its short term liabilities through the result of the liquidity ratios, especially from 2008 to 2010. From the result of activity ratios, we can see that the condition of activity ratios in Morrison is not satisfied, fixed assets turnover and inventory turnover are both increasing during this period, in other words, Morrison should generate more current assets rather than the fixed assets.

Solvency ratio analysis is the key ratio in third part. From the result of solvency ratios, we can know that the solvency of Morrison is stabilized, which is due to the increase of total assets, but it still should decrease the proportion of total liabilities to total assets, and keep the ability to collect money from external.

The forth part is focusing on the solvency analysis of Morrison Supermarket Company by using DuPont method. In this part we decompose the $ROE$ into three levels. From DuPont analysis we suggest Morrison should control both current liabilities and long-term liabilities, what’s more, to control the current liabilities is more urgent than long-term liabilities, and at the same time Morrison also should keep its ability to attract money from external. And the last part is the conclusion of the whole analysis.
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**List of Abbreviation**

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<th>Abbreviation</th>
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<tr>
<td>A</td>
<td>Assets</td>
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<tr>
<td>EAT</td>
<td>Earning After Tax</td>
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<tr>
<td>EBT</td>
<td>Earning Before Tax</td>
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<td>EBIT</td>
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- I agree that the diploma (bachelor) thesis shall be archived in the electronic form in VSB-TUO’s Central Library and one copy shall be kept by the supervisor of the diploma (bachelor) thesis. I agree that the bibliographic information about the diploma (bachelor) thesis shall be published in VSB-TUO’s information system;

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Ostrava dated ..........25........2014.....

..........................Li Ping.................
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Annex 1: Balance sheet from 2008 to 2012
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Annex 4: Financial ratios
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Annex 1 Balance Sheet

<table>
<thead>
<tr>
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<td><strong>current liabilities</strong></td>
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<td><strong>Total liabilities</strong></td>
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<td>Called-up share capital</td>
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<td>Share premium</td>
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<td>Retained earnings and hedging reserves</td>
<td>1474</td>
<td>1613</td>
<td>2008</td>
<td>2463</td>
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<tr>
<td><strong>Total equity</strong></td>
<td>4378</td>
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<td>5420</td>
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## Annex 2 Income statements

<table>
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<tr>
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<th>2009</th>
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<th>2011</th>
<th>2012</th>
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<tbody>
<tr>
<td><strong>Turnover</strong></td>
<td>12969</td>
<td>14528</td>
<td>15410</td>
<td>16479</td>
<td>17663</td>
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<tr>
<td><strong>Cost of sales</strong></td>
<td>12151</td>
<td>13615</td>
<td>14348</td>
<td>15331</td>
<td>16446</td>
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<tr>
<td><strong>Gross profit</strong></td>
<td>818</td>
<td>913</td>
<td>1062</td>
<td>1148</td>
<td>1217</td>
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<tr>
<td><strong>other operating income</strong></td>
<td>30</td>
<td>37</td>
<td>65</td>
<td>80</td>
<td>86</td>
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<tr>
<td><strong>Administrative expenses</strong></td>
<td>268</td>
<td>281</td>
<td>315</td>
<td>323</td>
<td>329</td>
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<td><strong>losses/profit on property transactions</strong></td>
<td>32</td>
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<td>4</td>
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<tr>
<td><strong>Operating profit before pension credit</strong></td>
<td>612</td>
<td>671</td>
<td>816</td>
<td>904</td>
<td>973</td>
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<tr>
<td><strong>pensions credit</strong></td>
<td>-</td>
<td>-</td>
<td>91</td>
<td>-</td>
<td>-</td>
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<tr>
<td><strong>Operating profit</strong></td>
<td>612</td>
<td>671</td>
<td>907</td>
<td>904</td>
<td>973</td>
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<tr>
<td><strong>Net finance costs</strong></td>
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<td>49</td>
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<td>26</td>
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<tr>
<td><strong>Profit before taxation</strong></td>
<td>612</td>
<td>655</td>
<td>858</td>
<td>874</td>
<td>947</td>
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<td><strong>Taxation</strong></td>
<td>58</td>
<td>195</td>
<td>260</td>
<td>242</td>
<td>257</td>
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<tr>
<td><strong>Profit after taxation</strong></td>
<td>554</td>
<td>460</td>
<td>598</td>
<td>632</td>
<td>690</td>
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Annex 3 Cash flow statements

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<tbody>
<tr>
<td><strong>Cash flows from operating activities</strong></td>
<td></td>
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<tr>
<td>Cash generated from operations</td>
<td>756</td>
<td>964</td>
<td>1004</td>
<td>1141</td>
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<tr>
<td>Interest paid</td>
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<td>-70</td>
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<td>-209</td>
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<td><strong>Net cash inflow from operating activities</strong></td>
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<td>790</td>
<td>735</td>
<td>928</td>
<td>898</td>
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<tr>
<td><strong>Cash flows from investing activities</strong></td>
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<tr>
<td>Interest received</td>
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<td>8</td>
<td>5</td>
<td>6</td>
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<tr>
<td>Investments</td>
<td>-</td>
<td>-</td>
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<td>-</td>
<td>-31</td>
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<tr>
<td>Proceeds from sale of fixed assets</td>
<td>94</td>
<td>22</td>
<td>7</td>
<td>8</td>
<td>4</td>
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<tr>
<td>Purchase of property, plant and equipment</td>
<td>-402</td>
<td>-673</td>
<td>-906</td>
<td>-494</td>
<td>-724</td>
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<tr>
<td>Purchase of intangible assets</td>
<td>-</td>
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<td>-98</td>
<td>-72</td>
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<td>Cash outflow from acquisition of businesses</td>
<td>-</td>
<td>-</td>
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<td>-74</td>
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<td><strong>Net cash outflow from investing activities</strong></td>
<td>-258</td>
<td>-627</td>
<td>-891</td>
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<td>-891</td>
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<td><strong>Cash flows from financing activities</strong></td>
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<td></td>
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<tr>
<td>Purchase of own shares</td>
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<td>-</td>
<td>-368</td>
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<td>Proceeds from issue of ordinary shares</td>
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<td>3</td>
<td>34</td>
<td>16</td>
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<tr>
<td>Shares repurchased for cancellation</td>
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<td>-</td>
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<td>Finance lease principal payment</td>
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<td>New borrowings</td>
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<td>200</td>
<td>25</td>
<td>1102</td>
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<td>Repayment of borrowings</td>
<td>-266</td>
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<td>-154</td>
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<td>Decrease in long term cash on deposit</td>
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<td>74</td>
<td>-</td>
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<td>-</td>
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<td>Dividends paid to equity shareholders</td>
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<td>-131</td>
<td>-159</td>
<td>-220</td>
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<td><strong>Net cash outflow from financing activities</strong></td>
<td>-434</td>
<td>46</td>
<td>74</td>
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Annex 4 Financial Ratios

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<th>2012</th>
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</thead>
<tbody>
<tr>
<td><strong>Profitability Ratio</strong></td>
<td></td>
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<tr>
<td>Operating profit margin</td>
<td>4.70%</td>
<td>4.60%</td>
<td>5.80%</td>
<td>5.50%</td>
<td>5.50%</td>
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<tr>
<td>(Operating profit/Revenue)</td>
<td></td>
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<tr>
<td>Net operating profit margin</td>
<td>4.30%</td>
<td>3.20%</td>
<td>3.80%</td>
<td>3.80%</td>
<td>3.90%</td>
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<tr>
<td>(Net operating profit/Revenue)</td>
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<tr>
<td>ROE</td>
<td>12.65%</td>
<td>10.18%</td>
<td>12.08%</td>
<td>11.66%</td>
<td>12.78%</td>
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<tr>
<td>(Net operating profit/Equity)</td>
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<td></td>
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<tr>
<td>ROA</td>
<td>7.26%</td>
<td>5.59%</td>
<td>6.83%</td>
<td>6.91%</td>
<td>7.00%</td>
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<tr>
<td>(Net operating profit/Assets)</td>
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<tr>
<td><strong>Liquidity Ratio</strong></td>
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<tr>
<td>Current ratio</td>
<td>49.06%</td>
<td>52.62%</td>
<td>50.74%</td>
<td>54.55%</td>
<td>57.40%</td>
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<tr>
<td>(Current assets/Current liabilities)</td>
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<tr>
<td>Quick ratio</td>
<td>15%</td>
<td>22%</td>
<td>14%</td>
<td>13%</td>
<td>13%</td>
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<tr>
<td>(Cash + marketable investment + receivable)/short-term liabilities</td>
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<tr>
<td>Cash ratio</td>
<td>11.98%</td>
<td>20.21%</td>
<td>13.24%</td>
<td>12.94%</td>
<td>12.24%</td>
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<tr>
<td>(Cash + marketable investment)/short-term liabilities</td>
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<td></td>
</tr>
<tr>
<td><strong>Solvency Ratio</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Debt-to-assets ratio</td>
<td>42.67%</td>
<td>45.05%</td>
<td>43.50%</td>
<td>40.76%</td>
<td>45.26%</td>
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<tr>
<td>(Total debt/Total assets)</td>
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<td></td>
<td></td>
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<tr>
<td>Debt-to-equity ratio</td>
<td>74.42%</td>
<td>81.99%</td>
<td>77.01%</td>
<td>68.80%</td>
<td>82.68%</td>
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<tr>
<td>(Total debt/Equity)</td>
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<td></td>
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</tr>
<tr>
<td>Interest coverage</td>
<td>174.42%</td>
<td>181.99%</td>
<td>177.01%</td>
<td>168.80%</td>
<td>182.68%</td>
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<tr>
<td>(EBIT/Interest payment)</td>
<td></td>
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<tr>
<td>Financial leverage</td>
<td>174.42%</td>
<td>181.99%</td>
<td>177.01%</td>
<td>168.80%</td>
<td>182.68%</td>
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<tr>
<td>(Assets/Equity)</td>
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<tr>
<td><strong>Activity Ratio</strong></td>
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<tr>
<td>Fixed assets turnover</td>
<td>172.80%</td>
<td>183.20%</td>
<td>181.40%</td>
<td>184%</td>
<td>185.80%</td>
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<tr>
<td>(Revenue/average fixed assets)</td>
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<tr>
<td>Total assets turnover</td>
<td>170.65%</td>
<td>177.08%</td>
<td>177.74%</td>
<td>180.99%</td>
<td>180.03%</td>
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<tr>
<td>(Revenue/Total assets)</td>
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<tr>
<td>Inventory turnover</td>
<td>3000%</td>
<td>2909%</td>
<td>2728%</td>
<td>3201%</td>
<td>3746%</td>
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<tr>
<td>(Cost of goods sold/average inventory)</td>
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</table>
Annex 5 Computation of the decomposition of ROE

<table>
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<tr>
<th>In factor</th>
<th>To Value</th>
<th>T1 Value</th>
<th>Difference</th>
<th>Index</th>
<th>Absolute influence</th>
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<tr>
<td></td>
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<tr>
<td>2008-2009</td>
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<tr>
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<td></td>
<td></td>
</tr>
<tr>
<td>EAT/Revenue</td>
<td>Revenu e/Total assets</td>
<td>Assets/Equity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.25%</td>
<td>3.19%</td>
<td>170.65%</td>
<td>177.03%</td>
<td>174.42%</td>
<td>191.99%</td>
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<tr>
<td>-1.02%</td>
<td>74.23%</td>
<td>1.43%</td>
<td>103.77%</td>
<td>7.57%</td>
<td>104.34%</td>
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<td>-3.381%</td>
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<td>0.421%</td>
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\[
\frac{1}{1-(1-D/A)} =
\begin{bmatrix}
42.67% & 45.05% \\
2.39% & 105.532%
\end{bmatrix}
\]

Current debts/Assets | Long-term debts/Assets
<table>
<thead>
<tr>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>0.24</td>
<td>0.25</td>
</tr>
<tr>
<td>0.00</td>
<td>1.01</td>
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0.0690% | 0.4150%
<table>
<thead>
<tr>
<th>2009-2010</th>
<th>ROE=EAT/Equity</th>
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<tbody>
<tr>
<td>0.1018</td>
<td>0.1208</td>
</tr>
<tr>
<td>0.01906</td>
<td>1.1873</td>
</tr>
<tr>
<td><strong>1.906%</strong></td>
<td><strong>18.731%</strong></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>EAT/Revenue</th>
<th>Revenue/Total assets</th>
<th>Assets/Equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0316</td>
<td>1.7708</td>
<td>1.8199</td>
</tr>
<tr>
<td>0.0068</td>
<td>0.0065</td>
<td>-0.0499</td>
</tr>
<tr>
<td><strong>2.174%</strong></td>
<td><strong>0.041%</strong></td>
<td><strong>-0.308%</strong></td>
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</tbody>
</table>

(1-D/A) = 45.05% 43.50%
-1.543% 96.565%

Current debts/Assets | -0.308% | Long-term debts/Assets |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>0.25 0.25</td>
<td></td>
<td>0.20 0.19</td>
</tr>
<tr>
<td>0.00 1.00</td>
<td></td>
<td>-0.02 0.93</td>
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<tr>
<td><strong>-0.003%</strong></td>
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<td><strong>-0.3007%</strong></td>
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</table>
## 5/3 (2010-2011)

<table>
<thead>
<tr>
<th>2010-2011</th>
<th>ROE=EAT/Equity</th>
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<tbody>
<tr>
<td></td>
<td>0.1208 0.1166</td>
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<tr>
<td></td>
<td>-0.0042 0.9650</td>
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<tr>
<td></td>
<td>-0.423% -3.499%</td>
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</table>

<table>
<thead>
<tr>
<th>EAT/Revenue</th>
<th>Revenue/Total assets</th>
<th>Assets/Equity</th>
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</thead>
<tbody>
<tr>
<td>0.03341</td>
<td>1.7774 1.8099</td>
<td>1.7701 1.6880</td>
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<tr>
<td>-0.0002</td>
<td>0.9987 0.0325</td>
<td>-0.0820 0.9536471</td>
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<tr>
<td>-0.075%</td>
<td>0.215%</td>
<td>-0.563%</td>
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</tbody>
</table>

\[
1 - (1-D/A) \\
43.50% 40.76%  \\
-2.75% 53.69%  \\
-0.563%  \\
\]

<table>
<thead>
<tr>
<th>Current debts/Assets</th>
<th>Long-term debts/Assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.25 0.23</td>
<td>0.19 0.18</td>
</tr>
<tr>
<td>-0.02 0.93</td>
<td>-0.01 0.95</td>
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<td>-0.362%</td>
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</table>
## 5/4 (2011-2012)

<table>
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<tr>
<th>Year</th>
<th>Current Assets/Current Liabilities</th>
<th>Long-term Liabilities/Total Liabilities</th>
<th>Current Liabilities/Current Assets</th>
<th>Long-term Liabilities/Total Assets</th>
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<tr>
<td>2011</td>
<td>0.23</td>
<td>0.18</td>
<td>0.23</td>
<td>0.945</td>
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<td>2012</td>
<td>0.12%</td>
<td>0.22%</td>
<td>0.12%</td>
<td>0.345%</td>
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### Ratio Analysis

<table>
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<tr>
<th>Metric</th>
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<th>2012</th>
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<tbody>
<tr>
<td>EBIT/E</td>
<td>0.1186</td>
<td>0.1278</td>
</tr>
<tr>
<td>Revenue/Total assets</td>
<td>1.8099</td>
<td>1.8031</td>
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<td>A/E</td>
<td>1.0680</td>
<td>1.8268</td>
</tr>
<tr>
<td>Current Liabilities/Current Assets</td>
<td>1.018573163</td>
<td>-0.0096</td>
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</table>

### Notes
- EBIT/E: Earnings Before Interest and Taxes divided by Equity
- Revenue/Total assets: Revenue divided by Total assets
- A/E: Assets divided by Equity
- Current Liabilities/Current Assets: Current Liabilities divided by Current Assets
- Long-term Liabilities/Total Assets: Long-term Liabilities divided by Total Assets