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Valuation of Royal Unibrew
- A strategic and Financial Analysis

Master's Thesis
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Executive summary:

The purpose of this thesis was to determine the fair value of one Royal Unibrew stock and whether the stock is worth buying, this was done on the basis of a strategic and financial analysis.

Royal Unibrew is a relatively new company in its current form; a product of mergers within the Danish brewing industry. From the get go the company was focused entirely on the Danish market, but as the company grew larger focus shifted towards expansions abroad. The first foreign acquisition took place in 1999, the most recent in 2007 the regions targeted have been Eastern Europe as well as the Caribbean. To be fair the acquisition streak was rather slow until the launch of the 2005 strategy "MACH II" which as the name suggests was about growing and doing so fast.

Royal Unibrew's strategic decisions since the launch of the MACH II strategy in 2005 has established the company on the international scene, and enabled it to claim a share of the growing Eastern European markets. Unfortunately this strategic direction seems to have been driven by exuberance and over-confidence in own capabilities to expand into new markets. It has lead to the situation today were massive write-downs in Poland combined with high leverage has left the company in bad economic shape.

The overarching problem for Royal Unibrew is its debt, with a debt-to-EBITDA ratio of 8.4 Royal Unibrew is far exceeding their own desired capital structure suggesting a debt-to-EBITDA ratio of 3.
Given the overall financial state of Royal Unibrew the abolishment of the Double Up strategy plan and subsequent new strategic goals of focusing on operational efficiency and profitability as well as bringing down debt makes good sense. The company is not in a position to make investments, debt is the major issue currently that must be addressed, and however operations will not contribute sufficiently towards bringing down debt, at least not for the first couple of years. As a result assets must be sold to accelerate the maturing of debt.

Besides dealing with its debt Royal Unibrew is expected to endure problems due to the current financial crisis. Margins will be lower as sales move from the On-trade to Off-trade, demand in Eastern Europe is expected to stagnate at best, but more likely decrease due to the impact of the financial crisis on these economies.

We expect that the decline in sales from Eastern Europe, the Baltics more specifically, will have the effect that total sales will decline; Western European and Malt & Overseas sales are expected to remain relatively stable.

The expected stagnation of market growth across the board will inevitable change the competition parameters in Eastern Europe, from one keeping market share and capitalizing from market growth to a situation of battle for market share. RBREW's strategy of operating several smaller brands has so far been performing somewhat up to expectations we do however expect that this strategy will prove costly during the financial crisis.

Using a calculated β of 0.905, a risk premium of 6.7 and a cost of debt of 400bps over the risk-free rate, the result was a Weighted Average Cost of Capital of 10.61% for RBREW.

Using the WACC to discount the company's forecasted future cash flows and residual income resulted in a *fair value* share price of:

- DKK 251.73 using DCF
- DKK 253.60 using EVA

A multiples sanity check was then applied which enforced our belief that EVA and DCF results are indeed reasonable, thus that time horizons and expected future developments are fair. Having concluded at a fair price for RBREW stock well above the market price of DKK 118.5 the question is whether the stock is actually a sound investment opportunity.

Literature proves that Value stocks historically outperform Growth stocks. Given RBREW's current characteristics of negative P/E, low P/BV as well as a low MVA pr share we find it clear that RBREW is a value stock. Combining these findings we therefore conclude that not only is RBREW currently undervalued by traditional standards (DCF, EVA and multiples), in fact this is also the case based on historical stock market data. Therefore we recommend buying RBREW stock with a 2-5 year holding period in mind.

Table of contents:

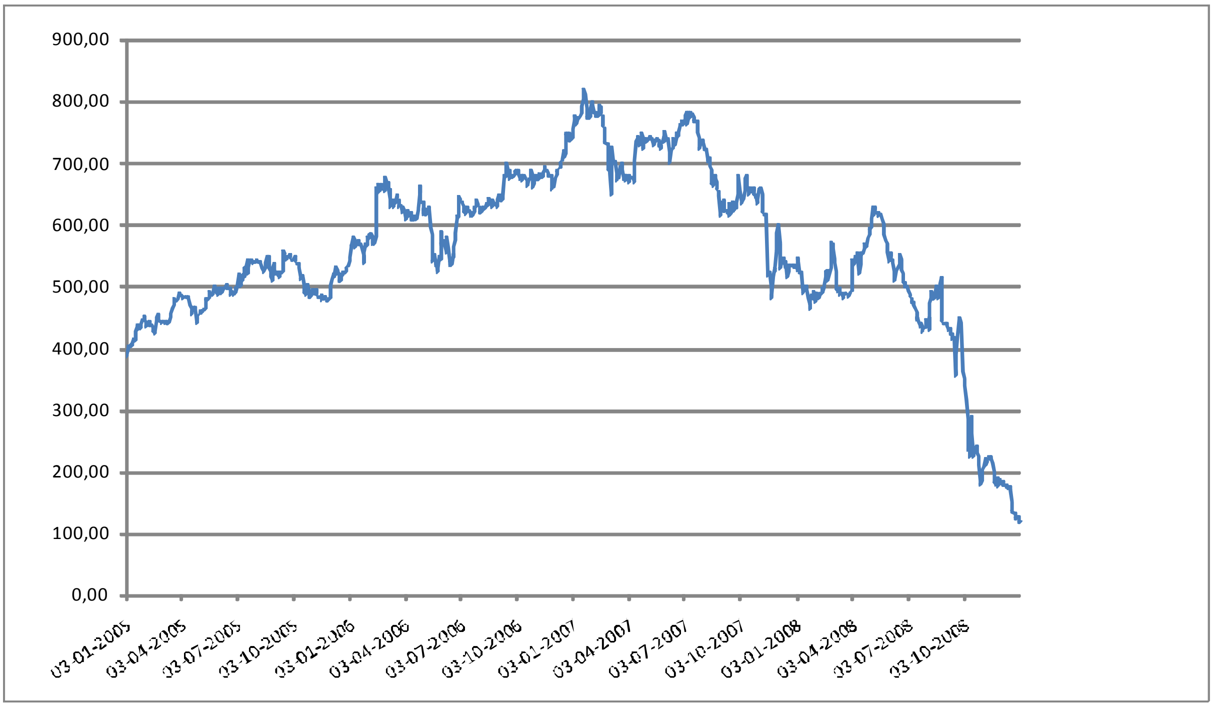
Chapter 1 - Introduction

1.1 Introduction

Bryggerigruppen A/S was founded in 1992 and listed on the Copenhagen Stock Exchange in 1998, in 2001 Bryggerigruppen A/S merged with Albani Bryggerierne A/S and changed the company name to become Royal Unibrew (RBREW) in 2005.

Since the IPO in 1998 Royal Unibrew has experienced some fluctuations in its stock price, with prices ranging between DKK 812 – DKK 118.5 over the past five years, resulting in a market cap range of DKK 663.6m – DKK 4,547.2m.

Figure 1.1 Royal Unibrew's share price development 2005-2009



Source: *Datastream*

2008 was a tough year for stock markets with declines in indexes of 38% (DJI), 39% (S&P 500), 42% (NASDAQ), 44% (OMXC20) and 39% (DAX) in the meantime Royal Unibrew's stock price plummeted a staggering 77.8%.

On February 26th 2009 Royal Unibrew released their earnings statements for 2008 which revealed a bottom line loss of DKK 483 million, included was recognition of DKK 455 million impairment losses on their Polish assets.

As a result the company's share price dropped from DKK 110.5 down to DKK 86 on the day of the announcement and reached a low of DKK 35 in the following weeks.

These developments pose the question of whether the market is overreacting in its pricing of Royal Unibrew stock, more specifically whether Royal Unibrew is priced fairly, or is it in fact undervalued?

Our objective with this thesis is to estimate the fair value of Royal Unibrew as of January 1st 2009. We will do so, on a basis of strategic as well as financial analysis and seek to answer whether Royal Unibrew's stock price reflects the company's fair value and consequently evaluate whether or not the stock presents opportunity for an investor with a medium to long holding period.

1.2 Problem Formulation

The purpose of this thesis is to analyze the following issue:

Is it possible to estimate a fair value of Royal Unibrew through a strategic and financial analysis, based solely on public available information, and can this be done with a result close to market value as of January 1st 2009?

And is the stock worth buying?

In order to estimate the value of RBREW it is necessary to conduct an in-depth analysis of the company, the analysis is composed of two parts: a strategic analysis and a financial analysis. In the strategic analysis we will analyze the following issues:

- What is the overall strategy of RBREW as presented by the company?
- What is the Strength-Weakness profile of RBREW, and what opportunities and threats does it present?
- What is the strategic position and direction of RBREW?

The financial analysis is based on the external accounts published by RBREW in its annual reports from 2005 through 2008. In this analysis RBREW's profitability, liquidity as well as financial and operating risks will be analyzed to answer the following questions:

- Does RBREW have the necessary resources to execute the strategic plan; moreover is the strategic direction in line with RBREW's strengths and weaknesses?
- Does the applied accounting practice present valid and clear basis for analysis, have accounting practices changed during the period?
- How does RBREW compare to peer-group in terms of key ratios?
- Do RBREW's key ratios underpin its strategic direction?

We will value RBREW on the basis of a Discounted Cash Flow analysis and Shareholder Value theory as well as on the basis of the strategic and financial analysis. In relation to our Valuation we wish to determine whether:

- What is shareholder value, and how is it measured?
- Is a theoretical valuation useful in practice?
- What is the estimated theoretical value of RBREW?
- Is there difference between the actual price and the estimated values from theoretical models?
- Is fair value and fair price equal?

Furthermore we will look into what effects the ownership structure imposes on the valuation of RBREW. This should enable us to answer the following question:

- Does RBREW's ownership structure present any issues relating to the stock price?

The choice of strategy has great implications on an investor's evaluation of stock performances, we set out to explore if value investing is in fact a superior strategy and furthermore whether

- RBREW is a value stock?

Finally we will evaluate our findings and answer the most important question facing any potential investor:

- Is the RBREW stock worth buying?

1.3 Outline

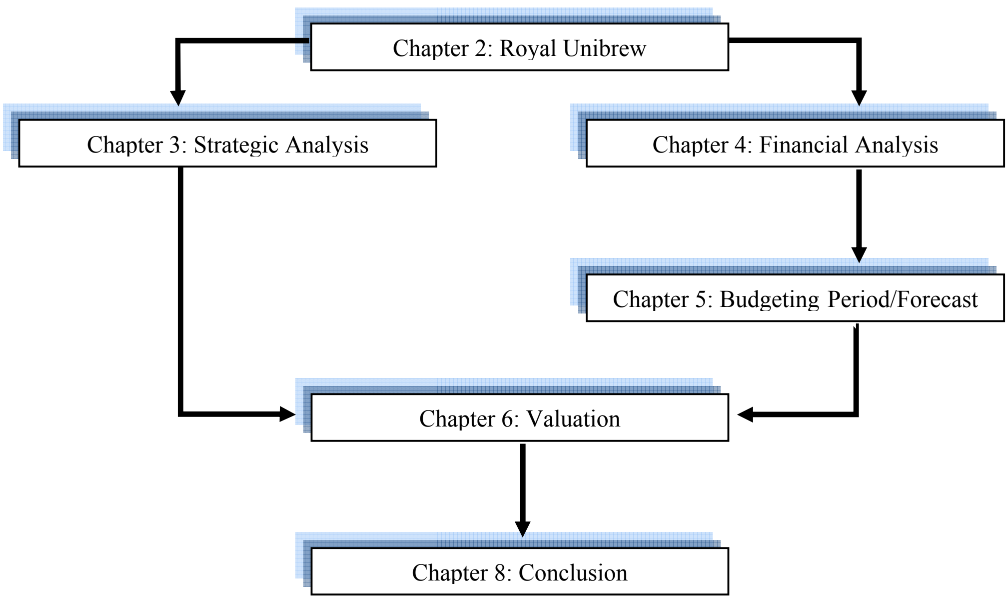
In order to perform a valuation of RBREW in a holistic manner a number of issues must be explored and taken into account where at the same time an extensive analysis of these issues must be prepared.

Choosing the appropriate models and valuation methods is critical for the final result. It is our view that the following are essential aspects of a sound valuation:

- Strategic Analysis
- Financial Statement analysis
- Budgets & Forecasts
- The Valuation

These aspects will be given their own individual chapters within this thesis as figure 1.2 illustrates. As a prelude to the analysis we will introduce RBREW and give an extensive overview of the company.

Figure 1.2 Thesis Outline



Source: *Own Creation*

1.4 Methods and Models

The following is a brief description of the chapters, their purpose and what models will be used. The information gathering will be conducted through secondary sources and RBREW's financial statements.

All analysis will be performed by the authors using the data and information gathered and the relevant models and methods that are generally accepted by both the business and academic community.

1.4.1 Method

The aim of this thesis is to determine the value of a company; we set out to do this from a normal investor's point through publicly available sources. Though the depth of the analysis is likely to exceed the attention paid by the average investor, we undertake the role of what one might call the informed investor determining whether to buy or sell a RBREW stock. The foundation of our analysis will be structured as follows:

Chapter 2: Royal Unibrew

This Chapter will include a historic overview of the company; including an examination of the ownership structure, organizational issues, management and finances as well as the markets in which they operate.

The main purpose of this chapter is to generate an extensive overview of the company, one that will create a basis for the analysis in the next chapter.

Chapter 3: Strategic Analysis

Cash flow estimates and other forecasts must be based on certain parameters, for them to be reliable a sound strategic analysis must be carried out.[1] The strategic analysis will be divided into two categories, the company's internal and external environment.

Chapter 4: Financial Statement Analysis

In this chapter we will evaluate RBREW's past performance by analyzing their annual reports and compare their key results and ratios with a peer group.

In our analysis RBREW's peer group consists of Carlsberg and Harboe, those are the companies most comparable to RBREW as other international players are far too big to compare and operate in different markets.

[1] Brealy *et al,* 2006

Other comparable companies in Denmark do not share RBREW's characteristics due to their size. A brief examination of RBREW's accounting policies will also be conducted in order to determine whether any significant changes that might influence the results have been made.

Chapter 5: Budgets and forecasts

In this chapter we will generate estimations on the future prospects of RBREW and what their cash flow will look like for the period. The foundation for these forecasts will be the items already discussed in the preceding chapters.

Chapter 6: Valuation

This will be the 'essence' of the thesis where we will value the company given the information gathered and generated in the previous chapters. We will use three models for this purpose, namely the:

- Discounted Cash Flow (DCF) model
- Economic Value Added (EVA) model
- Multiple analysis based on peer-group

Before these models are used we need to determine RBREW's cost of capital, i.e. the company's Weighted Average Cost of Capital (WACC). When using the models we will perform a sensitivity- and scenario analysis to determine how changes in certain variables will influence the company's value.

Having the valuation of fair value (from DCF & EVA) and fair price (from multiples) in place, we wish to determine whether the stock is worth buying. To do so we will identify the features of stocks that have consistently beaten the market during the past century, and put RBREW's numbers to the test to see if RBREW is worth buying.

Chapter 7: Conclusion

Main conclusions of the research will be presented and discussed with regards to the issues raised in the problem formulation.

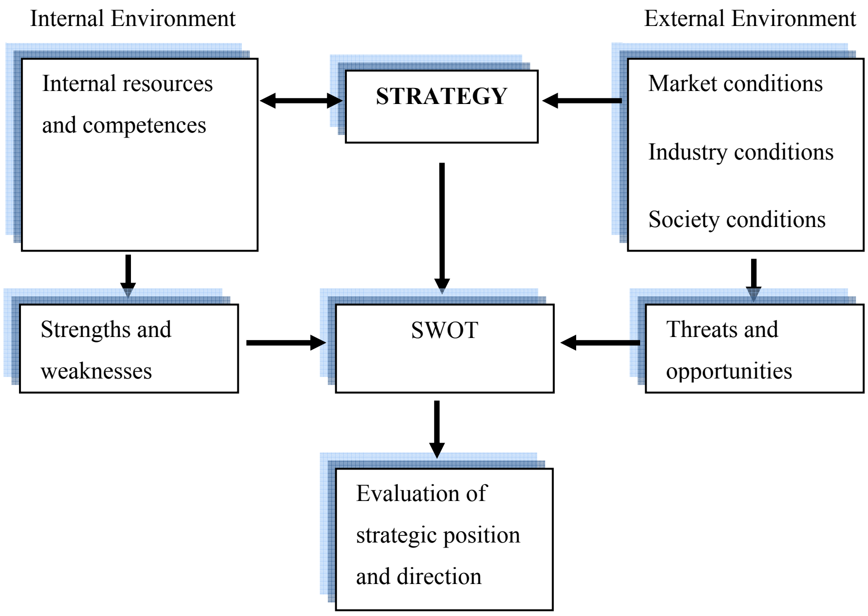
Chapter 8: Perspective

The purpose of the perspective is to expand the project and provide new perspectives on the work and results. Moreover how the applied analysis can be expanded on to other companies and industries.

1.4.2 Models

In order to provide structure to the methodology outlined above in best possible manner a wide array of models will be used; figure 1.3 illustrates the anatomy of the strategic analysis and following it is a brief description of the models that will be used in the strategic analysis and in the valuation.

Figure 1.3 Strategic framework



Source: *Elling et al, 1998*

<u>The Internal Environment</u>

The purpose of this analysis is to determine the company's strengths and weaknesses.

The Boston Consulting Group (BCG) Matrix

Here we will map the markets in which RBREW is competing with their existing products. The BCG will assist us in estimating the potential of RBREW's product portfolio.

Value Chain

Porter's Value Chain model serves the purpose of identifying resources and capabilities inside the company, in order to identify cost drivers and organizational efficiency. The objective is to single out primary and supporting activities in order to assess to what extent primary activities are exploited, but also whether potential linkages between activities are being put to use.

Ansoff's Product/Market Grid

This model helps us to determine the growth potential of RBREW in addition to taking a hindsight look at the company and how their existing - and past growth strategies can be characterized. This will assist in the evaluation of RBREW's existing strategy.

<u>The External environment</u>

The purpose of the external analysis is to determine what the opportunities are for RBREW and what might impact the company negatively (threats).

Porter's 5 Forces

This is where we go into depths of the industry dynamics that ultimately influence industry profitability and at the same time the company. The assumption here will be that the industry is homogenous in the markets RBREW operates and can therefore be profiled as a single market.

PESTEL

The PESTEL framework will be used to determine which factors in the macro-environment (will) have on RBREWs financial performance and growth.

SWOT

Finally, we will compile the results from the analysis above into a SWOT and reflect on the key findings, which will function as a conclusion on chapter 2.

<u>Valuation</u>

Discounted Cash Flow (DCF) model

The DCF model will be used for discounting the projected Free Cash Flow to determine their present values and thus determining the price of the price of RBREW's shares.

Economic Value Added (EVA) model

The EVA model builds on similar present value principles as the DCF model; however, this model requires a more vigorous analysis and decomposition of a company's financials.

Multiple Analysis based on peer-group

This is often referred to as the 'quick and dirty' method where certain ratios are determined, often with regards to industry averages, to value a company's share. A number of parameters will have to be determined before applying these models (especially DCF and EVA), to do so the following models will be used.

The Capital Asset Pricing Model (CAPM)

This model helps to determine the required rate of return on the company's stock for an investor.

The Weighted Average Cost of Capital (WACC)

This model incorporates the CAPM calculations together with the company's cost of debt and determines the discount factor, given the capital structure, to use in DCF and EVA.

1.5 Criticism of Sources

Relying on information published by the company in question and other data gathered by secondary sources contains some caveats and must therefore be taken at an arm's length. However, being a publicly traded company entails that the company has to obey the laws and regulations set by the government and the clearinghouse and therefore the information is to be considered reliable, under the assumption that these regulations are indeed effective.

Much of the data and other information will be gathered from external sources that are not in any way tied to the brewing industry and should therefore be free of bias, however, much of it is based on estimations and in the form of forecasts and can therefore not be regarded as 100% accurate. That being said, it is sometimes necessary to rely on information from industry related sources which should be analyzed in a critical manner.

1.6 Limitations

As this is a valuation of RBREW and not a consulting type project no suggestion on future strategy improvements will be outlined. The sole purpose of the strategic analysis is to clarify RBREW's strategic position, its direction and RBREW's ability to execute their strategy, all with the purpose of ensuring a solid background on basis of which to assess future cash flows.

We live in a dynamic environment and as this thesis is written over several months some of the relevant information and data might develop and change during the writing process. For practical reasons all data published after the release of the 2008 annual report will not be included.

There are several models for measuring Shareholder Value, in this thesis we will rely solely on the Economic Value Added (EVA) model by Stern Stewart. This thesis will not discuss other Shareholder Value models and/or theorems nor will it discuss pros and cons of these.

Revenues from non-brewery related activities will not be analyzed separately as we do not consider them to be core activities, hereunder sale of buildings and other special items. Malt & Overseas Markets' geographical dispersion ranging from UK and USA to the Caribbean and Africa combined with its relatively small contribution to RBREW's total revenue. Therefore this market will only receive detailed attention in the Porter's Five Forces.

Chapter 2 – Royal Unibrew's History

2.1 History

What we today know as Royal Unibrew started in October of 1976 when the three Danish breweries Thor, Ceres and the today seized Urban merged into the company Jyske Bryggerier A/S. The primary background for the merger was a common acknowledgement that competition within the industry was increasing, both in terms of production as well as sales.

In 1989 Jyske Bryggerier A/S merged with Danish brewery Faxe, the main reason for this merger was yet again that of increased competition within the industry. The merger brought about a new name Brygerierne Faxe Jyske A/S, later in 1992 the name was changed to Bryggerigruppen A/S. Bryggerigruppen A/S was listed on the Copenhagen Stock Exchange in April of 1998[2].

In 1999 Bryggerigruppen A/S bought its first overseas based brewery, the Lithuanian Tauras brewery, the Lithuanian portfolio was expanded the following year through the acquisition of Kalnapilio-Tauro Grupe. 2000 also brought about the acquisition of Danish brewery Maribo Bryghus.

The following year 2001 Bryggerigruppen A/S merged with Danish brewery Albani, and in 2005 the company was renamed Royal Unibrew, as it is today. Following a change in strategy of Royal Unibrew in 2003, the V8 strategy plan, Royal Unibrew accelerated its organic growth abroad through acquisitions of CIDO (a Latvian Juice and Soda producer) in 2004, Lacplesa Alus (Latvian Brewery) and Brok-Strzelec (Polish Brewery) both in 2005.

In 2006 Breweries in Antigua and Barbados was acquired, primarily to enter the Carribean Malt-drink market. The most recent round of acquisitions was in 2007 with the acquisitions of Polish Brewery Lomza, Latvian brewery Livu Alus and a brewery in St. Vincent[3].

[2] Bryggerigruppen, IPO Prospect, P. 17
[3] www.royalunibrew.com

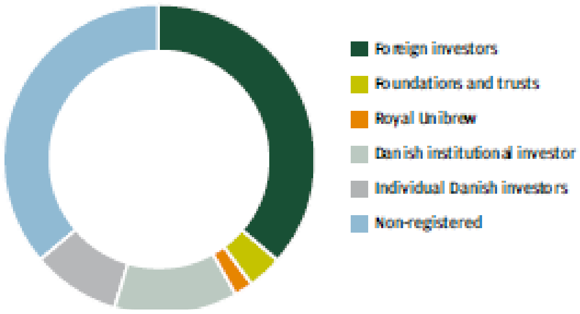
2.2 Ownership

2.2.1 Ownership Structure

Royal Unibrew is owned by a mixture of investors with diverse horizons and their reasons for investing in the company can also differ a great deal. There is only one class of shares in the company and thus no shares carry any special rights over others.[4] The different owners are grouped as follows and the division of the ownership is depicted in figure 2.1[5]:

- Foreign investors
- Danish institutional investors
- Foundations and trusts
- Individual Danish investors
- Non-registered
- Royal Unibrew

Figure 2.1 Ownership Structure by Type



***Source**: Royal Unibrew Annual Report 2008*

A number of these investor groups have traditional and predefined roles as investors; it might therefore be possible to determine their investment strategy and the effect it might have on the trading of the company's shares. Some of these groups' strategy can be analyzed through their positions in sectors, countries and their 'track record' while others can be difficult to decipher due to their 'aversion' to release information on themselves.

Another factor that has to be determined with respect to the different owners is how involved they want to be in the company, i.e. do they want to take part in the overall strategy creation or do they tend to be passive in the companies they invest in.

2.2.2 Owner Profiles

When profiling the owners of RBREW the authors have decided to give special attention to the largest shareholder in the company, not merely due to the size of their holding but more due to their current situation.

[4] http://www.royalunibrew.com/default.aspx?ID=1722 Articles of Association #6 – Retrieved March 3rd, 2009
[5] 2008 Annual Report

Almost half of the shares in RBREW are concentrated on five investors; they differ in their ownership engagements and likewise are their strategies and horizons. Together these shareholders own 47.79% share of the company. These five investors and their respective holdings are[6]:

- Stodir – 20.46%
- Artio International Equity Fund – 11.18%
- ATP – 5.95%
- LD F.m.b.a. – 5.77%
- KAS Depository Trust Company as nominee – 5.00%

The remaining 52.21% are dispersed between shareholders with less than 5% stake in the company and since only those with shareholdings of 5% or more are required by law[7] to give public notice of their holdings their identity can be difficult to determine.

The largest individual owner is Stodir,[8] formerly FL Group, an Icelandic holding company with core focus on investments in financial, insurance, property and retail and was until recently listed on the Icelandic stock exchange (a part of NASDAQ*OMX*).

"*The Company is a long-term strategic investor when it comes to the core assets. Stodir supports the management teams and assists in creating a good platform for further development and growth.*"[9]

Stodir acquired their first stake of 11% in the company in February 2006 and by August 2007 their holdings had risen to 20.46%.[10] It can be postulated that the investment in RBREW had the purpose of also gaining more influence in the company as the then CEO of Stodir (then FL Group) had not hidden the fact that he saw great potential for mergers involving RBREW.[11]

[6] http://www.royalunibrew.com/Default.aspx?ID=1028 - retrieved February 23rd , 2009
[7] http://www.eogs.dk/graphics/selskaber/AS_en.html - section 28a - retrieved February 24th, 2009
[8] http://flgroup.is/ - retrieved February 18th, 2009
[9] http://flgroup.is/#/About-Stodir - retrieved February 18th, 2009
[10] http://borsen.dk/investor/nyhed/115316/ - retrieved February 18th, 2009
[11] http://borsen.dk/investor/nyhed/103363/ and http://borsen.dk/investor/nyhed/105317/

Stodir was originally an airline company until it became FL Group in 2005 and gradually became an investment company focused on the travel industry, owning large share posts in e.g. American Airlines and EasyJet.[12]

Stodir were listed on the Icelandic Stock Exchange until in June 6th 2009 when they were delisted. Before being delisted the company began to experience extreme losses on their positions and in the financial year of 2007 they reported losses of EUR 694.5 million,[13] and when one of their largest investments, Glitnir Bank, was taken over by the Icelandic government, Stodir was forced into administration where it remains at this point. The effect these troubles can have on RBREW's shares are unknown, it can though be mentioned that they dropped dramatically when the financial troubles of Stodir surfaced in late 2007.[14]

The second largest owner is Artio International Equity Fund, formerly known as Julius Baer Holding Ltd, a wealth management company based in Switzerland and is listed on the SIX Swiss Exchange and concentrates on private banking and asset management for private- and institutional investors.[15]

RBREW's third largest shareholder is ATP, a Danish pension fund that provides pension coverage for the vast majority of Danes. The objective of their investments is best described on the company website:

"ATP's investment activities focus on generating a return that is high enough to preserve the long-term purchasing power of pensions."[16]

Their supervisory board prescribes the allocation of funds and the composition of the investment portfolio and ATP exercises their voting rights in all Danish companies that they invest in, however, they do state in their Policy on Corporate Governance[17] that they normally support the supervisory boards of the respective companies. It can therefore be understood that they do not seek real influence on a company's strategy or day-to-day operations.

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[12] http://is.wikipedia.org/wiki/Sto%C3%B0ir – retrieved February 19th, 2009
[13] http://www.flgroup.is/#/Investor-and-Media-center/Publication-Archive Q4 2007 Press release
[14] http://borsen.dk/investor/nyhed/121782/
[15] http://www.juliusbaer.com/global/en/Pages/default.aspx - retrieved February 18th, 2009
[16] http://www.atp.dk/X5/wps/wcm/connect/ATP/atp.com/index/investering/This_is_how_we_do/Investments
[17] http://www.atp.dk/X5/wps/wcm/connect/f66c3e004cef6fe4a086eafc2ffb990a/ATP_Aktiv_ejerskab_21012009_UK.pdf?MOD=AJPERES&CACHEID=f66c3e004cef6fe4a086eafc2ffb990a

LD F.m.b.a. is RBREW's fourth largest owner; it was created as a subsidiary of LD in January 2008 where parts of the asset portfolio of the different divisions of LD were consolidated. Much like ATP, LD is a pension fund that focuses on long term investments; however, the original purpose of LD which was established by the Danish Parliament in the 1970s was to manage the so-called 'frozen cost-of-living' allowances.

These allowances were established to offset the imbalance created by inflation over wages and were to be paid out to employees; it was however decided to change the procedure of these payments in such a way that instead of paying them out on a rolling basis, it would become a supplementary lump sum upon retirement.[18] In 2004 the government granted LD the license to manage the assets of other pension funds.

KAS Depository Trust Company acts as nominee for the fifth largest share of RBREW. Apart from what can be derived from the name, not much is known about this investor, it can only be speculated that they are either a nominee for one large shareholder or a part of an investment fund that they offer to their clients.

2.2.3 Changes in Ownership

At this point the authors would like to point out that the holdings discussed above changed significantly between February 18th and February 23rd, before the change Stodir owned 25.5% of the company's shares whereas RBREW itself owned 6.95%, moreover, ATP and LD F.m.b.a.'s shareholdings have increased slightly.

It can therefore be concluded that during this period nearly 10.1% of the company's shares changed hands. Taking this change in ownership and comparing it to the changes since 2005 it must be viewed as significant, since 2005 the major ownership shifts have been that Stodir increased their shareholdings, LD was in and then out (and then in again). Furthermore, a firm called BK & Trust Co. owned 5.43% in 2006 and lastly; RBREW themselves were a large shareholder themselves as described above.[19]

[18] http://ld.dk/Default.aspx?ID=792
[19] Royal Unibrew Annual Reports 2005-2006-2007 and Company announcement dated February 23rd, 2009

Taking that into consideration it is apparent that before this change the majority share of the company was owned by six large shareholders whereas the minority holdings were dispersed. This can in some ways be seen as a change in the balance of power between large and small shareholders. However, RBREW's articles of association[20] contain a restriction saying that no single shareholder or a group of shareholders can vote for more than 10% of total votes and thus preventing that any single shareholder or a group will take over control of the company.

A potential downside to the 10% voting cap is the notion that it might limit active ownership in the company and thus creating a *cartè blanche* for management. More specifically large investors could be deferred from engaging in thorough discussions with top-management, as small investors do not have the power to effectively challenge top-management the voting cap can potentially create a power vacuum for management which is undesireable for shareholders as a perfect alignment of interest between owners and management is unlikely, and thereby leaving room for potential agency issues.

2.3 Management

In order to understand RBREW as a company better it is prudent to establish an overview of the company's inner functions and what drives the company's performance internally.

2.3.1 Board structure

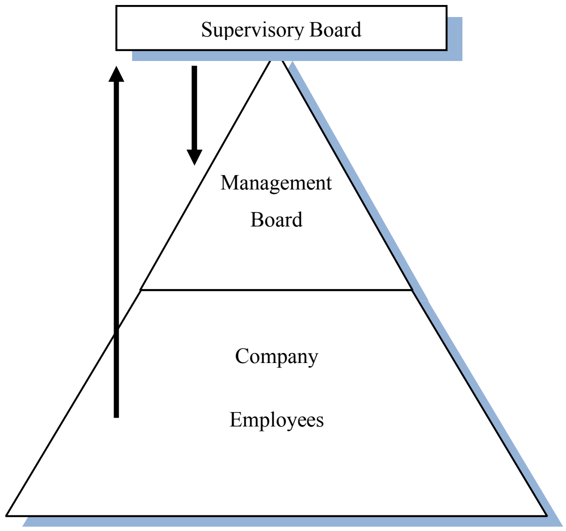
Royal Unibrew's management structure follows the two-tiered board system like the rest of Scandinavia, that is having a consisting of a Supervisory board and a Management board,[21] in RBREW the management board is called executive board. In the two-tier system, see figure 2.2, the supervisory board is elected by the shareholders and these board members are typically non-executive directors, this supervisory board then selects the executives that will sit in the management committee.

In addition to the board members elected by the shareholders the Supervisory board also contains members elected by the employees of the company, this is in accordance with the traditional Scandinavian model.

[20] Royal Unibrew Annual Report 2007
[21] Thomsen, 2008

The nine person (thereof three elected by employees) supervisory board's tasks are to evaluate the work performed by the executive board, overall strategic management along with financial and managerial supervision of the company. The members of the executive board are responsible for the operations and results of their respective divisions.

Figure 2.2 Board Structure



***Source**: Thomsen, 2008*

On September 29th 2008 RBREW announced that a new managing director, Henrik Brandt, had been appointed to replace Poul Møller.[22] This change in top management was the result of disappointing earnings and occurred at the same time as the management announced that they were lowering their expectations for 2008 significantly.[23]

2.3.2 Remuneration

Supervisory board members are remunerated on a flat salary basis, that is, they are not rewarded according to the company's performance, e.g. share options or bonuses. Members of the executive board are however on partially incentive based salary, that is, there are share options and bonus pay systems in place; their income is thus dependant on the company's performance. What is not known by the authors is how these incentive programs are comprised, that is, how much is based on financial results and how large a role other measures than financial play and thus what really drives management.

2.4 Products

Royal Unibrew's products can be divided into three groups: beer, soda and malt-drinks, with beer being the major contributor. In Denmark the primary products within beer are: Ceres Pilsner, Ceres Royal, Faxe Premium, Thor pilsner, Maribo Pilsner, Albani Pilsner and Odense Pilsner, in addition to these self- owned labels Royal Unibrew produces Heineken under license in Denmark. In terms of export Royal Unibrew focuses on the Faxe and Ceres brands.

[22] Company announcement No 01/2009 23 February 2009
[23] http://www.business.dk/article/20080929/nyhedsoversigt/809290383/

The sale of soda products is mainly confined to the Danish and Baltic markets; the products can be divided into self-owned and licensed products. The self-owned products include: Faxe Kondi, Jolly Cola, Egekilde and Nikoline. The under license products include: Pepsi, 7up and Lipton Ice Tea. Within Malt-drinks Royal unibrew's labels are: Vitamalt, Supermalt and Powermalt[24].

A few RBREW's brands have been singled out as Strategic Brands in different markets (Double Up strategy):[25]

- Royal Beer in Denmark
- Kalnapilis Beer in Lithuania
- CIDO juice, still water and soft drink in the Baltic countries
- Ceres Strong Ale (beer) in Italy
- Vitamalt (maltdrink) i Africa, Caribbean and UK
- Faxe Beer International

These are the brands that RBREW relies on as their growth drivers in the respective markets.

2.5 Markets

2.5.1 Geography

Royal Unibrew exports to and operates in approximately 65 countries and on their website they list those markets and divide them up into groups (According to the Double Up strategy, more on that later in the chapter) called Premier League, Strategic Markets and Other Markets.[26] The division into these different markets is done according to estimated annual organic growth and is depicted in Table 2.1.

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[24] www.royalunibrew.com
[25] http://www.royalunibrew.com/Default.aspx?ID=1843 – Retrieved March 3rd, 2009
[26] http://www.royalunibrew.com/Default.aspx?ID=1726 – Retrieved March 3rd, 2009

Table 2.1 Royal Unibrew's Markets

Premier League	Strategic Markets	Other
The Nordic Countries	Poland	France
The Baltic Countries	USA	Greenland
Germany	Russia	The Middle East
Italy		
The Caribbiean		
Africa		
The UK		
Canada		

Source: *http://www.royalunibrew.com/Default.aspx?ID=1726*

The *Premier League* consists of those markets where the most emphasis will be on; *Strategic Markets'* focus is to build a sound business in the next three years and *Other Markets* are those with no special emphasis (as the name suggests). Each of these markets has a different product category or compositions of products, some products are however represented in more than one market.

2.5.2 Market Turnover

Royal Unibrew's market areas are divided into three revenue groups (not the same as above), they are: Western Europe, Eastern Europe and Malt and Overseas Markets. The division into these markets including their respective shares of the total net revenue is as listed in Table 2.2

Table 2.2 Revenue per Market

Western Europe 61%	Eastern Europe 27%	Malt and Overseas Markets 12%
Denmark	Latvia	Africa
Germany	Lithuania	The Caribbean
Italy	Poland	The Middle East
Nordic Countries	Other Markets	The UK
Other Markets		USA/Canada
		Other European Markets

Source: *Royal Unibrew's Company Announcement No 02/2009*

A further description and analysis of the different markets will be performed in Chapter 3.

2.6 Economy

A brief overview[27] of RBREW's financials for the period in question (Table 2.3) reveals a slight increase in revenue (CAGR 9.4%)[28] for the period in question; this revenue increase is however not realized in an increased bottom line, there we see change for the worse after 2006. What follows are the most important events of the respective financial years.

Table 2.3 Key Figures

DKK millions	2008	2007	2006	2005
Net Revenue	4,178,703	3,881,762	3,439,026	3,190,959
Consolidated Profit/(Loss)	-483,165	155,234	230,339	224,158
Total Assets	4,051,408	3,781,293	3,413,626	3,187,796
Net interest bearing Debt	2,302,878	1,769,397	1,440,753	1,319,739
Equity	574,828	1,119,463	1,148,121	1,149,750
Free Cash Flow	-356,214	157,013	206,012	252,204
Share price, end of year	118.5	534	740	532
P/E, end of year	N/A	19.26	17.99	13.29
Average Number of Employees	2,755	2,659	2,278	2,202

***Source**: Royal Unibrew, annual reports 2005-2008*

2.6.1 The Financial Year 2005

By end of year 2005 RBREW had total assets worth DKK 3.1bn, including the acquisitions of Brok and Strzelec Breweries along with a 48% holding of the shares in Perla Browary Lubelskie S.A., all in Poland.[29] Net interest bearing debt amounted to DKK 1.3bn, and the result for the year was a profit DKK 224m. The prospect of these factors was a share price of DKK 532, trading at a P/E of 13.29.

2.6.2 The Financial Year 2006

By end of year 2006 RBREW had total assets worth DKK 3.4bn, including the acquisitions of controlling interests in Dominica Brewery & Beverages Ltd., Antigua Brewery Ltd. and Antigua PET Plant Ltd. These acquisitions were seen as a move to strengthen RBREW's position in the Caribbean. In addition to this, RBREW also secured all shares in Browar Lomza Sp. z o.o., a Polish brewery, with the intent of strengthening the position in Poland.[30]

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[27] Adopted from Royal Unibrew's Company Announcement No 02/2009 February 26th, 2009
[28] See Appendix 13B
[29] Company Announcement RU04/2006
[30] Company Announcement RU09/2007

Net interest bearing debt amounted to DKK 1.4bn, and the result for the year was a profit DKK 230m. The prospect of these factors was a share price of DKK 740, trading at a P/E of 17.99. Clearly the market took positive of the continuing acquisition spree, which was continued through very limited increases in interest bearing debt.

2.6.3 The Financial Year 2007

By end of year 2007 RBREW had total assets worth DKK 3.78bn, including the acquisitions of Livu Alus acquired to strengthen the position in the Baltic. In addition to this the breweries acquired in the previous year were included in the financial statements; Browar Lomza from May 1st and the Caribbean breweries from June 1st.[31]

Net interest bearing debt increased to DKK 1.77bn, leaving a declining profit for the year of DKK 155m. The prospect of these factors was a share price of DKK 534, trading at a P/E of 19.26. Though the stock price declined by around 30% the P/E level remained close to constant, implying that the market saw the drop in profits as a fluctuation more than as a sign of decreasing profitability.

2.6.4 The Financial Year 2008

By end of year 2008 RBREW had total assets worth DKK 4bn, including the impairment losses on assets in Poland amounting to DKK 455 million.[32] Net interest bearing debt amounted to DKK 2.3bn primarily due to renegotiations of credit due to the write-off. The result for the year was a deficit of DKK -483m including the expenses associated with a reorganization strategy including shutting down production in Aarhus as well as investments in the Danish distribution channel. The result of these factors was a share price of DKK 118.5, trading at a negative P/E.

Clearly the market did not react well to the troubles at RBREW, this will be analyzed further in later chapters. What is worth noticing here though, is that over the period (2005-2008) RBREW's total assets as well as yearly revenues have grown by close to 30%, all the while company value has decreased by DKK 3.5bn, in percentages around 84%.

[31] Company Announcement RU16/2008
[32] Company Announcement No 02/2009

2.7 Strategy

Since 2005 Royal Unibrew has implemented two strategic plans, *"MACH II"* and *"Double Up"* with time spans ranging between 2005 to 2007 and 2008 to 2010, respectively. The former focused on *"Value creation through profitable, international growth"*[33] and its main goal was to increase the top line to DKK 4.5bn by growing organically and through acquisitions, mainly in Baltic countries and Poland under the assumption that operating strong regional brands was the way forward in those markets, rather than moving in with their existing products. This strategy proved relatively successful, albeit the top line target was not reached.

Double Up is a continuum of the MACH II strategy of sorts, the aim was *"Increased profitability and doubled EBIT",*[34] among the target was a doubling of the EBIT (hence the name) and a very ambitious organic growth, reaching DKK 5bn in revenue in 2010 from DKK 3.9bn in 2007.

On February 26th 2009 Royal Unibrew presented the results for the financial year of 2008, the results turned out to be very negative and it was announced that the fundaments for the Double Up strategy were no longer in place and it would therefore be abandoned.
The strategic focus as set by the management will be to *"…creating a basis of significant earnings improvement and continued strengthening of the Group's strategic brands."*[35]

In addition to the statement above the management will also be highly focused on improving the company's capital structure which was dealt a huge blow by the write-down of the company's equity with relation to the impairment losses in Poland. The result was that debt ratios have spiraled due to debt renegotiations stemming from the write-downs. It is therefore a priority for the management to bring down the company's debt.

Royal Unibrew operates in a number of markets outside Denmark. The nature of the activity and engagement varies in these markets from fully owned subsidiaries to associates and the ownerships range from 25 – 100%, for a full overview of subsidiaries and associates see Appendix 16A.

[33] Royal Unibrew Annual Report 2005
[34] 2007Annual Report
[35] Royal Unibrew Company Announcement No 02/2009

2.8 Sub-Conclusion

Royal Unibrew is a relatively new company in its current form; it is the product of mergers of primarily small and medium sized breweries in Denmark but has since changed focus and increased emphasis on growth to foreign markets. The primary markets for RBREW are segmented to Western- and Eastern Europe followed by Malt and Overseas Markets, where the European markets produce 88% of the company's revenue. These market areas are broken up into strategic segments which vary in their importance for the company's strategy. The revenue has increased in the past years but in 2008 the company suffered a serious blow due to impairment of assets in Poland.

In addition to being a brewer, Royal Unibrew also produces own label soft drinks and in Denmark they are the licensed producer and distributor for PepsiCo, the brands under RBREW's ownership are divided into strategic groups according to the different markets.

The governance system of Royal Unibrew follows a model that has proved to be very efficient,[36] there is high ownership concentration but they are separated from the day-to-day issues through the two tier system. Managers and key employees are compensated partly in accordance with company performance which encourages them to take ownership of the results of their actions.

The majority of the company is owned by a diversified group of investors while a mixed group of individual companies with different profiles own the rest, the 10% voting cap prevents hostile takeovers and helps to protect the small investors. However, there is a high degree of uncertainty regarding the largest shareholder, Stodir, which is now under administration so it is difficult to predict what will happen to their shares in the company. The price of the company's shares might be affected negatively if the market gets the sense that perhaps this large shareholder needs to offload such a large holding in a firesale.

No strong owner appears to be in place, that is, the one owner that had the potential of perhaps throwing additional funds into the company should that be needed has now gone into administration and is likely to go bankrupt.

[36] Thomsen, 2008

The board sets ambitious goals for strategic development and growth for the company, some of which are reached while others are not, there will be more on the strategic development in a later chapter. After a disappointing 2008 it can be asserted that their strategic development will become more reactive than proactive.

Chapter 3 – Strategic Analysis

As written in section 2.6 RBREW has implemented several changes in its strategic planning starting with the "*MACH II-plan*" of 2005, followed by "*Double Up*" in 2007 only to be abandoned for a "*Cut our losses*"[37] strategy of 2009. The frequent changes in strategy might seem an obvious weakness for RBREW, a sign of a management team out of sync with its business, the surrounding environment and possibly the ability of reaching goals instead of changing them. In this chapter we set out to find out whether the latter is in fact the case, in addition we will analyze the strategic position and direction of RBREW through an analysis of the external and internal environment; this should help us evaluate RBREW's latest choice of strategy as well as the implications for the future.

3.1 External analysis

3.1.1 PESTEL

The thought behind the PESTEL model is to identify key factors of change in the macroeconomic business environment that could affect future demand (or structure) in the industry and factors impacting future profitability. The traditional PESTEL model takes six environmental factors into account when the situation is analyzed[38];

- Political – e.g. Government stability, taxation and foreign trade regulations
- Economic – e.g. Business cycles, GDP trends, Interest rates and unemployment
- Sociocultural – e.g. Demographics, lifestyle changes, consumerism
- Technological – New discoveries, speed of technological transfer, rates of obsolescence
- Environmental – Environmental protection plans, waste disposal, energy consumption
- Legal – Competition law, health and safety, employment law

That being said, we regard the PESTEL model more as an excellent guideline rather than a strict prescription on how to perform an environmental analysis.

[37] Authors' own terminology
[38] Johnson *et al*

The claim here is that stretching the analysis so to make all factors of the PESTEL relevant is indeed possible, however by doing so the roles might be reversing; i.e. using the report to fill out a model rather than using a model to 'assist' with analysis. Our analysis contains all elements of the PESTEL; however, they are analyzed to the extent of their impact on RBREW and thereby in accordance with the previous principle.

For the purpose of this report the analysis will be performed with respect to RBREW's revenue distribution between markets (Table 2.2) with a special focus on Eastern- and Western Europe which combined generate 88% of RBREW's revenue[39]. The current financial crisis will be the main theme in this analysis due to its enormous spillover effects to the real economy which increases the interaction between the different factors in the model.

As a result the region as a whole will experience many of the same external influences from the outside environment albeit the degree of impact might differ between East and West. The regional-specific factors for Eastern Europe will be outlined separately.

Because of the Malt & Overseas' geographical dispersion ranging from UK and USA to the Caribbean and Africa a PESTEL for this market segment would provide little contribution to the analysis compared to its scope.

3.1.1.1 PESTEL Western Europe

Political - The attention of policy makers has been on alcohol and other products which are considered to have a negative effect on the general population's health. Organizations like the World Health Organization (WHO) diligently point out the social effects of alcohol and publish material where they promote increased emphasis on these affairs by its member states.[40]

In addition to concerns about alcohol abuse, the issues of health challenges such as obesity have received increased interest. As an example of health policies the Danish government has set the target of increasing the average life expectancy of the population by three years during the next ten-year-period.[41]

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[39] See Appendix 13B
[40] WHO Global Status Report on Alcohol 2004
[41] http://www.dev-bryggeriforeningen.dk/default.asp?pid=191&visnyhed=322

The results of these efforts can be realized in higher taxes and stricter regulations on alcoholic- and non-alcoholic beverages as well as further restrictions regarding marketing of said products. Indeed there seems to be evidence of more harmonization of these laws and regulations, at least within the European Union (EU).[42]

The current economic crisis has diverted a large portion of political attention from the 'normal' political tasks towards trying to stitch together economic stimulus- and rescue packages to prevent total collapse of their respective economies. These efforts could in some cases entail increased nationalism as countries seek to protect their own economies,[43] however, as Europe is now a *de facto* single market and the EU strongly opposes any trade barriers within its borders this should not be seen as a threat to RBREW's core markets. In fact, these political efforts should have a positive effect on the European economy in the medium and long run and limit the economic downturn to a certain extent.

Economical - The global financial crisis has been the hot topic in recent months, shares have plummeted, banks are drained for cash and massive layoffs have been announced throughout the region and will most likely continue as 2009 goes on. Advanced economies' output is projected to contract for the first time (on an annual basis) since the Second World War, by 2% in 2009,[44] while the world's GDP change in 2009 is expected to be -0.8%.

This trend is however expected to reverse in 2010 where a slow economic recovery is projected. Central Banks across Europe have been slashing their benchmark interest rates in efforts to lower the cost of capital and as a result the current rate in the Euro-area is down to 1.5% compared to 3.75% on October 15th 2008.[45]

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[42] http://www.euphix.org/object_document/o5226n29045.html
[43] The Economist, February 5th 2009 "The Rise of Economic Nationalism"
[44] World Economic Outlook *Update* – International Monetary Fund
[45] http://www.ecb.int/stats/monetary/rates/html/index.en.html

Table 3.1 Economic Growth – Selected EU Countries, West

Country	2005	2006	2007	2008	2009	2010
Real GDP Growth %						
Denmark	2.4	3.3	1.6	-1.3	-3.5[c]	0.0[c]
Germany	0.8	3.0	2.5	1.3	-3.3[b]	-0.2[b]
Italy	0.7	1.9	1.4	-0.6[b]	-2.5[c]	0.0[c]
Change in Private Consumption %						
Denmark	3.8	4.4	2.4	0.0	-3.0[c]	0.5[c]
Germany	0.1	1.0	-0.4	-0.1	-0.4[b]	-0.2[b]
Italy	0.9	1.1	1.5	-0.5[b]	-1.5[c]	0.0[c]

***Source**: Economist Intelligence Unit – country reports* b=estimates, c=forecasts

The most important markets in this region are Denmark, Germany and Italy; these markets are expected to be severely hit by the economic downturn with negative growths in real 2009 GDP by 3.5%, 3.3% and 2.5%, respectively. All three are expected to recover to some extent in 2010 where Italy and Denmark will 'reach' zero growth while Germany is expected to remain in the negative region.[46]

Even though beverages are considered to be non-cyclical products[47] with beer demand being the least elastic among alcoholic beverages;[48] the industry is bound to be influenced negatively by this turmoil. This can take the form of restricted access to capital as banks have become more reluctant to lend, refinancing pressures (given debt covenants) as share prices fall as Debt to Equity (D/E) ratios.

On a more positive note the commodity bubble of 2008 has deflated severely and prices have now dropped below what they were in September 2009.[49] This is of course a benefit for all heavy users of commodities as raw materials such as RBREW, for companies hedging against raw materials the upside can be limited but as RBREW does not hedge prices on raw materials they should experience the full upside of the decreasing prices.

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[46] The Economist Intelligence Unit Limited – Country Reports 2009 for Denmark (March), Germany (March) and Italy (February)
[47] http://www.google.com/finance?catid=52760568
[48] Gallet 2007
[49] http://www.google.com/finance?catid=57629812 – Retrieved March 17th 2009

Sociocultural - The World's population is growing which intuitively should be good news for consumer goods industries such as the one RBREW operates in, this growth is however not being realized in their target segments. According to OECD the percentage of the population aged 65 and over is growing and will continue to do so,[50] a trend which is considered to have a large impact on beer consumption as the core beer drinking demographic is between 20 and 39 years old.[51]

In addition to the ageing population we have also witnessed some changes in consumption patterns where consumer orientation has shifted slightly towards 'healthier' products. This trend has in part been facilitated by public policy, as discussed above and increased awareness regarding topics such as Fair Trade, Fitness and Organic products.

Technological – Keeping up with technological advancements is important in the brewing industry, much like in other industries, as these advancements help to optimize processes and can also create grounds for more efficient new product development. Efficiency improvement has been one of the results for those companies that follow the technological trends, e.g. through ERP systems and/or new marketing opportunities with the proliferation of Web 2.0.

Being on top of these opportunities is very important for companies like RBREW in the fierce competitive environment. RBREW's recent operational overhaul has moved them in the right direction regarding these issues.

Environmental - From an environmental point of view the main challenges facing consumer good producers are related to CO^2 emissions, both from the production side and transportation. Beverages are normally not economical to transport, i.e. they demand a lot of space relative to their value dependant to the type of container (cans, bottles) so locating production facilities is definitely an advantage if possible. That does however limit the possibilities of economies of scale in markets with low population densities.

[50] http://masetto.sourceoecd.org/vl=2028296/cl=39/nw=1/rpsv/factbook/010201.htm OECD Factbook 2008
[51] Euromonitor International – Beer, World – Executive summary 2007

In December 2009 Copenhagen will host the United Nations Climate Change Conference[52] where some further resolutions regarding climate changes will be negotiated and it is expected that the decisions reached will have a profound effect on greenhouse gas emissions and other attributes that contribute to climate change. Moreover, it is expected that the wealthier part of the World will have to lead on by example,[53] putting extra pressure on organizations like RBREW.

A further issue regarding beverage containers is that of return refunds on bottles and cans, this is an increasing trend, at least in Northern Europe, and poses some logistical implications depending on how the procedure is constructed.
In Denmark for instance, consumers return empty bottles and cans in supermarkets which in turn get them collected by the distributors themselves.

Legal – The most pressing issue with regards to legal matters have to do with RBREW's potential as a takeover candidate for another company in the industry and whether such a takeover could be in breach of anti-trust laws. A clear example of this is when InBev (then Interbrew) was forced to sell off Carling in the UK to Adolph Coors in 2001, only a year after having acquired the brand in a takeover of Bass Breweries.[54]

The industry trend has been one of consolidation and has reached such a state that future growth potentials of companies are now mainly through organic growth, at least within Europe where RBREW is mainly based. This does however not have any significant impacts on RBREW as they are a relatively small player on the global or regional competitive scene.

3.1.1.2 PESTEL Eastern Europe

The analysis above also applies in most ways to Eastern Europe where the main markets RBREW operates in are members of the European Union and are thus guided by more or less the same policies as their neighbors in Western Europe. There are however, some differences as to the degree of impact the various factors will have on the regions. As a result it is highly appropriate to illustrate these main differences.

[52] http://en.cop15.dk/frontpage
[53] http://www.wwf.dk/dk/Menu/Det+g%C3%B8r+WWF/Klima/Klimatopm%C3%B8de
[54] http://www.independent.co.uk/news/business/news/interbrew-ends-bass-debacle-with-acircpound12bn-sale-of-carling-621182.html

Political - Latvia in particular is a reason for concern where political instability has been increasing as the economic downturn has hit the country harder than the other countries. The support for the governing parties has collapsed and faith in the system by the general population is disappearing.[55]

Economical - Eastern Europe is expected to be hit more severely by the economic crisis than Western Europe. Growth has been high in the region in recent years as Table 3.2 illustrates, mainly facilitated by foreign direct investment and lending.
The outlook for RBREW's main markets in the region is bleak at best and the economic downturn is expected to have severe consequences for private spending and consumption patterns will undoubtedly change as a result, the question is merely how hard this will hit the beverage industry and in what way.

Table 3.2 Economic Growth – Selected EU Countries, East

Country	2005	2006	2007	2008	2009	2010
Real GDP Growth %						
Latvia	10.6	12.2	10.0	-4.6	-12.0[c]	-2.0[c]
Lithuania	7.8	7.8	8.9	3.2	-8.0[c]	-2.5[c]
Poland	3.2	6.2	6.7	4.8	0.7[c]	2.2[c]
Change in Private Consumption %						
Latvia	11.2	21.2	14.8	-9.8	-17.0[c]	-4.0[c]
Lithuania	12.2	10.6	12.4	6.3	-12.0[b]	-3.5[c]
Poland	2.1	5.0	5.0	5.4	2.1[c]	2.6[c]

Source: *Economist Intelligence Unit – country reports* b=Estimates, c=Forecasts

There is though a positive trend to detect here, namely that Poland seems to go relatively unharmed from these challenges the economy is facing at the moment.

Sociocultural - As can be seen from Table 3.2 private consumption has been increasing in previous years, this leads to the assumption that the lifestyles of the people in the region are changing and approaching 'Western Standards'. The sharp turnaround they are witnessing now will inevitably slow this pace down severely and might even give ground to increased emphasis on the 'good old values'.

[55] Economist Intelligence Unit – Country Report, Latvia

Technological – The technological standards in Eastern Europe are still below Western standards so there is large room for improvement in that area. However, the lower wages in the region make up for some of this lack in efficiency.

Environmental – The environmental issues do not differ in any significant way from those in Western Europe and will therefore not be elaborated on further.

Legal – Poland is still strict on imports on alcoholic beverages therefore the prevailing business model for brewers entering the Polish market is to purchase Polish breweries and combine local brands with local production of own brands.

3.1.1.3 Evaluation on PESTEL

Taking departure from the analysis above it is clear that the main source of impact on RBREW from the outside environment is from the current financial crisis that has been diffusing into nearly all geographical markets where RBREW is operating. The economic impact is creating large pressure on governments around the world and banks are being either drained for cash, taken over by authorities or a combination of both.

This will have the effect that access to capital has been restricted in such a way that means for expansions and investments by companies are gone. In this challenging environment it is essential for a company like RBREW to have strong brands that can withstand momentary recession pressure.

Furthermore, as discussed above, beer tends to be relatively inelastic with regards to income and there will be a change in the pattern of consumption, i.e. beverage consumption will most likely move away from on-trade to the off-trade as a result of less disposable income due to the financial crisis, should more or less balance out.[56]

Even though only 27% of revenue originates from Eastern Europe versus 61% from Western Europe and despite the relative small size of the countries the impact from the situation in the Eastern countries is deemed to have a large impact on RBREW as these markets are of high strategic importance to RBREW.

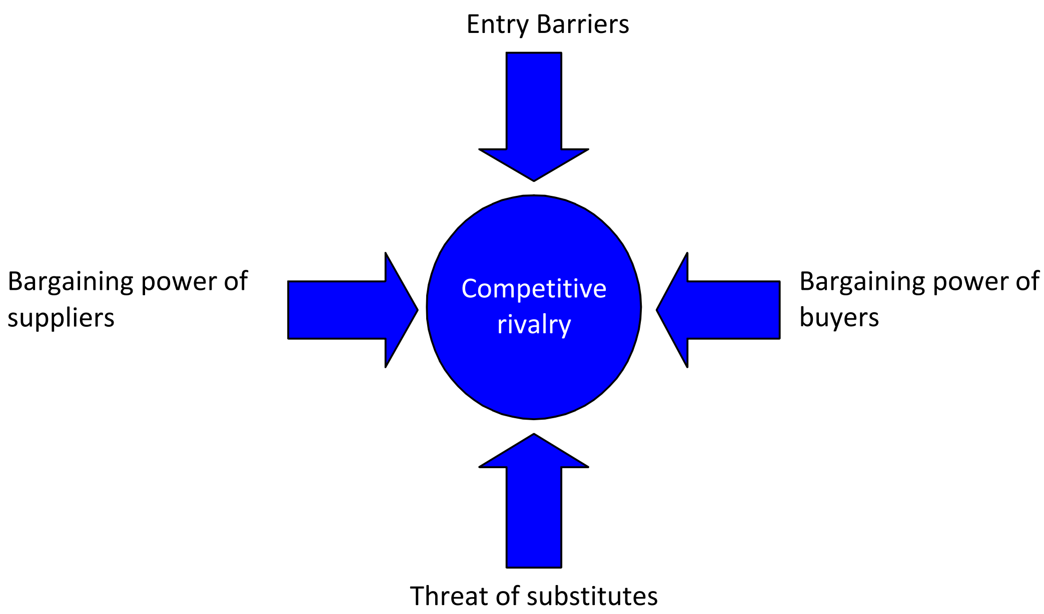
[56] Humphries, 2009

3.1.2 Porter's Five Forces

To analyze the brewing industry's attractiveness we use Porters five forces. The framework provides us with an outside-in perspective on the competitive situation within the market, moreover the relationship between competitors as well as relationships with customers, suppliers and other externalities.

The analysis will be split up between the geographical markets of Western Europe, Eastern Europe and Malt & Overseas, this divide of markets is the same as what is used by RBREW in its annual reports and should provide transparent results in relation to the data. Furthermore we assume that within Denmark soft drinks and beer are under identical competitive situations.

Figure 3.1 Porter's Five Forces



Source: *Michael Porter 1985*

3.1.2.1 Porter's Five Forces - Western Europe

The initial part of the analysis will concern Western Europe. The Western European market consists of Denmark, Germany, Italy and the Nordics and represents 64% of RBREW's net revenue. The Western European market is characterized by being a mature market, on the edge of declining as seen in table 3.4.

The impact of this market trend is that competition is primarily based on existing players competing for market shares. We expect that the general economic downturn imposed by the financial crisis will cause total sales to decrease further and thereby enhance the competition for existing market shares.

In this development RBREW has the immediate challenge that none of its products have a position as market leaders, we expect this will have the effect that RBREW will be hit harder than e.g. Carlsberg in the Danish market, even though RBREW have been able to increase their market share over the past couple of years.

Rivalry - As seen in the above table the development within the Western European market has been an overall small decline in sales, at best it can be considered stagnating. Most Western European markets resemble the Danish market in the sense that they are dominated by several brands, often owned by a few major players (oligopoly), often the ones who are also considered major on a global scale[57].

Companies generate growth through competition for existing market shares, which implies that competition is fierce. Smaller regional players are rarely a factor as they simply do not have the same access to capital in order to optimize production and distribution facilities and thereby likely to incur considerably higher costs when trying to compete head-on with one of the big 5.

Table 3.3 Beer sales Western Europe (Off-trade) in millions of Liters

	2003	2004	2005	2006	2007	2008	% change
Denmark	364	346.1	335.6	327.7	316.7	308.9	**-0.15%**
Germany	5,807.8	5,690.5	5,649.9	5,725.8	5,537.2	5,280.2	**-0.09%**
Italy	993.8	1,018.5	1,040.4	1,074	1,123.6	1,167.8	**0.18%**
Norway	174.6	179.1	177	184.7	190.3	196.3	**0.12%**
Sweden	381.5	358.4	358.7	365.5	377.5	379.9	**0.00%**
Western Europe Total	7,721.7	7,592.6	7,561.6	7,677.7	7,545.3	7,333.1	**-0.05%**

Source: *Own creation, Data source: Alcoholic Drinks: Euromonitor from trade* sources/national statistics

[57] The big 5: InBev, Heineken, Carlsberg, SABMiller & Molson Coors

As earlier mentioned RBREW has continuously focused on improving its cost efficiency in Denmark targeting both production and distribution through investments and restructuring. This is a common trend within the industry primarily due to cost-drivers[58] which to a great extent drives the industry. A direct consequence of these consolidation and cost-effectiveness investments is that a lot of capital is tied to production facilities in particular, resulting in high exit-barriers for companies in business.

Entry Barriers - The typical threat of new entrants often take the form of either new breweries starting up (very likely microbreweries) or from existing breweries entering new markets. When it comes to startup breweries these do not pose a threat simply due to their small size, their lack of distribution network, small production facilities and lack of brand awareness.

They might be able to gain a regional foothold but cannot be compared to larger industrial producers. Furthermore this type of brewery is likely to focus on high-end products which do not threaten RBREW's product portfolio other than in Italy.

As for the second possible threat, existing breweries entering new geographical markets, this is more plausible. In the major beer markets such as the UK and Germany all of the big 5 are already present, but there is the risk that one of them would want to penetrate the Danish market, competing on the same terms as Royal, Carlsberg and Tuborg. In fact we have seen this development with Heineken entering through a licensing agreement with RBREW.

The licensing agreement is the key here, since Carlsberg is by far the dominant force in the Danish market, RBREW is the only solution for other companies trying to expand. Carlsberg is far too big in the Danish market to even consider producing under license for e.g. InBev if that means more competition on supermarket shelves and in the on-trade, that leaves only RBREW left as a possible licensing partner as no other Danish brewery has the production and distribution facilities needed to execute the job.

It is safe to disregard the possibility that anyone would want to build their own facility in Denmark, simply due to the costs associated. In the rest of Western Europe (excluding Germany) the situation is the same.

[58] See Chapter 3.2.1.4

Substitutes - Beer as a product has an infinite amount of possible substitutes, depending on the definition used it may span from tap-water over cocktails to fine red wines, the result is that competition is enormous but at the same time there seems to be a steady demand for beer regardless of definition.

The result of this looks as if the discussion of what constitutes a genuine substitute for beer, might be best left to philosophers as demand throughout Western Europe is close to stagnant.

Factors that might change the composition of overall consumption of alcoholic beverages might include increasing health trends in society and aging demographics (which will likely cause a shift towards wine). However we will refrain from this discussion and its implications as we see the beer market as stable, therefore focus should be on building market shares not on protecting against substitutes.

Bargaining Power of Buyers - Direct Buyers of RBREW products can be grouped into either supermarket chains (off-trade segment) or bars and restaurants (on-trade segment). When it comes to the off-trade the bargaining powers of customers is considerable, often they consist of a few big chains where breweries need to be in order to claim a respectable market share.

This gives the off-trade customers a strong bargaining position when negotiating price and delivery. RBREW does not have any real possibility to differentiate its product offering at the off-trade, as a result their only legitimate claim towards customers is the best possible shelf space.

As mentioned in the Value chain analysis, RBREW's product is heavy and has a low value, and as such the off-trade customers do not make any real profits from then, instead they use them as a source of bringing in customers through campaigns and special offerings.

In the on-trade market it is a different story, the customers are most often individual bars and restaurants or at best small chains. These customers do create enough volume for them to put any pressure on prices, furthermore their profitability from selling RBREW products is significantly higher than that in the on-trade.

The only real power these customers have is to change its supplier completely i.e. switching from RBREW to Carlsberg in DK. The costs associated with doing so are usually incurred by the brewery, but in reality it is uncommon practice to play the breweries against each other.

Bargaining power of Suppliers - The bargaining power of suppliers is not overarching within the brewing industry. The nature of the input needed to produce beer (agricultural products as well plastic and aluminum for packaging) are all highly standardized products with well-functioning markets carrying many sellers.

The size and good function of the market has the implication that breweries have little chance of negotiating prices; their best opportunity to secure prices is in the derivatives market, where futures contracts can be a tool to lock in future prices.

In general this is however very demanding to carry out. Increasing demand has led prices to soar during past years, but the current economic crisis has changed this trend, making especially agricultural products cheaper.

3.1.2.2 Porter's Five Forces - Eastern Europe

The Eastern European market is made up of Latvia, Lithuania and Poland, and constitutes 24% of RBREW's net revenues[59]. In relation to the analysis of the Western European market the issues of Customer and Supplier bargaining powers as well as threat of substitutes is very similar in Eastern Europe and will only commented on briefly.

Rivalry - The development in sales within the Eastern European market has been one of high growth. As table 3.5 below shows all three of RBREW's markets have experienced two digits growth rates.

Table 3.4 Beer Sales in DKK (millions)

	2003	2004	2005	2006	2007	2008	% change
Lithuania	1,884	2,016	1,838	2,063	2,412	2,818	49.60%
Latvia	590	655	733	879	1,026	1,097	85.94%
Poland	10,178	10,942	11,333	11,935	12,682	13,765	35.24%

Source: *Own creation, source Euromonitor*

[59] 2007Annual Report

The high growth rates have had the impact that there is not much competition over market shares among breweries; the focus is solely on increasing sales. Even though these markets have been producing excellent growth rates, their size is small compared to other growth markets such as Russia, China and India. As a result hereof the big 5 breweries are putting their main efforts in these markets, though they are also present in Poland, Latvia and Lithuania.

This development has helped RBREW to gain a solid foothold in Poland, Latvia and Lithuania, as an example RBREW is the leader within imported beer in Poland though it should be noted that national brands have much higher market shares than imported beer. Most breweries within Eastern Europe are still in the process of optimizing production, mostly due to their rather new status as acquired by foreign breweries.[60]

An example of this development is RBREW's attempt to optimize production by moving production from Koszalin to Warzaw[61]. As with production and distribution in Western Europe, the goal of this optimization is to make better use of economies of scale and thereby minimizing cost drivers in the production process. Currently the amount of capital tied in Eastern European facilities is far from the levels of Western Europe, but we expect this to change as production facilities are upgraded in the future.

This as well as a market that will stagnate at best, due the increasing economic crisis, causes us to expect that the Eastern European markets will begin to change in the direction that competition of market share will increase. This is not a dream scenario for RBREW as they do not have market leading product in any of the markets, and must be expected to struggle for increasing sales.

Entry Barriers - As in Western Europe, the threat of start-ups is very little and for the same reasons. New entrants in the form of existing breweries expanding to Eastern Europe, is on the other hand a real threat. In Poland a model characterized by foreign breweries buying a local brewery and then keeping the Polish brands in production as well as incorporating own brands into the Polish brewery.[62]

[60] 2007Annual Report
[61] 2008Annual Report
[62] 2007Annual Report

This is a model that could well be implemented in Latvia and Lithuania as well. Thereby a threat of new entrants is very real, but the size of these markets and the economic situation in these countries as well as within the foreign breweries might minimize that threat in the short run. The required investments in the production facilities in order to optimize profitability underlines the fact that we do not see new entrants entering the markets in the next few years.

3.1.2.3 Porter's Five Forces - Malt & Overseas

The Malt & Overseas market, constituted by primarily the Caribbean and Africa, constitutes roughly 12% of RBREW's net revenues[63]. In relation to the beer markets in Europe there are no major differences in terms of Supplier bargaining power as well as substituting products, these issues will not be described further though it should be noted that malt is a nonalcoholic drink, which limits the amount of substitutes.

Rivalry - Competition in the countries included in RBREW's Malt & Overseas market is characterized by many small producers, often local, that produces non-brand products, RBREW on the other hand produces brand products. Furthermore they are able to make use of economies of scale to a higher degree than competitors, this done through more efficient production.[64] The major players within malt products have very little activities within the markets where RBREW is present; instead they focus on larger markets such as India.[65]

The lack of structured competition has the effect that rivalry within the market is very limited, should a major player (such as Heineken) decide to enter this could change rapidly. Currently the major players sell in these markets through licensing agreements, thereby not giving it much attention.

Entry Barriers - In a market characterized by many small and local producers the likelihood of new competitors in the form of start-ups is large. But it has to be noted that it does not necessarily mean that these start-ups are able to provide credible competition towards RBREW, as with beer it takes time and capital to build brands as well as effective production. In terms of existing competitors expanding into these markets, this is neither a very likely threat.

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[63] 2007Annual Report
[64] www.bryggeriforeningen.dk
[65] Heineken Annual Report 2008

First of all they are present in most markets through licensing agreements, secondly the markets are small relative to the markets which these potential competitors are active (India, Asia), their money is better spent there. Third and lastly the small and local producers are not seen as ideal takeover targets, as they simply are not geared to the scale which a larger player would require.

Bargaining Power of Buyers - Both in Africa as well as in the Caribbean the customers are small, without many alternatives as RBREW is the only brand product. The result of this is that they have very limited bargaining power, though development is heading in the direction of consolidations and thereby larger customers, this process has some way to go to force a real shift in bargaining power[66].

3.1.2.4 Evaluation on Porter's 5 forces

With a market in Western Europe that is stagnant, and one in Eastern Europe that has been experiencing good growth rates over the past couple of years, the outlook for RBREW seems good. The problem however is that we expect the current financial crisis to have severe impact in Eastern Europe, affecting total beer sales in a direction of negative growth. The impact of this development is that the situation in Eastern Europe will resemble that of Western Europe in the sense that it becomes a battle for market share rather than on of merely increasing sales.

In this battle for market share RBREW has the challenge that they do no not have a market leading product in any market, at best they are just behind the leaders, this is a problem as we expect the market leaders and discount products to perform best in a declining market.

The risk of new entrants in all markets is very little in the short run, this due to primarily the financial crisis, but also due to the sizes of markets such as the Caribbean and the Baltics. To the major players markets such as China, India and Russia have higher priority and we expect them to focus efforts here. As for the risk of new entrants in the form of start-ups it is not a factor simply due to the capital and time required in order to build a brand as well as production and distribution channels.

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[66] 2007 Annual Report

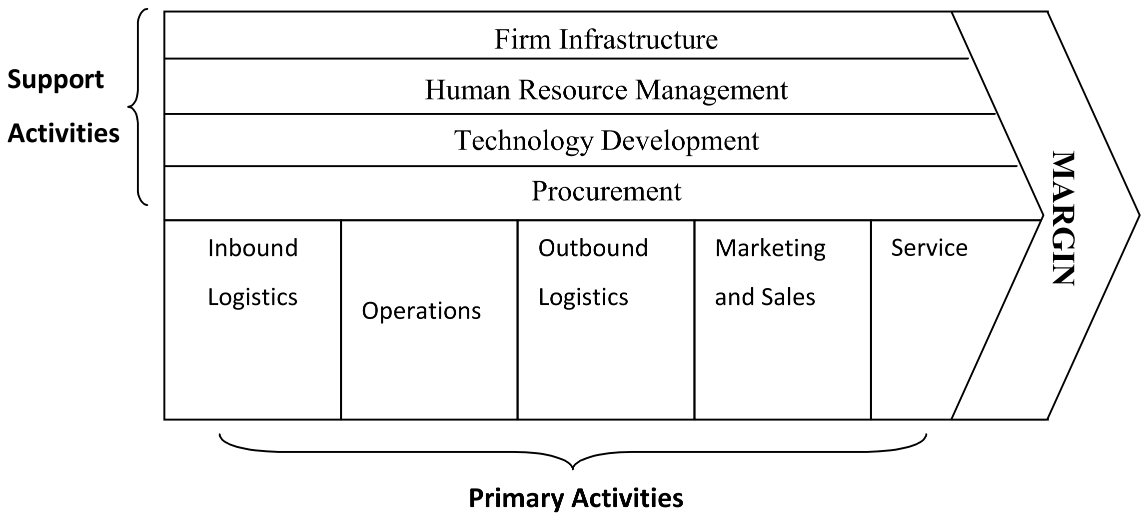
3.2 Internal analysis

3.2.1 Porter's Value Chain

According to Michael Porter the organizations' activities are divided into two main categories, Primary- and Support Activities and together they form the organization's Value Chain. Fundamental to an organization's well-being is an understanding of how value is created or lost within the bounds of the company. The Primary Activities are divided into five main categories whose ultimate function is to create and deliver a product or a service, these are:[67]

- Inbound Logistics – receiving, storing and distributing inputs
- Operations – Transforming inputs into products
- Outbound Logistics – collecting, storing and distributing products
- Marketing and Sales – create awareness around the product
- Service – enhancing and/or maintaining a product

Figure 3.2 Porter's Value Chain



Source: *Stabell, Charles B., & Fjeldstad, Øystein D*

[67] Johnson *et al*

In order to help the Primary Activities improve their efficiency or effectiveness they are all linked to the Support Activities, which are:

- Procurement – acquiring inputs for the primary activities
- Human Resource Management – recruit, train, rewarding people within the organization
- Technology Development – A fundamental area and contains functions such as Research and Development (R&D), product design and process design

Developed in the 1980's the Value Chain is still a widely used analysis tool, it does however present some challenges when other industries than traditional manufacturing are to be analyzed. As an example, trying to apply the Value Chain in its unchanged form to service industries can be problematic.[68]

To solve this challenge an extended 'version' of the value chain has been developed where it is divided into three categories of value configurations:

- Value Chain – Transformation of inputs into outputs
- Value Shop – Solving customer problems
- Value Network – Linking customers

These three categories may have different cost- and value drivers.[69] For the purpose of this thesis we will however stick to the Value Chain version as of the three it applies the most to Royal Unibrew.

3.2.1.1 Internal Resources

Prior to the value chain analysis RBREW's internal resources will be identified and described, this is done in order to see if RBREW has any competitive advantages. This approach will help evaluate whether RBREW has core competencies (which will be identified in the value chain analysis) that are supported by the internal resources and vice versa.

The internal resources are divided into material (tangible) and immaterial (intangible) resources, these are pivotal to the future of RBREW as they are the foundation of which the company does business.

[68] Stabell *et al,* 1998
[69] Stabell *et al,* 1998

3.2.1.1.2 Material Resources

RBREW has production facilities spread out in most of its key markets. In Denmark production is centralized in the two plants located in Odense and Faxe respectively, besides from producing towards the local market this is also the site for production towards exports, primarily targeting the German and Italian markets.
Besides from the two production sites RBREW owns the past production site of Ceres in Aarhus, the site is scheduled to be developed into high-end private housing, and currently valued at around DKK 400m[70]. Besides from current and past production sites in Denmark, RBREW operates eight regional distribution centers with a joint sales office in Faxe.

It is worth noticing that this development is a result of restructuring the distribution channel, trimming it down from 21 distribution centers to eight[71].

The production and distribution situation in especially Poland, but also in the Caribbean, Latvia and Lithuania, is characterized by being less optimized than the standard in Denmark. This is primarily a result of the rather recent acquisitions abroad, and the time needed to plan and execute an optimizing strategy.

However, recently RBREW has closed down production in one of its Polish sites (Koszalin), centralizing production around two sites rather than three as well as centralizing marketing efforts in one Warsaw branch[72]. The development in Poland was somewhat expected due to disappointing results in Poland.

RBREW's economic situation has worsened during the past year, most significantly a write-down of the Polish assets of DKK 455m. Furthermore the net interest bearing debt has increased by DKK 550m[73]. Further analysis of RBREW's economic situation will follow in chapter 4.

[70] 2008 Annual Report
[71] 2007 Annual Report
[72] 2008 Annual Report
[73] 2008 Annual Report

3.2.1.1.3 Immaterial Resources

Branding - As for the majority of breweries the brand value is of pivotal importance, this too is the case for RBREW. As opposed to major players such as Carlsberg, Budweiser and Coors to name a few, RBREW focuses its branding activities around branding the individual brands within its product portfolio. The major players in the industry tend to focus their marketing efforts around branding the company brand; furthermore they tend to focus on fewer but stronger brands.

The implications of RBREW's branding strategy is that negative publicity is unlikely to spread from one brand to another, on the contrary marketing several brands simultaneously is more costly and requires increased coordination.

However, the key advantage for RBREW especially in Denmark is its strong local presence in areas around Aarhus, Randers, Odense, South Zealand as well as Lolland Falster – this obtained through the brands: Ceres, Thor, Albani, Faxe and Maribo respectively. On a side note it is worth mentioning that the name change from Bryggerigruppen to Royal Unibrew, a name change that was important in the effort of going international, was possible due to the fragmented branding strategy.

In 2008 RBREW has been able to increase total revenues as well as increasing market shares for most products, even though the marketing expenditure has increased slightly[74] which indicates that RBREW is successful in executing its fragmented branding strategy.

Quality - Needless to say the physical quality of RBREW's products is the basis for success; that being both the case with the design of packaging (cans and bottles) as well as the quality of the beverages. Since taste is subjective it is of even greater importance that consumers experience high quality when consuming RBREW products. To ensure that the marketing plan is important, more specifically it is important that key products such as Royal Pilsner is promoted as a quality product. Resources can be deployed to developing new products, but basically the key when it comes to quality is to ensure that the products live up to standards and then the primary task in order to fulfill this lies in the branding of the product.

[74] 2008 Annual Report

3.2.1.4 Internal Resources and Porter's Value Chain

Primary activities: In analyzing RBREW's value chain we decompose the analysis into two parts: Operational cost drivers and Value drivers. Figure 3.3 portrays these cost and value drivers.

Figure 3.3 Key Drivers

Operational Cost drivers – Beer	Value drivers – Beer
- Inbound Logistics o Volume - Production o Effective use of production capacity - Outbound Logistics o Distribution network - Marketing and Sales o Focus on target segments - Quality o High importance	- R & D o Important to remain competitive through offering of new products in order to satisfy demand - Image o High quality at reasonable prices - Marketing and Sales o High priority in order to grow market shares - Quality o A precondition in order to provide high quality products

Source: *Own creation*

On basis of figure 3.3 we will turn to the analysis of the most important drivers identified.

3.2.1.5 Cost drivers

Logistics – RBREW's production facilities is of a considerable size and it is the backbone of the business, therefore it is pivotal that the inbound logistics is managed efficiently, which will help maximizing the efficiency. The inbound logistics process must be managed in a way that ensures that deliveries of raw materials and packaging are correct and on time.

The quality of the inbound materials must be up to standard which means relationships with suppliers must be of a high standard. Furthermore the timing of deliveries is important in order to keep the production running making sure the warehouse is utilized optimally (volume control) as well as making sure raw materials do not go bad.

Since the inbound logistics is the initial step in RBREW's production process it is important that it is flawless, since failures here will have implications on all following steps in the production process, therefore the inbound logistics must have a high priority. In addition it worth underlining that, as mentioned in the PESTEL analysis, hedging against fluctuating commodity prices is a useful tool in cost control.

The outbound logistics is the process of delivering the finished goods to the customers. Since beer is a relatively heavy product with low value, it is very important that this process is optimized. Distribution costs makes up a considerable part of RBREW's variable costs and is an important cost driver. RBREW's decision to change the structure of its distribution channel is therefore a very welcome change, and should be expected to decrease costs considerably.

Production - The brewing process is a highly standardized process which makes it difficult to achieve significant competitive advantages compared to competitors. As mentioned in chapter 2, the industry as a whole has seen a great deal of consolidation aimed at increasing efficiency, this was also the reason behind the initial mergers creating RBREW[75].

The turnover pr employee was DKK 1,510 in 2006 and DKK 1.460 in 2007[76], with regards to the products produced the company cannot be seen as labor intensive. RBREW is a production company with the production process serving as the cost driver.

3.2.1.6 Value drivers

Marketing and Sales – RBREW's key products such as Royal and Faxe is positioned in the market as quality products, meaning that they are sold at a premium compared to discount competitors such as Harboe.

In order to sell products at a premium, marketing expenses are important, as the key is to add perceived value of the products to consumers. RBREW's success in capturing market shares in recent years points to the fact that they have been successful in their marketing strategies.

[75] 2007 Annual Report
[76] Own calculation based on Royal Unibrew's annual report 2007

RBREW's decision to sponsor Sports teams such as Aarhus Elite as well as several concerts[77] seems in line with trying to build a lifestyle product with focus on enjoyment through usage rather than mass consumption. This seems in good line with current political trends focusing on health (as described in the PESTEL analysis).

Service – Is not really an area where RBREW is able to create an advantage, instead they seem to be following premium brands industry standards i.e. delivering on site for off-trade with agents fully servicing big supermarket as well as full service in on-trade market. This level of service is necessary to be in business, with little for cost cutting or improvements in service level.

Regarding *secondary activities* Technologic development is by far the most important as it is a key reason for the ability to improve logistics as well as production efficiency. As mentioned earlier these are key cost drivers.

3.2.2 Ansoff's Product/Market Grid

Ansoff's Product/Market Grid is a way for companies to identify the direction for growth strategies and development. This grid lists the strategic options generally available to organizations at a given time and according to their strategic capabilities and is fairly self-explanatory.

What it does not list explicitly is the possibility of either vertical- or horizontal integration. It is especially the latter which is the 'name of the game' in mature markets like the beverage market (the one RBREW operates in) where we see large corporations expanding both existing and new markets by means of acquisitions, an example of such a move on a large scale is InBev's acquisition of Anheuser Busch on November 18th 2008.[78]

Moreover, these same companies then sell off some activities from their portfolios in order to focus on their core markets or the newly acquired venture,[79] these decisions are often made with regards to their position in the BCG matrix discussed above.

[77] www.royalunibrew.com
[78] http://www.ft.com/cms/s/0/6e8aae0e-b5b0-11dd-ab71-0000779fd18c.html - Retrieved March 11th 2009
[79] http://www.ft.com/cms/s/0/6026a3f0-08ed-11de-b8b0-0000779fd2ac.html - Retrieved March 11th 2009

In addition to these opportunities already mentioned some companies, that are usually fierce competitors, enter into alliances when new markets are entered. These arrangements can be extremely complex but at the same time highly advantageous and are sometimes referred to as *Coopetition* where the competitors compete and cooperate (hence the name) at the same time.[80]

Figure 3.4 ***Ansoff's Product/Market Grid***

Markets \ Products	Existing	New
Existing	**Protect/Build** Growth in existing product markets through: • Increased market share • Increased product usage	**Product Development** • Expand the product line • Develop new products for the same market
New	**Market Development** • Expand geographically • Target new segments	**Diversification** New markets with new products • Related • Unrelated

Source: *Adapted from various sources*

3.2.2.1 RBREW's Strategic Development

Parameters - RBREW's strategy fits in many ways into Ansoff's Product/Market Grid, in fact using this approach facilitates a mapping of their strategy and how it has changed in recent years as the company has grown. Before this analysis can be performed in a meaningful way the parameters must be established, that is:

- How is a new market defined?
- What is really a new product?

For the purpose of this analysis a new market will be defined as outside Denmark's geographical borders, however, when it comes to new products the discussion is fairly limited. The claim here is that product lines of acquired companies in RBREW's portfolio are basically the same as RBREW's; there might however be some generic changes of products in the existing portfolio that require new competences.

[80] Bengtsson, M. and Kock., S.

Growth - As mentioned in chapter 2 RBREW is a product of a string of mergers and acquisitions where a number of small players in the Danish market were joined to create synergies and economies of scale. In 1998 the company became a listed company on the Copenhagen stock exchange and the capital that was raised became the foundation for further expansion, this time abroad in the emerging markets of Latvia and Lithuania followed by a merger in Denmark where the position in the home base was strengthened.

In 2005 the MACH II strategic plan was launched, amongst other goals the main theme in this new plan was to increase revenue by a staggering 50% from DKK 3bn in 2004 to 4.5bn in 2007 while still maintaining double digit ROIC and profit margin. Translating this to annual growth rates gives a CAGR of 14.5%[81] of which annual organic growth was targeted at 3% which meant that growth through acquisitions would have to provide for the rest.

A part of the reason for growth through acquisitions could be that RBREW did not own an international brand name that would facilitate further geographical growth through e.g. licensing.

In the spirit of the MACH II plan RBREW acquired breweries in their existing markets of Latvia and the Caribbean in addition they entered a new market, Poland which at the time was experiencing high growth figures. At that time stock prices were surging and companies generally had easy access to capital through banks' willingness to supply means for further growth. This strategy was followed until 2007 when things started to turn for the worse for the world's financial markets.

The MACH II strategy was in some ways successful albeit the main targets were not reached and in 2008 the new Double Up strategy was launched. The new goal was to streamline operations and increase profitability considerably in addition to increasing managerial emphasis on the activities in Poland which had proven to be more of a challenge than expected.

[81] Appendix 13E

As 2008 progressed it became evident that RBREW had to abandon this strategy and following the huge losses reported for 2008, RBREW announced that it would abandon Double Up and focus on structural and operational adjustments to cope with the changes in the company's situation.

As a result of this new strategic direction, RBREW announced on March 27th that an agreement had been made with Van Pur SA, a polish brewery group, to sell a part of company's Polish activities.

3.2.2.3 RBREW on the Product/Market Grid

Translating these strategic directions of RBREW into Ansoff's Grid (see figure 3.4) reveals that the company has been shifting back and forth between *Protect/Build* and *Market Development*.

This shift back and forth does makes sense for a company like RBREW where an organization takes the time in between expansions to reorganize and realize value of the acquisitions and take some time to plan the next steps.

Given the current situation of the company and the direction they have more or less been forced to take, suggests that the company might have overestimated their capabilities when it comes to new market entry and subsequently set goals that were too ambitious.

This overestimate has resulted in an increasingly negative outlook for the company as viewed by investors which has been reflected in a large decrease in RBREW's share price. Moreover, the company is now heavily indebted and has been forced to renegotiate their existing debt obligations and as a result the main priorities have changed and are now concerned around bringing down the company's debt.[82]

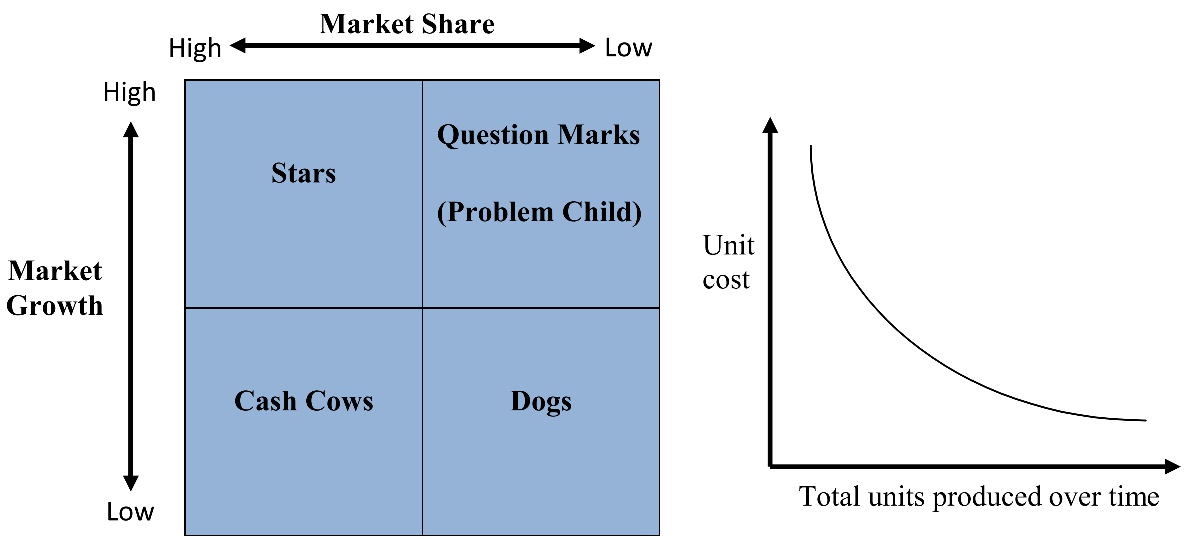
[82] Company Announcement No 02/2009

3.2.3 The Growth/Share (BCG) Matrix

The BCG Matrix, [83] Figure 3.9 was developed (as the name entails) by the Boston Consulting Group (BCG) in the 1970's and was a part of their review on the Experience Curve, Figure 3.10. According to BCG businesses can be categorized into four categories:[84]

- Businesses that require more cash input than they generate (Question Marks)
- Businesses that generate far more cash than they can profitably reinvest (Cash Cows)
- Businesses that generate and use very little cash (Dogs)
- Businesses that are self sufficient in cash flows and have a potential of being even larger cash generators (Stars)

Figure 3.5 The Growth/Share Matrix and the Experience Curve



Source: *Johnson et al*

The Question Marks are usually businesses or business units, with a low to medium market share in growing markets; therefore heavy investment is required in order to increase this market share and the cash they generate is not sufficient to offset the heavy spending but their future potential is high, it might reach Star-status. The category name refers to that if the business does not attain a high market share before the market growth slows down it can easily become a Dog. Furthermore, the Question Marks are not reaping any benefits from the experience curve as the market share is still low.

[83] As described by Boston Consulting Group and Johnson *et al*
[84] http://www.bcg.com/publications/files/Experience_Curve_IV_Growth_Share_Matrix_1973.pdf

The Star is a business with a large market share in highly growing markets. Much like the Question Marks this unit will require heavy spending, however, unlike them they generate a lot of cash which can partly be explained by their higher market share.

These businesses are also taking advantage of the experience curve and thus lowering their unit costs as time goes by, making them in balance with regards to net cash flows. These businesses have all the potential of becoming Cash Cows as market growth starts to decline, the risk exists though that the business could become a Dog should it fail to maintain its market share.

Cash Cows are those businesses with a large market share in slowly growing (mature) markets. These are typically those businesses that have realized all the advantages of a growing market and utilized the experience curve to the fullest. Their profits are used to pay for overheads and to subsidize other business units.

The Dog is the business that is so unfortunate as to hold a low market share in a mature market. Most often these units are considered cash traps, or even worse, useless. That being said some arguments exist for maintaining a unit that has 'achieved' Dog-status; they might provide credibility in the market, have a defensive purpose or even be revitalized later on should the opportunity present itself.

Like any good model the BCG Matrix has its limitations such as:

- How to measure what is high or low growth
- How narrowly a market is defined
- External influences

3.2.3.1 BCG Western Europe

The Western European markets are considered to be mature markets with low to declining growth, thus creating a zero-sum game for competitors when it comes to gaining market share. Both the Danish on- and off-trade segments show a negative value growth between 2003 and 2008.[85] The key issue in such markets is to be a strong player so that the competitive forces have as low an influence on your operations as possible.

[85] Beer Denmark – Euromonitor International

Of the different markets within Western Europe it is Denmark that is RBREW's core market. RBREW's combined market share (by volume) within beer was 21.4% (including Heineken) in 2007 which means a solid 2nd place where Carlsberg is the undisputed market leader with a combined share of 61.9%, the 3rd largest player in Denmark is Harboe with a market share of 1.1%.[86]

The soft drink market in Denmark is also one where RBREW has a large interest in. RBREW is the distributor of PepsiCo's products in addition to owning a few brands themselves, of which Faxe Kondi is the largest with an impressive 2nd place after Coca Cola, measured in off-trade volumes.[87]

Italy is RBREW's second most important market in Western Europe; here the company is the fifth largest player with a market share of 3.4% of total volume.

Germany is also a large market for Royal Unibrew with DKK 484m in net revenue, although their market share is not large, a mere 0.2%. Although Germany is generally a fragmented market when it comes to market share it can be safe to assume that the main source of sales in the German market comes from Danes as they take advantage Germany's more lax alcohol taxation as they cross the open borders and buy alcohol and other goods cheaper than in Denmark.

Table 3.5 Off trade volume, year-on-year % growth, historic and forecasted

	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
Western Europe									
Denmark	-3.0	-2.3	-3.3	-2.5	-2.3	-1.6	-1.2	-0.9	-0.7
Germany	-0.7	1.3	-3.3	-4.6	-2.8	-1.5	-0.5	-0.5	0.1
Italy	2.2	3.2	4.6	3.9	4.0	4.0	3.7	3.1	2.3
Eastern Europe									
Latvia	2007 consumption 74 liters per capita				2012 consumption 92.9 liters per capita = CAGR 4.65%				
Lithuania	2007 consumption 93.6 liters per capita				2012 consumption 114.8 liters per capita = CAGR 4.17%				
Poland	9.4	12.9	11.9	3.3	2.3	1.4	0.0	3.7	-0.9

Source: *Euromonitor International – dated 2009, accessed March 26th. Humphries 2009 total volumes for Latvia and Lithuania, CAGR calculations in Appendix13C and 13D*

[86] Beer Denmark – Euromonitor International
[87] Euromonitor International – data retrieved March 23rd 2009

3.2.3.2 BCG Eastern Europe

Moving on to Eastern Europe where Latvia, Lithuania and Poland are all markets where RBREW has experienced high growth in volume and value, both through acquisitions and organically. In Lithuania RBREW controls 25%[88] of the fast growing beer market with their strong brands Kalnapilis and Tauras, underlining the two brands' importance to RBREW is the fact that beer is the most popular alcoholic drink in Lithuania.[89]

Like in Lithuania beer has a strong tradition in Latvia, and the market is rapidly growing.[90] RBREW owns Livu Alus which is the third largest brewery in the country in addition to other smaller brands, thus creating a strong position in Latvia.

In Poland RBREW is the fourth largest player when it comes to beer sales with a market share of 2.9%, far behind the market leaders; SABMiller, Heineken and Carlsberg.[91]

3.2.3.3 RBREW's market strength

Figure 3.6 illustrates RBREW's market strength in their most important markets. Using the BCG discussion above combined with the analysis above the conclusion can be drawn that one of RBREW's markets can be seen as a Cash Cow and one is to be seen as a Star.

Others are a mix-between of sort due to numerous factors; the economic situation has changed the projected market growth estimates slightly (Latvia) and the markets that were highly growing might also be getting closer to maturity.

Furthermore, the problems RBREW has had with its Polish activities where a large devaluation of assets (as discussed in chapter 2) has become a reality makes Poland an uncertain market for RBREW. Italy is still showing strong growth characteristics where RBREW seems to be well positioned.

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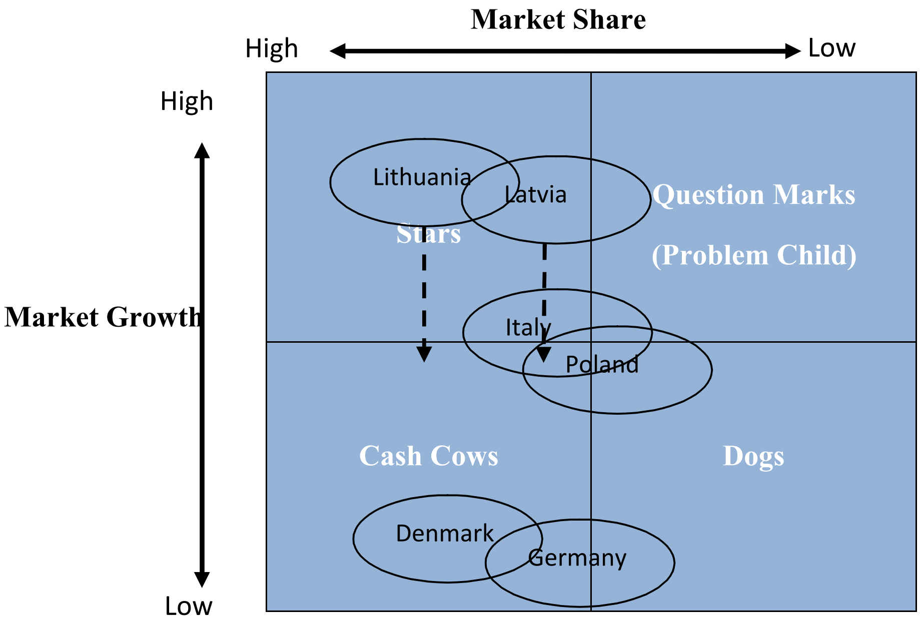
88 Company Announcement No 02/2009
89 Euromonitor – Consumer Lifestyles Lithuania
90 Euromonitor - Consumer Lifestyles Latvia
91 Euromonitor International

Figure 3.6 RBREW on the BCG matrix



Source: *Johnson et al, markets inserted by the authors, dashed lines represent a likely shift for the respective markets*

3.3 Sub-conclusion

Cost drivers are of huge importance within a traditional production industry as the brewing industry. It is definitely a strength that RBREW is far in optimizing its cost efficiency in Denmark, and has begun doing so in Poland, but their economic situation coupled with the implications of the financial crisis (lack of access to capital) makes it plausible that these efforts are now put on hold, which will limit the long-term profitability in Eastern Europe.

Besides the latter, the financial crisis poses other threats to RBREW including: expected move of sales from On- to Off-trade, as well as expected stagnant growth at best in Eastern Europe which will have the effect that this market will come to resemble that of Western Europe in most regards.

The move of sales from On- to Off-trade is expected due to the characteristics of beer as an inelastic product, the move will affect revenues negatively simply due to lower margins in this market.

Furthermore this development will cause a shift towards higher overall customer bargaining power as big chain supermarkets' bargaining power far exceeds that of individual restaurants or cafes, this could bring margins in the off-trade further down.

Overall we expect the financial crisis to be most severe in Eastern Europe, the Baltics more specifically, having the effect that total sales will decline; we expect Western European and Malt & Overseas sales to remain relatively stable. The only positive consequence of the financial crisis, and the restraints it has imposed on access to capital, is the fact that competitive new entrants in all of RBREW's markets are highly unlikely. Both due to the capital required, but also because of the size of the markets relative to that of other growth markets.

Figure 3.7 illustrates this along with those other factors that compose RBREW's SWOT profile

Figure 3.7 SWOT for Royal Unibrew

Strengths	Weaknesses
• **Strong presence in Denmark** • Strong presence in Baltic • Good implementation of productivity/distribution improvements	• Relatively small player • Lack a strong international brand • **Large debt**
Opportunities • Growing Italian market • **Divest part of activities** • Takeover by another company	**Threats** • **Financial Crisis/Economic situation with a sharp downturn in Baltic, a 'star market'** • Move of sales from On to Off-trade • Declining core demographics

Source: *Own creation*

The expected stagnation of market growth across the board will inevitable change the competition parameters in Eastern Europe, from one keeping market share and capitalizing from market growth to a situation of battle for market share. RBREW's strategy of operating several smaller brands has so far been performing somewhat up to expectations we do however expect that this strategy will prove costly during the financial crisis.

The disadvantage in the fragmented branding strategy of its product portfolio is that RBREW does not have a strong brand that is their 'identity' in the different markets. The only brand that is represented in nearly all markets is Faxe beer,[92] which is their 3rd most selling brand in the home market of Denmark.[93] The different markets nearly all have their own *key brand* which in the long run might limit the cross-market economies of scale, for instance with regards to marketing and/or production activities.

As branding activities are high priority value adding activities in the process of ensuring customer perception of RBREW's products, this task will require great skill in the future and must remain a top priority.

RBREW's strategic decisions since the launch of the MACH II strategy in 2005 has established the company on the international scene, and enabled it to claim a share of the growing Eastern European markets. Unfortunately this strategic direction seems to have been driven by exuberance and over-confidence in own capabilities to expand into new markets. It has lead to the situation today were massive write-downs in Poland combined with high leverage has left RBREW in bad economic shape, going forward under current market conditions it is difficult to see what good news lies around the corner, if any.

In our view RBREW's best chance to improve its performance lays in immediate divesture of assets, first and foremost its DKK 400m site in Aarhus, but assets abroad must be considered as well. More specifically, Malt & Overseas activities could be a prime candidate for divesture as synergy effects with regards to the rest of the organization are small, furthermore, a good price for these activities is likely should one of the major players decide to expand to these markets.

[92] http://www.royalunibrew.com/Default.aspx?ID=1726
[93] Euromonitor International

Chapter 4 – Financial Analysis

The analysis that follows is primarily conducted through Royal Unibrew's 2008 Annual Report, in some cases however it is necessary to consult previous reports in order to see if significant changes have been made to the reporting methods. The aim of this section is to create a clear overview of the company's financials which will serve as basis when it comes to budgeting and ultimately the valuation of the company.

4.1 Accounting Policies

In order to conduct an accurate valuation of RBREW a closer look into their financial statements is in order, this includes going through historical performance analysis of the company. This closer examination entails that a number of issues regarding their financial statements need to be addressed. In some cases the financial statements need to be reconfigured in such a way that they portray a measure of the operating income which then can be used for future performance forecasting.

4.1.1 Key Accounting Policies

There have been some changes to financial reporting standards as adopted by the EU which RBREW has implemented:

- IAS 27(A) Consolidated and Separate Financial Statements – Requires companies to recognize dividends from subsidiaries and associates on the income statement of the parent company
- IFRIC 13 Accounting for Customer Loyalty Programmes – has not resulted in any changes for RBREW's reporting

In addition to these changes made according to new accounting standard there is one significant change to RBREW's accounting policies which has been made since the last annual report, this change is made due to RBREW's proposed sale of the brewery properties in Aarhus. According to RBREW this property has several possible applications and has therefore been categorized in a separate category under Property, Plant & Equipment (PP&E).

Apart from the above mentioned items there have not been any significant changes in RBREW's accounting policies since the last annual report. RBREW has reported under the International Financial Reporting Standards (IFRS) since 2004 and since then no revolutionary changes have been made to the accounting policies.[94]

4.1.2 Consolidation

RBREW's financial statements are portrayed on a group basis, that is, all enterprises that RBREW holds a controlling share are listed as *subsidiaries* while those that the company only controls 20 – 50% of are labeled *associates.* Appendix 16A provides a full overview of associates and subsidiaries.

As the number and size of associates is negligible with regards to the company as a whole they will be included in all analysis without any adjustments made.

4.1.3 Goodwill

Goodwill and other intangible assets are reviewed annually to determine whether impairment has incurred, apart from normal amortization, goodwill is recognized at cost in the balance sheet and subsequently measured at cost less accumulated impairment losses. The carrying amount of goodwill and other intangible assets with indefinite useful lives is tested at least annually for impairment and is written down to the recoverable amount in the income statement if the carrying amount is higher.

In this relation it is worth mentioning that impairment tests of the Polish operation resulted in impairment losses of DKK 455 million. In 2007 Poland's share of the carrying amount of goodwill and trademarks was 41% of the total, amounting to DKK 314 million, in the 2008 statements the goodwill has been written down to zero and trademarks down to DKK 11.6 million, now 2% of the whole.

[94] Royal Unibrew – Annual Reports 2005, 2006, 2007, 2008

4.1.4 Property, Plant & Equipment

As mentioned earlier a separate category under PP&E was created to fit the former brewery facilities in Aarhus and through a series of assumptions the management estimated its fair value to be DKK 400 million and have recognized as such on the balance sheet. These properties are not expected to be sold before the year 2010.[95]

4.1.5 Operating Leases

RBREW's only leases are considered to be operating leases and payments are recognized in the income statement on a straight-line basis over the lease term. Since the value of total lease obligations for RBREW is only DKK 123,100[96] no special adjustments will be made for the value of leases.

4.2 Restating the Financial Statements

Reorganizing a company's financial statements is an essential part of the valuation procedure as the process helps to distinguish between operating (core) and non-operating items.[97] The non-operating items are then excluded from calculations regarding the valuation of RBREW as these are often special items that are not an integral part of the company's operations. This method consists of reorganizing the balance sheet to identify the Invested Capital (IC) and adjusting the income statement to derive the Net Operating Profit after Taxes (NOPAT). The ROIC is then a product of these two:

$$ROIC = \frac{Net\ Operating\ Profit\ after\ Tax}{Invested\ Capital\ (beginning\ of\ the\ year)}$$

[95] Royal Unibrew – Annual report 2008, Note 13
[96] Royal Unibrew – Annual report 2008, Note 22
[97] Koller *et al,*2005

4.3.1 Revenue Growth

In order to examine the financial performance of RBREW we set up looking at past growth.

Table 4.1 Company growth

Net revene (mDKK)	2008	2007	2006	2005
Western Europe	2,536.2	2,489.6	2,414.1	2,371.1
Revenue Growth (year on year)	1.87%	3.13%	1.81%	
Volume Growth (year on year)	-2.63%	0.00%	5.56%	
Eastern Europe	1,129.2	909.3	671.5	576.5
Revenue Growth (year on year)	24.18%	35.41%	16.48%	
Volume Growth (year on year)	18.52%	22.73%	15.79%	
Malt and Overseas Markets	513.3	482.9	353.4	243.4
Revenue Growth (year on year)	6.30%	36.64%	45.19%	
Volume Growth (year on year)	0.00%	50.00%	33.33%	
Total Revenue	4,178.7	3,881.8	3,439.0	3,191.0
Growth (year on year)	7.65%	12.88%	7.77%	

Source: *Own Creation*

Table 4.1 above portrays RBREW has experienced a solid growth in revenues over the past four years. This growth is to a large part driven by growth in emerging markets, exemplified by double-digit growth rates in Eastern Europe for the whole period.

One result of this development is that RBREW is spreading its revenue generating geographically. The contribution to total revenues generated by Western Europe has declined from 74% to 60% over the course of the period despite modest growth. Eastern Europe on the other hand is up by 96% during the period, increasing its contribution to total revenues from 18% to 27%.

A large part of the Eastern European growth has been generated through acquisitions of Brok-Strzelec and Lomza in Poland in 2005 and 2007 respectively, as well as Lacplesa Alus and Livu Alus in Latvia in 2005 and 2007 respectively[98].

[98] See Chapter 2.1

As the aggressive acquisition strategy has been abandoned we expect Eastern European growth rates to decline, forward looking growth has to be obtained organically which we expect will put a lid on high growth rates.

In the Malt & Overseas markets growth rates have been high in '06 and '07, primarily driven by acquisitions, but since competition is low we expect RBREW to maintain organic growth rates of around 6% in the near future.

4.3.2 ROIC

As for the profitability of RBREW, the company has undergone a poor development during the period. ROIC has dropped by 5% over the period, not surprisingly the poor result in '08 accounted for the majority of the drop. Operating and EBITA margins have been declining as well, another indicator that overall profitability is decreasing for RBREW despite of increasing revenues.

The increase in revenues is the only "good news" as RBREW has been able to grow its revenues both in magnitude, but also in relation to operating investing capital (despite a small decrease in '08), this is an indicator that RBREW is improving its efficiency.

Table 4.2 Decomposition of pre-tax ROIC

Item	2008	2007	2006	2005
Pre-tax ROIC (excl. Goodwill)	3,81%	7.16%	8.83%	NA
EBITA margin	3.26%	6.32%	10.15%	9.68%
Restructuring Costs	50,125	107,823	14,329	0
Operating Margin	3.23%	6.29%	10.11%	9.49%
Revenues / Operating Investing Capital (Ex. Goodwill)	1.74	1.95	1.79	1.16

Source: *Own Creation*

If we compare RBREW's ROIC to the sector we see that in '06 all of the companies were posting close to similar numbers, indicating that profitability was close to equal within the industry.

In '07 we start to see a trend where the major competitor Carlsberg is able to increase its ROIC whereas RBREW and minor competitor Harboe experience decreasing profitability.

This trend has continued through '08 at an accelerating pace for RBREW and Harboe, this development could suggest that the economic crisis hits smaller players harder – however the evidence here is not sufficient to conclude so.

Table 4.3 Cross sectional comparison pre-tax ROIC

Company	2008	2007	2006	2005
Royal Unibrew	3.81%	7.16%	8.83%	NA
Carlsberg	13.30%	11.80%	9.80%	9.20%
Harboe	1.80%	7.90%	9.20%	13.10%

Source: *Own Creation*

4.3.2.1 Operating Margin

As seen in the previous section RBREW's operating margin has decreased by around 6% over the period, to further identify reasons for developments in margins the income statement is split into percentages. Reported at group level as regional numbers is not available

Table 4.4 RBREW's Operating margin

Royal Unibrew	2008	2007	2006	2005
Net revenue	4,178,703	3,881,762	3,439,026	3,190,959
Cost of sales	58.23%	54.85%	50.68%	49.56%
Gross Profit	41.77%	45.15%	49.32%	50.44%
Sales and distribution expenses	33.21%	32.69%	34.64%	35.77%
Marketing Expenses and Sales Expenses	21.74%	20.82%	22.32%	23.25%
Distribution Expenses	11.47%	11.87%	12.27%	12.52%
Administrative Expenses	5.96%	5.84%	5.84%	5.38%
Other operating income	0.09%	0.24%	0.85%	0.04%
Operating margin	3.23%	6.29%	10.12%	9.49%

Source: *Own Creation*

As mentioned previously RBREW's net revenues have been steadily increasing during the past years, both due to acquisitions as well as organic growth. When it comes to the cost structure, costs of sales have increased close to ten percent over the period – a bad development considering that cost drivers are very important within the industry.

The result of this increase in COGS, the effect this has on profits is imminently visible in RBREW's operating margin which has decreased steadily with from around 9 percent down to around 3.2 percent. As a result we can conclude that it is increasing costs that are hurting RBREW's profitability.

On a positive note Sales and Distribution costs have been brought down, this suggests that RBREW has improved its cost effectiveness especially within its distribution chan. This is positive considering that the full effect of restructuring the Danish distribution channel is not expected to be fully utilized before 2009; therefore we can expect this to decrease further in the future.

Administrative costs have increased, however not very much, the reason primarily being consolidation of activities in Faxe as well as Warsaw.

Table 4.5 Carlsberg's operating margin

Carlsberg	2008	2007	2006	2005
Net revenue	100%	100%	100%	100%
Cost of sales	52.13%	50.11%	49.05%	49.62%
Gross Profit	47.87%	49.89%	50.95%	50.38%
Sales and distribution expenses	29.35%	32.46%	34.50%	35.04%
Marketing Expenses and Sales Expenses	17.02%	18.82%	20.21%	20.21%
Distribution Expenses	12.33%	13.65%	14.29%	14.83%
Administrative Expenses	6.56%	6.98%	7.46%	7.78%
Other operating income	1.97%	2.08%	1.61%	2.30%
Operating Margin	13.3%	11.7%	9.9%	9.3%

Source: *Own Creation*

If we look at Carlsberg during the same period, we see that COGS has been increasing as well, but to a much smaller degree (around three percent for the period) resulting in increasing operating margins. Sales and Distribution expenses have decreased by 6% over the period twice as much as RBREW, which suggest that even though RBREW has been able to improve on its costs Carlsberg is doing better.

Regardless of area Carlsberg is outperforming RBREW when it comes to the cost structure. This is concerning, as for RBREW COGS have grown out of control, the effect being that operating margins are down, this must be improved in order to regain more profitable margins. It cannot be stressed enough that cost drivers and the use of these determine who wins and who loses in this industry, currently RBREW is losing.

4.3.2.2 Capital Management

Within heavily industrialized manufacturing industries the operating invested capital turnover is low, primarily due to the costs associated with production facilities. When we look across the Danish brewing industry we see rather low numbers here as well, which was expected.

Table 4.6 Cross sectional comparison of turnover on invested

	2008	2007	2006	2005
Operating Invested Capital Turnover (Excl. Goodwill)				
Royal Unibrew	1.74	1.95	1.79	1.16
Carlsberg	1.69	1.89	1.82	1.65
Harboe	1.48	1.53	NA	NA

Source: *Own Creation*

As we see in the table 4.6 there has been a common trend in the industry of increasing turnover in relation to operating invested capital, although we have seen small declines in '08. This is a sign of increasing efficiency, a sign that an unused potential in companies' cost structure has been utilized. In addition it is worth noting that RBREW has overtaken Carlsberg as the leader, a sign that RBREW is far when it comes to maximizing cost efficiency.

Below we see a comparison of PP&E turnover across the sector, here RBREW has maintained its position as industry leader, again a sign of good ability to create revenues by using assets efficiently.

Table 4.7 Cross Sectional Comparison of PP&E Turnover

	2008	2007	2006	2005
Royal Unibrew	49.76%	40.11%	41.49%	43.53%
Carlsberg	56.79%	49.41%	49.58%	53.50%
Harboe	57.86%	60.38%	56.69%	54.93%

Source: *Own Creation*

As for working capital management RBREW has undergone a positive development of almost decreasing net operating working capital / revenues by 50%, down to 7.5% of net revenues. This development is especially positive since it is a measure of the capital required in the production of revenues, the major underlying changes can be attributed to inventory management as well as increases in accounts payables.

In relation to Carlsberg there is still some way to go, even though Carlsberg have posted a negative number for '08 we do not expect this to be a recurrent trend.

Table 4.8 Working Capital Management

	2008	2007	2006	2005
Royal Unibrew				
Net operating working capital/Revenues	7.52%	10.80%	13.74%	14.36%
Inventory/Revenues	9.92%	9.06%	8.04%	7.95%
Trade receivables/revenues	12.96%	14.89%	12.86%	12.52%
Accounts payable/revenues	12.52%	9.03%	10.01%	8.74%
Carlsberg				
Net operating working capital/Revenues	-1.99%	3.47%	5.25%	7.19%
Inventory/Revenues	8.87%	8.53%	7.84%	7.53%
Trade receivables/revenues	10.62%	14.17%	14.87%	15.71%
Accounts payable/revenues	13.33%	13.03%	12.53%	11.86%

Source: *Own Creation*

4.3.2.3 Liquidity and other Ratios

As mentioned in previous chapters, RBREW has increased its debt over the past years in order to fund acquisitions, as a consequence of the increased debt we find it relevant to take a look at RBREW's liquidity.

The Current and Quick ratios are measures of liquidity, and in both cases decreasing during the period as seen in the table below. The Quick ratio is lower than the Current ratio which makes good sense since it is a more conservative measure only including the most liquid current assets.

As a rule of thumb a Current ratio of 2 is considered an indicator that liquidity risk is very low,[99] this may vary across industries depending on the capital tied up in production, for RBREW a current ratio around 1-1.3 might be optimal due to the fast moving nature of its

[99] Plenborg, 2005

products. With a current ratio of 0.82 in 2008 RBREW is heading in a concerning direction as liquidity risk has increased considerably during the past 4 years.

If we more from liquidity measures, which are in nature short term, to a more long term view of debt we see that the debt and debt-to-equity ratios have both increased over the period. An increase in these ratios indicates increased financial gearing, and thereby increased financial risk. Though leverage have been a business mantra across industries in past years, it poses a great risk in times of economic crisis, effects of RBREW is now facing including increasing interest rates.

Table 4.9 Ratio analysis RBREW

Ratios	2008	2007	2006	2005
Current ratio	0.82	1.19	1.34	1.38
Quick ratio	0.56	0.84	1.03	1.05
Debt ratio	0.57	0.47	0.42	0.41
Debt-to-equity	6.05	2.38	1.97	1.77
Return on total assets (ROA)	-11.93%	4.11%	6.75%	7.03%
Return on Equity (ROE)	-84.05%	13.87%	20.06%	19.50%
Earnings per share (EPS)	-86.28	27.72	41.13	40.03
Price Earnings (P/E)	N/A	19.26	17.99	13.29

Source: *Own Creation*

The poor economic development throughout the period is further underlined by continuously decreasing ROA, ROE and EPS. The P/E ratio has had a positive development until 2008 (where earnings turned negative) indicating that market valuation of the company have been too positive, or at least future expectations have been so.

Table 4.10 Ratio analysis Carlsberg

Ratios Carlsberg	2008	2007	2006	2005
Current ratio	0.75	0.87	0.76	0.73
Quick ratio	0.54	0.64	0.59	0.59
Debt ratio	0.34	0.38	0.39	0.42
Debt-to-equity	2.36	3.07	3.08	3.20
Return on total assets (ROA)	2.24%	4.24%	3.71%	2.20%
Return on Equity (ROE)	5.28%	13.02%	11.43%	7.03%
Earnings per share (EPS)	26.99	27.47	28.47	17.98
Price Earnings (P/E)	6.35	18.13	19.71	18.77

Source: *Own Creation*

Comparing RBREW with competitor Carlsberg we see that the two companies are fairly similar when it comes to use of debt, the only exception being the rise in debt-to-equity ratio in '08 for RBREW. Apart from debt it is worth noticing that the larger Carlsberg is more stable in its developments, despite of a disappointing result in '08 Carlsberg still managed to turn in profits, and looks more solid than RBREW.

In terms of liquidity Carlsberg is on the short side, the company's increased debt due to the purchase of Scottish and Newcastle has become a concern as it further squeezes liquidity.

If we turn to smaller competitor Harboe we see a company operating with a greater margin of safety, most noticeable through less leverage used. Unlike larger competitors Carlsberg and RBREW, Harboe has not been taking on acquisitions instead focus has been on operations as a result we see little changes in ratios.

However two interesting issues are the decreases in ROA, ROE and EPS coupled with a sharp increase in P/E. We expect that the trend of decreasing profitability but at the same time increasing P/E suggests that either the market is very positive on the low debt levels or a future acquisition is expected. Whatever the reason for this development, it is unusual as we should expect falling profitability to be directly visible in the share price.

Table 4.11 Ratio analysis Harboe

Ratios Harboe	2007/2008	2006/2007	2005/2006	2004/2005
Current ratio	0.99	0.92	1.10	0.92
Quick ratio	N/A	N/A	N/A	N/A
Debt ratio	0.08	0.06	N/A	N/A
Debt-to-equity	0.72	0.77	0.69	0.93
Return on total assets (ROA)	1.57%	4.65%	5.73%	7.21%
Return on Equity (ROE)	2.88%	8.24%	9.67%	13.90%
Earnings per share (EPS)	3.40	9.50	11.00	14.80
Price Earnings (P/E)	40.29	22.97	20.19	13.99

Source: *Own Creation*

4.3.3 Risk Analysis

The risks facing RBREW as all other companies can be divided into financial and operating risks. In the following these risks will be analyses within the two groups.

4.3.3.1Financial risk

Debt

- Total debt has increased since the strategic decision to acquiring foreign breweries. Acquiring through the use of debt has the pitfall that pressure on performance in the acquired company is imminent, in RBREW's case the Polish activities have not lived up to expectations and thereby disabled RBREW's ability to decrease debt.
- Poor performance in Poland has also led to a massive write-down of DKK 455m, which caused creditors to force a restructuring of debt resulting in a further increased debt.
- RBREW has set a target of debt in an optimal capital structure equaling 3 X EBTDA, currently however that ratio equals 8.4 X EBITDA.
- The large debt combined with the far off-target debt-to-EBITDA ratio implies that RBREW will not b e able to bring down debt in the near future through capital generated from operations. The result is that sale of assets is needed to bring down debt, besides from the DKK 400m Aarhus site it is difficult to see what other assets are left for sale, meaning the company could be forced into selling operations in Eastern Europe or the Malt & Overseas markets in order to generate capital.

Currency

- As a result of operating across borders RBREW do have a currency risk. For those countries in which operations are placed the risk is small since purchases and wages are paid in local currencies. When it comes to exports the currency risk is more of an issue and is actively managed through FX products.

Credit

- Credit risk is primarily related to debt outstanding, and to RBREW's ability to repay these, loans is in DKK which eliminates any currency risk.

- Trade receivables poses a risk, especially during an economic downturn, RBREW budgeted for bad debtors in '08 with DKK 28m, a budget that was not met.

Interest rate

- Interest rate hikes or cuts primarily affect the value of debt outstanding, which is not that important as long as RBREW does not close its loans prematurely, but in the light of the current debt this risk could pose a bit more important in the near future.

4.3.3.2 Operational risk

Forecasting of sales

- Good forecasting of sales volumes enables RBREW to plan its production, exports and other costs optimally, in the light of the current economic crisis this is even more important to react quickly if demand is affected.

Market rivalry/customer bargaining power

- As discussed in chapter 3.1.2 the highly competitive market has the implication that ability to raise prices is very limited, if existing at all. This is a risk to RBREW as it can limit them in raising revenues this way.

4.3.4 Cash Flow Analysis

In the previous sections RBREW's profitability, financial risk and growth has been analyzed. The purpose has been to identify accounting profits including operational income. The results derived in the prior sections portray creation or destruction of value as it is created, whereas the cash flow statement shows creation/destruction of value as it is realized.

The purpose of the Cash flow analysis is to analyze the developments in RBREW's cash flows in order to determine contributions from operational, investing and financing activities.

Table 4.12 Cash flow analysis

	2008	2007	2006	2005
Cash flow from operating activities	103.208	151.457	425.240	382.397
Cash flow from investing activities	-589.013	-372.271	-304.444	-407.890
Cash flow from financing activities	418.142	11.698	-39.399	244.031
Total After-Tax Cash Flow	**-67.663**	**-209.116**	**81.397**	**218.538**

Source: *Own Creation*

Cash flows from operating activities have decreased over the period due to a drop in net profits in ’07 as well as further drop in net profits in ’08 combined with a sharp increase in payables for ’08.

Cash flows from investing activities was poor to begin with and has further deteriorated due purchases of subsidiaries as well as purchases of PP&E exceeding sales of PP&E for the period as a whole.

Financing activities has increased over the period, not a good sign as it implies that debt is increasing. Furthermore the type of debt raised has changed over the period from using long-term debt in ’05 and ’06 to short term debt in ’07 and even more so in ’08. In addition to this ’05 and ’06 was characterized by substantial share repurchases, which to a large extent justifies the financing expenses, this is not the case for the latter two years indicating that RBREW has experienced a growing need for foreign capital.

4.4 Sub-Conclusion

RBREW has been able to keep on growing revenues throughout the period, the main part of the growth stemming from Eastern European markets where contribution to total revenues is up from 18% to 27%, whilst Western Europe was stable. Despite of the increases in revenues RBREW has experienced declining profits over the period, exemplified by a decreasing ROIC.

By comparison Carlsberg has experienced increasing profitability through a rising ROIC. To a great extent the decrease in ROIC can be explained by increases in Cost of sales, competitors have experienced rising cost of sales as well but at a slower pace, resulting in higher margins which only underlines the fact that in the brewing industry cost control and effectiveness is absolutely key to succeed, currently RBREW is not performing well enough, this has to be a major concern to Faxe-based managers.

Despite the increasing cost of sales RBREW has been able to improve in areas of operational efficiency, resulting in better scores than competitors when it comes to working capital management. The overarching problem for RBREW is its debt, with a debt-to-EBITDA ratio of 8.4 RBREW is far exceeding their own desired capital structure suggesting a debt-to-EBITDA ratio of 3.

The debt is so severe that operations are not expected to provide sufficient cash for RBREW to bring down debt, instead sales of assets seems to be the way forward. We have our doubts as to whether this debt-to-EBITDA goal can be met without severe divesture of assets.

In terms of risk it is our assessment that RBREW does not have other pressing issues than debt, primarily because the company has the ability to adapt quickly to a decrease in demand (by scaling down production) but also because issues such as currency, credit and interest rate risks are limited.

Given the overall financial state of RBREW the abolishment of the Double Up strategy plan and subsequent new strategic goals of focusing on operational efficiency and profitability as well as bringing down debt makes good sense. RBREW is not in a position to make investments, debt is the major issue currently that must be addressed, however operations will not contribute sufficiently towards this.

Assets must be sold to accelerate the maturing of debt, alternatively an issue of new stock could be a solution but given the current stock price the timing for such a solution could not be worse and is therefore highly unlikely.

Chapter 5 – Forecast

5.1 Introduction

Forecasting is a vital part of company valuation, that is, we need to estimate future cash flows to be able to determine the present value of future cash flows as the DCF analysis is one of the core parts of this thesis. It is important to state that no one can of course predict the future, however, we are to make calculated estimates (might also be termed as educated guesses) on how we see the development in the near future based on the analysis already performed in this thesis.

The forecasting of RBREW's future cash flows will be made with references to the strategic analysis in Chapter 3 which will then be coupled with the financial analysis from Chapter 4. The period we have chosen for our projections is the next four years, that is, 2009 – 2012, as the period chosen exceeds e.g. the economic indicator data we collected in Chapter 3 this entails that a few assumptions have to be made along the way, these will be stated clearly.

5.2 Investments

Before we proceed with the forecasting of RBREW's future income and expenses we need to address if and how any investments will be made in the near future by the company, this needs to be established as RBREW's recent growth can be related mostly to acquisitions in new and existing markets.

Different markets call for different funding strategies, depending on the characteristics of the business and its environment the sources of funding can vary. For this purpose the Growth/Share Matrix discussed in Chapter 3 has been extended to include the appropriate financing strategies for the different 'quadrants' in the matrix (for full discussion see Appendix 14A).[100]

In short, the argument here is that business activities with high risk involved should use financing that offsets some of the risk, that is, less risky financing.

[100] Johnson *et al*

RBREW has, as mentioned above, grown in part due to acquisitions in markets with rapid growth which according to the definition used here carry a high business risk and should thus be financed by equity. This has not been the case with RBREW where acquisitions during the last two years have been funded by debt and in fact net interest bearing debt has doubled since 2006 as mentioned in Chapter 4.

It is therefore the assumption when forecasting future items for RBREW that no major investments to be undertaken in the period due to this heavy debt, supporting this assumption is that the company has refinanced its bank debt and committed to strive towards a more appropriate capital structure as stated in their annual report.[101] Or cleansed for corporate spin, bring down debt which is beyond acceptable levels.

The lack of free cash for investment use combined with our hypothesis of a more restricted access to credit leads to what we call "the No-Investment assumption", implying that no new major investments are on the company's radar.

5.3 Net Revenue

In Chapter 3 we analyzed RBREW's major markets and established that they were Eastern- and Western Europe, furthermore, this analysis indicated that the market situation in both regions is toughening up. Western Europe which is where RBREW derives most of its revenue is categorized as a mature market with slow growth or even decline in beer sales and Eastern Europe is the market that has driven most of the company's growth. See Appendix 15A for regional growth.

The core market in Western Europe will most likely remain unchanged, however, as Eastern European markets are starting to show signs of 'Western characteristics' and will experience slower growth we predict that RBREW will loose some ground there, especially given the assumption that smaller brands tend to do worse than large ones in downturns.

The changes in consumptions as mentioned in the macro-analysis (in chapter 3) are not considered to have a large impact on RBREW's ability to generate revenue as the beer-drinking tradition in its main markets is strong.

[101] Royal Unibrew Annual Report 2008 - Highlights

Moreover, as we argued in our PESTEL evaluation the economic crisis will have a negative effect on consumer spending which will be realized in a decline in on-trade spending to be offset by an increase in off-trade purchases.

Assuming that RBREW's distribution channels in the respective areas will remain intact the effects will be slightly negative with regards to net revenue as sales move to areas where the buyers' bargaining power is higher.

Combined with the indicators in the external analysis (macro- and industry analysis) in Chapter 3 and the 'no investment assumption' above we will therefore assume negative growth in 2009 and 2010 in RBREW's net revenue and a slow recovery in the remaining years for the period.

Table 5.1 Royal Unibrew's Revenue Development 2008-2012

DKK '000)	2008	2009e	2010e	2011e	2012e
Net Revenue	4,178,703	4,095,129	4,054,178	4,135,261	4,259,319
Change	*7.65%*	-2.00%	-1.00%	2.00%	3.00%

Source: *Own Creation*

For a full copy of the forecasted income statement see Appendix 1A.
This relatively small decline in net revenue compared to the world's bleak economic outlook is supported further by the fact that the industry RBREW operates in is non-cyclical and will thus be less affected by the economic downturn than many other industries. The inexpensive and fast-moving nature of RBREW's products is a strength during such a crisis.

5.4 Costs

Given that RBREW have now retreated from their growth strategies it is safe to assume that focus will be on increased cost cutting in the near future. Table 5.2 illustrates the cost development for RBREW and below is further discussion on the rationale behind the assumptions used in the table 5.2

Table 5.2 Cost Development for Royal Unibrew 2008-2012

	2008	2009e	2010e	2011e	2012e
Production costs/net revenue	58.23%	58.83%	58.23%	58.23%	58.23%
Change in production costs	*14.28%*	*-1.00%*	*-2.00%*	*2.00%*	*3.00%*
Sales and distribution expenses/net revenue	33.21%	32.53%	31.54%	30.30%	29.13%
Change in sales and distribution expenses	*9.36%*	*-4.00%*	*-4.00%*	*-2.00%*	*-1.00%*
Administrative expenses/net revenue	5.43%	5.21%	4.94%	4.75%	4.61%
Change in administrative expenses	*-8.91%*	*-6.00%*	*-6.00%*	*-2.00%*	*0.00%*
Total expenses (share of net revenue)	96.86%	96.56%	94.72%	93.29%	91.97%

Source: *Own Creation*

Furthermore, as RBREW's main market is Denmark and Western-Europe and given the recent upgrades of the production facilities we do not predict any significant impact from factors mentioned in the macro-analysis, i.e. political or environmental as the region tends to be on the forefront regarding technological issues.

5.4.1 Production Costs

Production costs are by far the largest cost item on RBREW's income statement, which is characteristic of the brewing industry as a whole. Therefore any percentage change in these costs affects the bottom line significantly relative to other cost items.

The primary impact we see on RBREW's production costs is the consolidation of the production facilities in Denmark, add to this a positive effect from the decline in raw material prices and more experience in the new markets we predict that these costs will be relatively stable in the coming years.

5.4.2 Sales and Distribution Expenses

Sales and distribution expenses are the second largest item on RBREW's income statement in terms of costs; therefore, any percentage change here will have a large effect on the bottom line results.

RBREW has embarked on a path to change the structure of their distribution channels and result of those changes will have a positive impact (reducing) on distribution expenses. Marketing and sales expenses tend to rise in absolute numbers when new markets are entered.

In line with our 'No investment assumption' RBREW will not embark on any new investments in the near future creating grounds for the assumption that these costs will decline slightly in the near future. This hypothesis is supported further by the discussion on the BCG Matrix and Learning Curve discussion in chapter 3.

5.4.3 Administrative Expenses

This is not a large post on RBREW's income statement; despite of that it should not be ignored as it is here some excess costs might be identified and reduced without it impacting perceived product quality or service negatively in the eyes of the customers.

RBREW have already managed to reduce administrative expenses and it can be assumed that this development will continue as no extra back-office resources will be needed to deal with new acquisitions. On the contrary, it will most likely be in this field where the first synergies from previous mergers and acquisitions will be realized.

We will therefore assume that costs (as share of revenue) will decrease in the period, mainly attributed by decreasing administrative and distribution costs. Moreover, the decline in raw material prices should contribute positively to production cost development.

5.5 Working Capital

Net working capital is of particular interest for us in such a way that any change in this item ultimately affects the free cash flow of RBREW. In many cases net working capital is defined as current assets less current liabilities from the Balance Sheet.[102] Our calculation of net working capital (NWC) however, is adjusted for interest bearing current liabilities.[103]

$$NWC = Total\ current\ Assets - (Current\ liabilities - Mortgage\ debt - Credit\ institutions)$$

As a result of the reorganization that has and will take place on the operational level at RBREW it can be safe to assume that working capital management will be improved at the company. Previous years' fluctuations will be replaced by a stabilization of working capital as a share of net revenue in the short term. Some minor fluctuations in absolute numbers are to be expected according to our projection of the company's financials.

[102] E.g. Brealy *et al,* 2006
[103] Koller *et al, 2005*

Table 5.3 Royal Unibrew's working capital 2008-2012

DKK '000	2008	2009e	2010e	2011e	2012e
Net working Capital (operating working capital)	314,177	271,034	299,783	435,360	486,159
Net working capital as share of revenue	7.52%	6.62%	7.39%	10.53%	11.41%
Change in Net working capital	*-25.02%*	*-13.73%*	*10.61%*	*45.22%*	*11.67%*

Source: *Own creation*

Table 5.3 illustrates the net working capital development for RBREW during the forecasting period, the table illustrates a rising trend in net working capital and at the end of our period we have almost reached the levels of 2005, as share of revenue.

Our forecasting model assumes that RBREW will have some difficulties in managing inventories with the new structural changes, most notably in finished goods as we see difficulties in predicting demands. The development for the entire period can be found in Appendix 1B, 1C and 2B

5.6 Free Cash Flow

When we examine our projections of RBREW's profits for the forecasting period we observe that bottom line results continue to be negative for 2009 and 2010. However, even though it is generally prudent to look at a company's outcomes for the year to see if it's really making or losing money it is more appropriate for us in the valuation process to examine the company's free cash flows. As authors in the literature point out:[104]

Cash is king

The Free Cash Flow (FCF) is the cash flow which is available to investors after all investments necessary for growths have been made.[105] This is an item that is of particular interest to us as these cash flows will be used for our valuation in the next chapter.

Referring to Table 5.4 we can see the development of RBREW's FCF during our forecasting period, as the table reveals we still expect a negative FCF in 2009 following the exceptionally bad results in 2008. This is however an improvement and we expect the company to be back in the black numbers in 2010. There are of course numerous items that affect the outcome of the FCF; these can be explored further in Appendix 3A

[104] E.g. Brealy *et al,* 2006
[105] Brealy *et al,* 2006

5.7 Debt

When producing a forecast we find it necessary to assign a section to one of the greatest risks facing RBREW- its debt. As of end '09 RBREW has a net-interest-bearing-debt amounting to DKK 4.3bn 2/3of which has to be re-financed within the following two years[106]. It is our expectation that it will be a tough task of renegotiating this credit, a task that is not made easier by the lack of ability to bring down debt with cash from operations. We expect that RBREW will be able to renegotiate all of its debt within the period at close to similar conditions, resulting in minimal changes in overall debt levels.

5.8 Sub-Conclusion

Given the assumptions the company will return to being profitable again already in 2009, the revenue will however decline slightly but as costs will be better managed the result will be an improved bottom line.

Table 5.4 Estimates for Royal Unibrew for 2009-2012

DKK '000	2008	2009e	2010e	2011e	2012e
Net Revenue	4,178,703	4,095,129	4,054,178	4,135,261	4,259,319
Profit/Loss before tax	-452,965	-25,282	48,022	111,474	175,823
Net profit/loss for the year	-483,165	-89,803	-16,500	46,952	111,302
Assets	4,051,408	3,977,326	3,990,814	4,143,185	4,257,276
Equity	574,828	575,393	606,503	692,684	682,595
Free cash flow	-356,214	-88,916	7,669	99,522	155,959

Source: *Own Creation*

Even though the former brewing facilities (listed under PP&E, see Chapter 4) are expected to be sold in the near future we have decided to keep them on the asset side of the balance sheet for the remainder of the forecasting period as our assumptions exclude any large extraordinary items on the income statements.

Furthermore, we assume that the impairment loss that occurred in 2008 was in isolated maneuver that will not be repeated in the near future and thus RBREW will return with positive free cash flows after the current year and through the remainder of the estimation period.

[106] 2008 Annual Report

Chapter 6 – Valuation

6.1 Introduction

So far in this thesis we have gone through RBREW's history and ownership structure, analyzed their strategy and markets, past and current, along with determining the future potential of the company and industry as a whole.

Moreover, we have also conducted an analysis of the company's financials and created a prediction of the company's cash flows. These steps have all been taken with one purpose in mind, namely to determine the value of RBREW given its situation in today's and near future market conditions.

There are several methods available in the literature for company valuation; these methods can be divided into two main categories:

- Relative valuation
- Absolute valuation

We have chosen to use the absolute valuation methods: Discounted Cash Flow (DCF) model DCF and the Economic Value Added (EVA) model. Absolute valuation methods have the advantage that they are long-term valuation techniques accounting for future developments with horizons that are as long as the analyst finds necessary.

The DCF model which as the name indicates is based on cash flows, and the EVA model also known as the Residual Income model which is based on accounting income.

As for relative valuation models we have chosen the more practical multiples-based approach which in nature is a method that usually provides a broad dispersion of results and therefore is highly debatable. However, it is the most commonly used approach by analysts and can serve as a quick and dirty tool to see whether results from the absolute models are in a reasonable range.

The input in multiples is often market based which makes them relative to market performance and can therefore be useful in a second stage of valuation as it enables comparison of values to comparable firms.[107]

It is worth noting that a large difference between relative and absolute valuation models is their output as relative valuation models determine *fair price* while absolute valuation models determine *fair value.* The combination of both approaches should enable us to narrow the gap between theoretical and practical valuation techniques.

6.2 Investor Returns

Before we proceed to the actual valuation of RBREW we need to determine all the variables that will be used. This means that we need to determine, either by calculations or using historical values, the costs of debt and equity which together will be used to determine the company's Weighted Average Cost of Capital (WACC) which is a key item in both the DCF and EVA models.

On a side note, RBREW publish their company WACC in their annual accounts, however, as the underlying assumptions are not published we find it more prudent to come to our own conclusions.

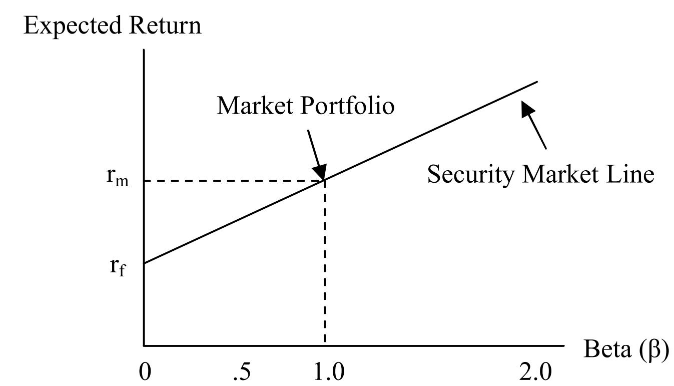
To do so, determining the cost of equity is our point of departure, this process entails that we need to determine several variables and plug them into our model of choice which is the Capital Asset Pricing Model (CAPM).

6.2.1 CAPM

Before we proceed with the process it is in order to review the CAPM, which was created with relations to Markowitz's portfolio theory, and define our processes in more detail.

[107] Fernández, 2002

Figure 6.1 The Capital Asset Pricing Model



Source: *Brealy, Meyers & Allen*

The CAPM was developed as a solution to the issue of what the beta of an asset that is neither re risk free asset nor the market portfolio, that is, not zero or one. According to the CAPM the risk premium on a stock which varies directly to the proportion of its beta (β) and all investments will, on average, plot along the Security Market Line (SML) as shown in figure 6.1.

The formula for deriving the expected return on a stock then looks like this:[108]

$$r - r_f = \beta(r_m - r_f)$$

For our purpose the relationship is rearranged to look like this:

$$r = r_f + \beta(r_m - r_f)$$

Where:

r = the return on the stock, in this case the return on RBREW

r_f = the risk free rate, in this case the 10 year treasury note

r_m = the return on the market portfolio

This will be the first step in our effort to determine RBREW's company cost of capital, i.e. the return investors will require for an investment with the same risk.

[108] Brealy *et al,* 2006

6.2.1.1 Riskfree Rate

The first variable we need to determine is the risk free rate, in our case we will use the rate on the Danish government's 10 year note pr January 1st 2009 which was 3.307%.[109]

6.2.1.2 Beta

The next item to be determined is the appropriate beta (β) for a RBREW stock. Beta is the stock's sensitivity to changes in the market portfolio values, i.e. it measures the stock's contribution to the market portfolio risk.[110]

In terms of risk on a single stock a security with a beta higher than one will rise/drop more than the market while a security with a beta value of less than one will rise/drop by a smaller amount. The intuition is, higher beta leads to higher required rates of returns as can be seen from figure 6.1.

The process of determining β is a bit more cumbersome than the determination of the risk free rate, the formula for calculating β is: [111]

$$\beta_{RBREW} = \frac{\sigma_{RBREW-Market}}{\sigma^2_{market}}$$

For the purpose of our calculations we have chosen to measure RBREW's beta with relation to the total OMX Copenhagen index (OMXC). The approach is as follows:

- Period chosen is January 1st 2005 to January 1st 2009
- Time series for daily prices are downloaded[112]
- These are transformed into returns using: $\ln\left(Price_t / Price_{t-1}\right)$
- The volatilities for the market- and RBREW returns are determined along with the covariance between RBREW and the market.

Using the variable generated we find that RBREW's β is 0.905 according to the formula above with a standard error of 0.206 (R^2 of the regression line). For further illustrations and calculations we refer to Appendix 10A, 10B, 10C, 10D.

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[109] http://statistikbanken.dk/statbank5a/default.asp?w=1024
[110] Brealy *et al,* 2006
[111] Brealy *et al,* 2006
[112] Datastream

6.2.1.3 Risk Premium

When deriving the market risk premium using the CAPM we run into a slight problem due to poor market performance in the recent quarters which results in a negative market premium so instead of using calculations the historical average for 12 selected international stock markets, including Denmark, giving us a market risk premium of 6.7%.[113] This changes our CAPM formula slightly where

$$"r_m - r_f" \text{ becomes } "market\ risk\ premium"$$

6.2.1.4 Required Rate of Return (cost of Equity)

We are now ready to determine the required rate of return on a RBREW stock on the Copenhagen stock exchange which will function as return on RBREW's unlevered equity using:

$$r = r_e = 3.307\% + 0.905 * 6.7\% = 9.37\%$$

This gives us a required rate of return of 9.37% on a RBREW share given that the company has no debt; however, as we know from chapter 4 RBREW is heavily levered so this is only a part of the overall company cost of capital. For the full picture we need to determine the company's cost of debt.

6.2.2 Cost of Debt

The cost of corporate debt usually depends on their quality rating and the time to maturity, and is most often illustrated in the spread over a given type of government bond, or the risk free rate as we call it here.[114]

In 2007 RBREW's credit rating was determined to be BB,[115] or what is called below 'investment grade', it can be safely assumed that this rating has not improved as the company's debt ratio has risen significantly; rather it is likely to have fallen.

[113] Dimson *et al*
[114] Fernandez, 2002
[115] https://amadeus.bvdep.com/version-2009327/cgi/template.dll?product=2&user=ipaddress

In 2006 the spread on a BB rated 10 year bond was 265 basis points (bps) over the risk free rate,[116] since then credit markets have become more difficult as discussed in chapter 3. We therefore find the appropriate spread to determine RBREW's cost of debt as 400 bps given a possibly worse credit rating, increased debt ratio and the situation in credit markets.

More specifically, the bailout of the Danish banking sector comes with a price to pay for the banks this price is then passed on to borrowers. Latest estimates of this premium are estimated at around 90 bps.[117]

With reference to the risk free rate of 3.307% and adding the spread equals a 7.307% as RBREW's cost of debt.

6.2.3 RBREW's WACC

So far we have only briefly mentioned the Weighted Average Cost of Capital (WACC) but not explained in detail what it actually is. A company's WACC is the required rate of return its investors will demand for an investment with the same/similar risks involved and it is derived from the values of return on debt and equity along with taking into consideration the company's capital structure.

$$WACC\ (after\ tax) = r_D(1 - T_C)\frac{D}{V} + r_E\frac{E}{V}$$

Where:

- D = Market value of debt – Balance sheet values (listed as market values)
- E = Market value of Equity (here we say total assets-debt=equity)
- T_C = Marginal Corporate tax – Assuming constant 25%
- r_d = Return on debt – risk-free rate plus 400 bps = 5.48% (7.307 - after tax)
- r_E = Return on Equity – risk premium of 6.7% over risk-free rate = 17.36% (cost of levered equity)

[116] http://www.bondsonline.com/Todays_Market/Corporate_Bond_Spreads.php
[117] http://www.danskebank.com/da-dk/ir/Documents/Presentations/2009_01_Credit_package_analysts.pdf

When we enter the data above into our formula we can determine that:

RBREW's WACC for the period is 10.61%.

That is, in our valuation all future cash flows are discounted by 10.61% in order to determine the present value of the cash flows.[118]

At this stage it is important to note that one of the drawbacks of WACC calculations is that the formula assumes a constant capital structure over the period, this can be solved by re-calculating the WACC for each year in our forecasting period and thus taking changes in the capital structure into consideration.

Doing so presents the issue of whether constant rebalancing is performed or once a year, choosing to rebalance constantly is not economically viable due to possible transaction costs so using end of year capital structure would be appropriate.

We took these issues into consideration in our calculations using our balance sheet forecast we found that the changes in WACC between the years were insignificant (within a band of +/- 10 bps); we therefore decided employ 10.61% as our WACC for the total period for simplicity.

6.3 Valuation

We are now equipped to perform our valuation of RBREW, as mentioned in the introduction to this chapter this will be done using the DCF model and EVA. What is of particular interest when implementing these two models is to see whether they produce the same or similar conclusions or not, as they are partly based on different inputs.

In addition to the actual valuation we find it prudent to employ sensitivity- and scenario analysis to our results in order to capture uncertainties in some key variables that ultimately can influence the share prices derived using the two models.

[118] See Appendix 10E for further illustrations.

6.3.1 The Discounted Cash Flow Model

The basic notion behind the DCF model is to value future cash flows by discounting them backwards to today using the appropriate discount factor which is usually the project's or company's cost of capital. In our case we also calculate for the horizon value of the company's cash flows as we assume that the RBREW will still exist after our projection period. The formula below[119] illustrates how we will derive the value of RBREW using the DCF model.

$$PV_0 = \sum_{t=1}^{H} \frac{FCF_t}{(1+WACC)^t} + \frac{FCF_H}{(1+WACC)^H}$$

Where:

- PV_0 = Present value of RBREW
- H = Horizon, Forecasting period +1

The WACC is already known to us as we used chapter 6.2 to derive the discount rate and FCF is our free cash flow as estimated in our projected cash flow statement.

6.3.1.1 Pros and cons

Pros:

The main advantage of using the DCF in valuation is that it treats the company as a cash flow generator; the cash flows are to be based on detailed forecasting for each of the periods in question and operational aspects are taken into consideration, e.g. sales, expenses.[120] Furthermore, as the appropriate cash flow to use is the free cash flow (FCF) it eliminates the issue of whether cash outlay is expensed or turned into an asset on the balance sheet.

Cons:

Among the disadvantages of using the DCF model is that the model is ultimately only as good as the inputs, that is, the cash flow forecasts. WACC estimations have to be based on data of high quality which in turn demands certain transparency of the company in question and a degree of certainty regarding the future market environment.

The theoretical foundation of the DCF model states that the budgeting period must be long enough for the company to reach a state of stable growth, for companies in turmoil this period

[119] Benninga, 2008
[120] Fernández, 2002

will be longer than for stable companies. This has to be accounted for when choosing the budgeting period.

6.3.1.2 DCF Valuation

The information that we have gathered so far will now be plugged into our model, Table 6.1 lists the assumptions used for discounting the cash flows, growth at horizon and the number of shares outstanding; these are then applied to the free cash flows from Table 5.4 in the previous chapter.

Table 6.1 Assumptions used in DCF Valuation

Assumptions	
WACC	10.61%
Number of shares	5,600,000
Terminal growth	1.50%

Source: *Own creation*

Table 6.2 illustrates our calculations of RBREW's share price, the cash flows are discounted back to today's values and we then add the present value (PV) at horizon.

Table 6.2 Share price calculations

FREE CASH FLOW DKK	2009e	2010e	2011e	2012e	2013 Horizon
Free Cash Flow ('000)	-88,916	7,669	99,522	155,959	196,885
PV of free cash flows 2009-2012	103,633				
PV of horizon ('000)	1,306,048				
PV of RBREW DKK	1,409,680,209				
Price per share DKK	**251.73**				

Source: *Own creation*

The calculations in Table 6.2 reveal a share price of 251.73 DKK given our assumptions and calculations developed throughout this thesis. This price is considerably higher than the market price of 118.5 DKK on January 1st 2009; actually, we have to go back to October 14th 2008 to find a similar share price.

The reasons for this difference can be numerous including a more negative view on future earnings, a higher cost of capital or the horizon of the forecasting period. What must be kept in mind though is that the total OMXC has fallen considerably since then as well.[121] The reasons for the difference in the share price estimations will be explored further when scenario- and sensitivity analysis will be conducted in a later chapter.

[121] Datastream

6.3.2 EVA

To understand Economic Value Added we have to take a step back and begin with the concept of EVA, the reasoning behind it demands two assumptions:

1. The main objective of any firm is to maximize shareholder value
2. The NPV rule is a correct tool for decision makers.

Before moving on to EVA we start with MVA (Market Value Added).

$$MVA = Total\ Value - Total\ Capital$$

Where:

Total Value = Market Capitalization

Total Capital = the amount of capital invested by shareholders

MVA is a measure of how the stock market prices a firm's value in relation to the shareholders invested capital (in the form of stock and reinvested earnings). The higher MVA the better the firm, MVA provides an instant picture of how the market assesses the firm's performance.[122]

MVA is also labeled shareholder value as it measures the added value an investment provides for its investor, management serving to maximize shareholder value must therefore aim at maximizing MVA. The only drawback to this mantra is that in some occasions maximizing profits in the short run in order to increase MVA might prove a bad decision in the long-term hence decreasing future MVA.

EVA goes further into detail than MVA with company records and is calculated in its most basic form as:

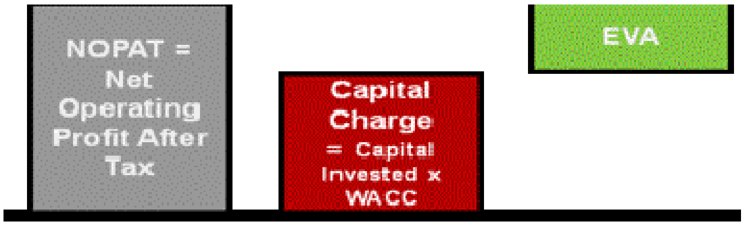
$$EVA = Sales - Operating\ Expenses\ (including\ tax) - Financing\ Expenses$$

Intuitively EVA is a measure to compare companies regardless of size, in order to measure how good companies are at getting the best returns on their employed capital.

[122]Stewart, 1994

EVA is a measure of economic value added in nominal terms, not the percentage change in returns. As seen below EVA is the part of NOPAT which exceeds the capital charge. A negative EVA implies that the capital charge exceeds NOPAT hence destroying value.

Figure 6.2 NOPAT and EVA



Source: *http://seminars.sternstewart.com/whatiseva.html*

Furthermore EVA is written as:

$$EVA = NOPAT - (WACC * IC) \qquad (1)$$

Where:

- NOPAT = Net Operating Profit After Tax, before financial income/expenses.
- IC = Invested Capital, a measure for the amount of capital invested in the company.

By dividing NOPAT with IC from the previous year, the result is the return on invested capital (ROIC).

$$ROIC = \frac{NOPAT}{IC} \qquad (2)$$

If we divide the equation 1 by IC and afterwards insert equation 2, we get the following relationship:

$$\frac{EVA}{IC} = \frac{NOPAT}{IC} - WACC \Leftrightarrow \frac{EVA}{IC} = ROIC - WACC \Leftrightarrow EVA = (ROIC - WACC) * IC$$

As seen above EVA is the difference between the return on investment and the stockholders' required return multiplied by the invested capital. EVA is positive as long as ROIC exceeds WACC, note that the relationship depicted above holds for a single period.

The continuing value of EVA (also referred to as terminal value) is an expression of what economic return the invested capital generates at the beginning of the terminal period, and is expressed as follows:

$$Continuing\ Value = \frac{NOPAT_H * (1 - \frac{g}{ROIC})}{WACC - g}$$

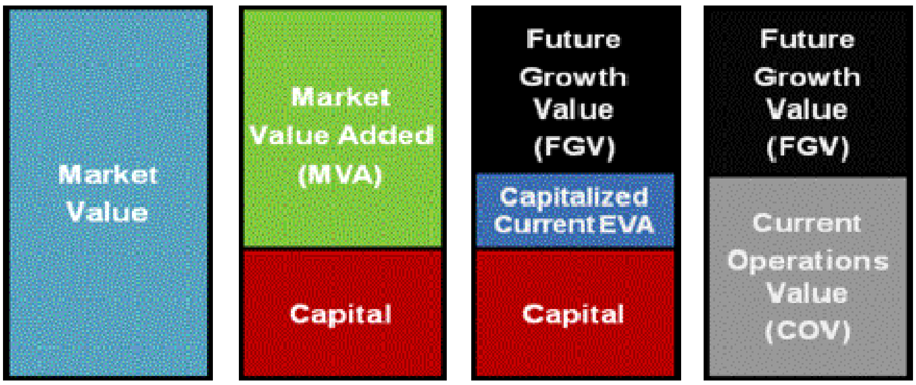
Where:

- $NOPAT_H$ = normalized NOPAT in the year following the final year in the budgeting period (horizon).
- g = the expected growth rate

The total value of a company is then found by discounting the future EVA's (from the budgeting period) as well as the discounted continuing value. The discount factor used is the same as in the DCF model.

The relationship between MVA and the performance of the firm can be restated as seen below in figure 6.3 here the MVA is divided into Future Growth Value and Capitalized Current EVA, in other words FGV can be stated as expected future EVA.

Figure 6.3 MVA and EVA



Source: *http://seminars.sternstewart.com/whatiseva.html*

6.3.2.1 Pros and Cons

Pros:

Inputs in the model are based on accounting and should therefore be easy to implement by an analyst. Furthermore the budgeting is simpler than that of the DCF which demands that cash flows are estimated yearly – a rather extensive process. For a quick EVA valuation IC, WACC and growth rate will be sufficient to conduct a quick estimate.

As in the DCF model, the output of EVA is the total market value of a firm, this makes it easy to calculate the stock price. These two advantages can be summoned under the caption “User friendliness”

Cons:

When calculating EVA the user is dependent on calculation- and accounting criteria, which is a disadvantage, compared to the DCF model. In the DCF model cash flows are not subject to accounting principles and therefore easier to implement correctly.
The issues related to the budgeting period are equal to those mentioned in the DCF discussion.
According to EVA’s creator Stern-Stewart an analyst has to account for up to 200 corrections to arrive at a company’s true EVA value. In addition systematic risk is not included in EVA, companies who have historically had EVAs boosted by gains on currency changes, can hardly be expected to carry on this extra income therefore this should be accounted for.

6.3.2.2 EVA Valuation

As in the theoretical background of EVA, the practical calculation take the departure from invested capital, return on invested capital (ROIC) and the required return by stockowners (WACC). The model captures returns which exceeds the required returns of stockowners. Previously the required return has been estimated at 10.61%, this implies that EVA will be positive when ROIC exceeds 10.61%.

The EVA surplus/deficit is calculated for every year in the budgeting period as well as the continuing value; these values are then discounted back to present value as of end 2008.

The calculated stock price of RBREW as of end 2008 = DKK 253.60 Tables 6.3 and 6.4 below provide further description of the assumptions used in the model.

Table 6.3 Assumptions used in EVA valuation

Assumptions	
WACC	10.61%
Number of shares	5,600,000
Terminal growth	1.50%

Source: *Own creation*

Table 6.4 Share price calculations

Valuation EVA DKK	2009e	2010e	2011e	2012e	2013 Horizon
EVA ('000)	-261,705	-178,287	-108,646	-52,924	-3,408
PV of EVA 2009-2012	-497,996				
PV of Continuing Value ('000)	1,918,157				
PV of RBREW DKK	1,420,160,218				
P per share DKK	**253.60**				

Source: *Own creation*

The result far exceeds the actual stock price as of January 1st 2009 of DKK 118.5. This could very well be due to the length of the budget period, the terminal value has a major influence on the result, a shorter budget period would move the terminal period back and thus cause a lower price.

6.3.3 Scenario and Sensitivity Analysis

Now that we have determined the value of a RBREW's shares we find it in order to examine how certain changes in a given set of parameters will affect this price estimation, to do so we have decided to implement a quick and simple sensitivity analysis together with a more detailed scenario analysis.

Figure 6.2 shows us a possible method for building scenarios, the idea is to identify those aspects that are difficult to estimate in a turbulent environment and will affect the end result significantly.

6.3.3.1 Sensitivity Analysis

The purpose of the sensitivity analysis is to determine if there will be changes in the share price due to a change in some of the inputs, what is also useful is that when performing the sensitivity analysis one can find out which variables have the most effect on the outcome of the valuation models.

We have chosen to examine what will happen to RBREW's share price given certain changes in either WACC or net revenue; in addition, we will also be able to determine the share price given changes in both. Choosing net revenue as a variable enables us to create relatively clear assumptions regarding changes in costs and other items that ultimately affect the bottom line results and thus minimizes the need to conduct thorough analysis on all items on the income statement which is then translated into FCF and NOPAT calculations.

Tables 6.5 and 6.6 illustrate the results of the scenario analysis; the shaded areas illustrate changes in one variable while the un-shaded areas show the changes in the share price if both variables are changed. The changes in revenue in the sensitivity analysis apply to all years in the period, that is, the respective revenues are changed by the values listed in the top row.

Table 6.5 Sensitivity analysis for DCF valuation

		Change in revenue				
		-2.00%	-1.00%	Base	1.00%	2.00%
Change in WACC	-2%points	113.44	194.59	276.45	357.34	438.95
	-1%point	107.18	185.25	264.02	341.82	420.32
	Base	101.14	176.33	**251.73**	327.34	403.15
	1%point	95.68	168.03	241.09	313.16	385.91
	2%ponts	92.21	162.83	234.15	304.47	375.48

Source: *Own creation*

Using the results from Table 6.5 above it becomes evident that revenue changes will have the largest effect of the two on the share price when using the DCF model while WACC changes are not as significant. It is interesting to note that when applying the most pessimistic input into the analysis (revenue -2% and WACC +2%) we come very close to the share price as of one day before the announcement of the 2008 earnings, a difference of 6.21 DKK, a difference of 6.97%.

Table 6.6 Sensitivity analysis for EVA valuation

		Change in revenue				
		-2.00%	-1.00%	Base	1.00%	2.00%
Change in WACC	-2%points	133.49	208.29	287.27	358.33	433.56
	-1%point	123.92	195.88	271.82	340.20	412.57
	Base	114.72	184.06	**253.60**	323.34	392.26
	1%point	106.43	173.12	243.44	306.87	373.93
	2%ponts	101.19	166.27	234.89	296.81	362.26

Source: *Own creation*

Table 6.6 illustrates what happens to the share price when applying the same inputs and methodology into the sensitivity analysis using EVA as was done with the DCF model. The results are also more or less the same, that is, revenue changes have a larger impact on the estimated share price than changes in WACC.

From the sensitivity analysis we can assume that correct estimations of revenue are pivotal when calculating the value of RBREW and other firms, regardless of whether EVA or DCF models are applied in the valuation. Both models show that changes in WACC must be severe in order to deviate far from the base estimation.

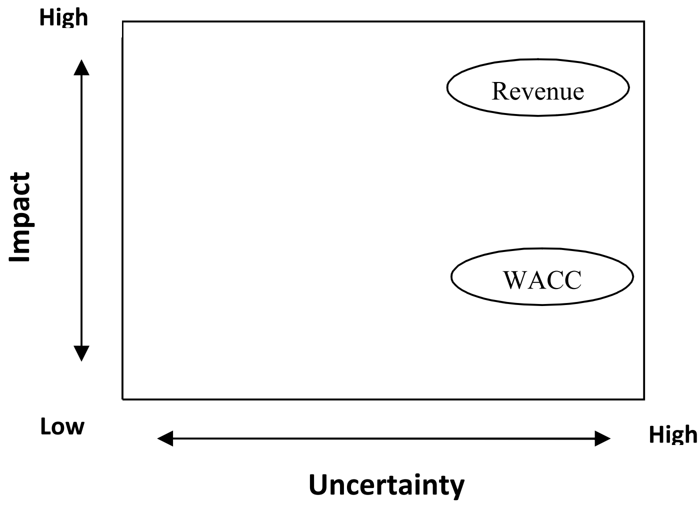
Comparing the sensitivity analysis for EVA and DCF does however reveal an interesting observation, the models do not respond in the same way to the changes in the two variables. This is evident in that, all other things equal, the price derived using EVA is less sensitive to revenue changes than when DCF is used. Furthermore, the EVA method seems to respond more to positive changes in WACC (lowering the WACC) than negative.

Moreover, as the DCF model is more sensitive to revenue changes, the range of the share price in the sensitivity analysis is slightly higher;

- DCF share price range: DKK 92.21 – 438.95
- EVA share price range: DKK 101.19 – 433.56

The sensitivity analysis here above has, as discussed, helped us to identify what will affect our valuation in a most significant way; Figure 6.2 displays graphically how our scenario grid will look like.

Figure 6.2 Scenario grid



Source: *Johnson et al*

6.3.3.2 The Best case scenario

In what we choose to set up as our best case scenario we decided to be a bit more conservative than in the sensitivity analysis. As our forecasting model predicts negative growth in the first two years and positive growth after that we have chosen to set it up as with net revenue being 2% higher than our model prescribes in the first two years.

Revenues:

Our original projections estimate negative growth in sales in 2009-10 (primarily driven by decreasing market shares in Eastern Europe), with increasing revenues in the following years. In this best case scenario we expect a better development in especially Eastern Europe, contributing to an increase in revenues by 2% compared to our initial budget for the years 2009-10. We expect Western Europe as well as the Malt & Overseas market to remain stable.

Production costs:

Several investments have been made in Danish production facilities furthermore one Polish branch has been closed. In a best case scenario this could mean decreasing costs of production, in this scenario we use a decrease in production costs of 2%.

R&D:

A very little item on the income statement, we do not expect this to change as R&D costs in the brewing industry are generally low.[123] Any changes here are not likely to affect the value of RBREW, not unless they invent the next Coca Cola.

Distribution and Marketing costs:

In our initial budget cost savings from the investments in the distribution channel are included; we find it very unlikely that these costs can be cut further due to the nature of the product it must process. Regarding marketing costs, we still expect that the fight across the board will be for market shares in a mature market; therefore costs in this area are not likely to be cut. As a result we keep Distribution and Marketing costs equal.

Administrative costs:

Administrative cost is yet another small item, an item we find unrealistic to decrease beyond our initial projections. This relationship makes us keep it equal.

Other income:

Other income entails both special and financial income, since both items historically have been low and do not relate to the core business we keep other income equal.

Write-offs:

In the best case scenario we do not expect further write-offs, furthermore depreciations remain constant.

Changes in working capital:

Working capital is calculated as Operating current assets – Non-interest-bearing current liabilities. Due to the positive development in both revenues and production costs RBREW will generate a lot of extra cash, which all else being constant will increase the net working capital.

[123] Tremblay, 2005

This is not realistic; instead we expect that the cash generated from improved operations is channeled on to decrease debt (both current and non-current) as well as to shareholders in the form of dividends. As a result NWC/Revenues is expected to increase with around 50% over the period from 10.7% to 16%, our estimate here is conservative as debt could be brought down even further but with projected debt and debt-to-equity ratios of 0.65 and 0.58 we assume that management will be pleased given their debt target.

Investments in- and divestures of PP&E:

The Aarhus property is a prime candidate for divesture and in a best case scenario would be sold for its estimated value of DKK 400 million using the funds to bring down the company's debt. Acquisitions of new subsidiaries as well as major investments in PP&E are not likely.

These changes in the company's financials give us a new WACC of 10.47% and the implications of the best case scenario give a new valuation of:

- DCF: Price pr share DKK **420.86**
- EVA: Price pr share DKK **421.01**

Due to changes in the capital structure the WACC changed in a minimal way, the assumption of a constant capital structure after the first year still holds throughout the period with the WACC calculations.

6.3.3.3 Scenario Analysis; Worst Case

Like with the Best Case Scenario here above we have chosen to be more conservative than the sensitivity analysis, in this worst case we set an estimation of a further drop in the first two years by 2% than our forecasting model prescribed. Furthermore, in our worst case we do not expect the Aarhus property to be sold in the near future (same as with the original model) so the capital structure will not change in any significant way, resulting in an unchanged WACC of 10.61%.

Revenues:

Our original projections estimate negative growth in sales in 2009-10 (primarily driven by decreasing market shares in Eastern Europe), with increasing revenues in the following years. In this worst case scenario we expect a worse development in especially Eastern Europe as a result of the economic crisis hitting Eastern Europe harder than initially projected.

Contributing a decrease in revenues by 2% annually compared to our initial budget for the years 2009-10. We expect Western Europe as well as the Malt & Overseas market to remain stable.

Production costs:
Production costs are unchanged from the initial budget, with low commodity prices, increasing unemployment rates as well as no new investments in production facilities we do not see production costs rising even in a worst case scenario.

R&D, Distribution and Marketing costs, Administrative costs and Other income are all kept equal, small changes could occur but they contribute very little to the valuation and therefore not included.

Write-offs:
With the major write-offs of Polish activities in '08 we believe that RBREW have taken serious action, the write-down of the Aarhus plant also underlines that. We do not foresee further write-offs even in the best worst case scenario. The reason being that operations in Western Europe as well as the Baltic are strong enough to resist write-down tests, the obvious targets of Poland and the Aarhus plant have taken their hit, we find unlikely that they are in line for another.

Changes in working capital:
Working capital does not change significantly compared to the initial projections and thereby not able to help bring down debt.

Investments in- and divestures of PP&E:
In the worst case scenario the Aarhus property is not sold, and thereby not able to help bring down debt. New investments are not even on the radar.
The results from conducting this worst case analysis and valuating RBREW again were as follows:

- DCF: Price pr share DKK **101.66**
- EVA: Price pr share DKK **103.33**

As no changes were made on the balance sheet the WACC remained unchanged and the assumption of a constant capital structure for the WACC after the first year still holds.

6.3.4 Multiples

Having derived RBREW's share price using absolute valuation models: DCF and EVA, the attention will be turned to relative valuation methods, valuation techniques preferred by most analysts in the real-life industry, namely multiples.

A wide array of multiple approaches that can be used in this type of valuation and they are for the most part divided into three main groups:[124]

- Multiples based on capitalization (Equity Value)
- Multiples based on the company value (E+D)
- Growth referenced multiples

One of the advantages of using multiples is that they are relatively easy to calculate and understand they also enable comparisons between companies within an industry and a specific company to industry averages.

As there a number of multiple types it is at the analyst's own discretion which one to use and therefore creates the opportunity for biases, multiples are often referred to as the 'quick and dirty' method, which indicates that their reliance is limited.

Of the three categories mentioned here above the last one is usually only applicable to growth industries RBREW is in a mature industry with little growth perspectives, therefore a growth based multiple is not applicable for pricing the stock of RBREW.

For our purpose we have chosen to implement two multiples that adhere to the market capitalization group and as multiples alone have limited use we implement one that is relative to the industry; these are:

- Price/Earnings - (P/E)
- Price/Book Value - (P/BV)
- Price/Earnings (Relative) - (P/E relative)

[124] Fernández, 2002

P/E is the most widely used valuation method in the industry while P/BV is 6th on the list, right after DCF.[125]

6.3.4.1Price to Earnings Value

The calculation for determining the P/E ratio which can be seen below gives us a P/E ratio of 12.64 for RBREW, this value is derived from taking the average of last four years' ratios.

$$P/E = \frac{Share\ price\ (end\ of\ year)}{EPS}$$

Inputs:

Share price (end of year) = DKK 118.5

EPS = Earnings per share

Taking our calculated multiple and applying it to our forecasting model gives us:

$$Share\ price = \frac{Net\ Earnings\ in\ the\ last\ period * {}^{P}/_{E}}{No\ of\ shares}$$

This yields equation yields a share price of DKK <u>251.15</u>, which is very close to our calculations using DCF and EVA.

Now let us see what happens if we extend the P/E ratio method by taking the industry average relative to RBREW's P/E ratio, the short hand can be seen below.

$$P/E\ (Relative) = \frac{{}^{P}/_{E}\ Company}{{}^{P}/_{E}\ Industry}$$

The formula above yields a relative P/E ratio of 0.72 for RBREW which we add into our formula used to value the company using the industry P/E ratio as illustrated below.

Applying the same methods but using the industry P/E ratio yields a share price of 349.39 which is considerably higher than using only RBREW's ratio and that might, at first glance, indicate that the company is undervalued using our calculations with DCF and EVA.

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[125] Fernández, 2002

Taking a closer look at the industry in this case composed of Carlsberg and Harboe we recall from chapter 4 that both competitors posted positive earnings in 2008 and have significantly lower debt levels. Therefore it seems reasonable that RBREW trades at a discount compared to the industry and thus the relative P/E of 0.72 seems appropriate.

This also entails that the risk factor of high debt, often referred to as the cost of financial distress,[126] is included in the market's current pricing of RBREW.

6.3.4.2 Price to Book Value

The second method we implement in this phase uses the P/BV ratio which is calculated as indicated below; using this equation gives us an average P/BV ratio of 2.73 for RBREW.

$$Price/_{Book\ Value} = \frac{Market\ Capitalization}{Book\ value\ of\ shareholders\ equity}$$

We then implement this ratio into our forecasting model where we have made an estimation of RBREW's equity at the end of the period to derive the share price using:

$$Share\ price = \frac{P/_{BV} * Equity\ in\ the\ last\ period}{Number\ of\ shares}$$

The result from these calculations is a share price of <u>DKK 332.14</u>, considerably higher than our DCF and EVA values. However, we find that RBREW's historic P/BV is not appropriate to use due to the massive write-down of equity in 2008, which of course affects this ratio considerably. Instead we implement the industry average book value which is not as affected by such dramatic changes in one company's write-downs of equity; using the same methods and get a share price of <u>DKK 239.68</u> which is closer to our previously calculated values.

[126] Brealy, *et al*

6.4 Value Investing

Examples of strategies for trading and thus evaluating stocks are numerous including day-trading, technical analysis as well as portfolio theory to name a few. We have decided to focus on value and growth strategies when determining if RBREW is a stock worth buying.

As far as technical analysis and portfolio theory goes we believe that they lack empirical data proving their performance,[127] therefore we will not take them into account, the foundations of day-trading vary greatly from investor to investor therefore reliable data does not exist, this approach will neither be analyzed.

Value investing is an investment strategy based on the 1934 book Security Analysis by Graham and Dodd of Columbia Business School. [128] Following the major losses on Wall Street in 1929 and early 30's Graham and Dodd presented a new take on investing, proposing to discard the earnings-based view of most investors and instead focus on companies undervalued by the market.

More specifically the value investor needs to roughly estimate the value of a company from its financial reporting, in cases where the market has seriously mispriced a stock the risk of losing is limited as companies selected are often worth more dead than alive.[129]

Value stocks are characterized by having low P/E, P/Div, P/BV to name a few. For Growth stocks it is opposite. The ratios reflect that growth stocks are stocks which prices exceeds the underlying earnings due to expectations of future growth, this is consistent with Gordon's Growth formula:[130]

$$P_t = \frac{D_{(t+1)}}{r-g} \leftrightarrow r - g = \frac{D_{(t+1)}}{P_{(t)}}$$

Hence for a given low r, a low dividend-price or low earnings-price multiple goes hand in hand with a high g (growth rate). Relating Value and Growth stocks to MVA, we can say that a high MVA driven by FGV characterizes a growth stock whereas a MVA driven by Capitalized Current EVA.

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[127] Samuelson, 1991, 1994
[128] Graham & Dodd, 1934
[129] Schroeder, 2008
[130] Brown *et al* 2002

Companies with negative or zero MVA falls in the Value stock group only if their assets + equity – debt exceeds the market cap, in other case of negative MVA the stock is simply a poor investment decision (recall a negative EVA equals value destruction).

For an investor to follow a value strategy he needs to combine the previous criteria with a contrarian approach to trading stocks, in short this implies selling the winners and keeping the losers. So does this work, and can we learn any lessons from history?

Empirical testing of the performance of value vs. growth (in the authors' terminology growth = glamour, for simplicity we will continue using the term growth) stocks was carried out in 1994[131]. The test ran from April 1963 through April 1990 and used the stocks listed on NYSE and AMEX, with holding periods of 5 years for each stock.

Stocks were picked using the previously outlined principles for picking value stocks, for growth stocks the criteria were the opposite of value. Every five years the portfolios are adjusted in accordance with the contrarian principle. The results posted as average five year returns were:

Table 6.7 Returns, Growth vs. Value

	Growth	Value	
B/M	9.30%	19.80%	Book /Market
C/P	9.10%	20.10%	Cash flow/Price
E/P	11.40%	19.00%	Earnings/Price
GS	12.70%	19.50%	Growth in Sales

Source: *Own creation*

Though the results are strikingly in favor of value stocks, there are a few question marks surrounding the results. Firstly it is not clear what exactly the B/M ratio captures, low multiples could reflect intellectual capital not accounted for in Book Value, furthermore it could of course be a sign that a share is overpriced.

[131] Chan *et al,* 1994

Secondly one would expect that value stocks entail greater risk, however this is not the case; value stocks do not have higher standard deviations nor do they co-vary more with the market[132]. Baring in mind that the sample period includes four recessions (1970, ‘73-‘75, ‘79-‘80 and ’81-‘82) were value only underperformed growth in the third recession it seems evident that the results provides value, basically the results underline that if an investor is able to identify value stocks this is a superior strategy over time.

Testing of value vs. growth was continued in 2000. [133] In short the results found was that in the 90’s small cap value stocks maintained outperforming similar size growth stocks, for mid- and large cap the trend reversed to a large extent driven by the IT bubble (which burst in 2000 and therefore not part of the test).

In terms of the Danish stock market, using a three year holding period and sorting the 20 largest stocks by P/E before forming portfolios, they found that value stocks on average outperformed growth by 4.3% annually.[134] As in the findings of Lakonishok, Shleifer & Vishny value stocks do not seem to entail more risk.

So is RBREW growth or value? In accordance with the principles listed earlier a quick look at the numbers and ratios should help us determine that, intuitively though we would not expect a settled company so to speak in a mature industry to be a growth stock.

Judging by a historical average P/E of 12.64 we would not consider RBREW a prime value candidate, but due to negative earnings in ’08 a P/E cannot be computed, thus we can say for sure that RBREW in ’08 and ’09 looks nothing like RBREW earlier on in the eyes of an investor.

If we move on to the P/BV ratio we see that RBREW is trading at 1.15 X its book value of equity, resulting in a market value of equity of DKK 102.64 pr share. This is staggering compared to the share price of DKK 118.5; it also tells us that the MVA pr share is around DKK 16.

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[132]Ibid 132
[133] Lakonishok *et al*, 2000
[134] Nielsen & Risager, 2001

It is fair to say that even though RBREW might not be worth more dead than alive, as Graham would argue it should to be considered value, it is worth very close to that and a stock price below DKK 102 would be enough to satisfy that condition. Considering our previous valuation of RBREW at around DKK 250 it is evident that the market is under-pricing RBREW.

Reasons for the mispricing of RBREW in the market could be attributed to several reasons including:

- More negative revenue estimations by the market
- A short time horizon by investors might limit their ability to recognize future earnings fairly
- Expected fire sale by a large investor such as Stodir
- Market inefficiency

Most likely the current stock price is a combination of the above mentioned factors, highlighting one over the other would be a mere guess – we will refrain from that and simply conclude that RBREW is mispriced in the market. In our opinion RBREW possesses far more value than its current market value suggests therefore we recommend buying, with a 2-5 year holding period in mind.

6.5 Sub-conclusion

The value of a RBREW share has now been determined using the Discounted Cash Flow, Economic Value Added models as well as multiples to benchmark these results with market values.

Absolute valuation methods such as DCF and EVA are long-term techniques accounting for future developments with horizons that are as long as the analyst finds necessary, though the goal is to keep them as short as possible in order to limit uncertainty. Relative valuation models are more practical, characterized by a multiples-based approach which in nature usually gives a broad dispersion of results.

The input in multiples is often market based which makes them relative to market performance. The outcome of the relative approach is of course debatable, but never the less the most common approach by analysts. At the very least a relative approach suits as a "quick and dirty" method to see whether results from absolute models are in a reasonable range compared to market values.

It is worth noting that a large difference between relative and absolute valuation models is their output as relative valuation models determine *fair price* (relating to market prices) while absolute valuation models determine *fair value* (relating to forecasted values of cash flows and profits). The combination of both approaches enables us to narrow the gap between theoretical and practical valuation techniques.

To perform valuation through absolute methods a company's cost of capital must first be determined. Using a calculated β of 0.905, a risk premium of 6.7 and a cost of debt of 400bps over the risk-free rate, the result was a Weighted Average Cost of Capital of 10.61% for RBREW. In determining the cost of debt we took into account the price of the Danish rescue package for the banking sector, expecting the costs of this to be passed on to customers.

As a result we added a premium of 135bps to the 265bps a BB rated bond was trading at in '06, the added 135bps represents the costs related to the bail-out package as well as increased margins for the banking sector.

Using the WACC to discount the company's forecasted future cash flows and residual income resulted in a *fair value* share price of:

- DKK 251.73 using DCF
- DKK 253.60 using EVA

Sensitivity- and Scenario Analysis were then implemented in order to find out how the valuation outcomes would be affected by changes in certain variables. For the Best case the changed variables were:

- Revenues up by 2% in '09-'10
- decrease in prod costs by 2%
- The resulting increase in working capital provides RBREW the ability to bring down debt
- Sale of assets worth DKK 400m further increases ability to bring down debt
- A decrease in WACC to 10.47% due to improvement in the capital structure

For the Worst case the changed variables was a decrease in revenues by 2% annually in '09-'10. The outcome from the two scenarios was:

- Best case share prices: DKK 420.86 (DCF) and 421.01 (EVA)
- Worst case share prices: DKK 101.66 (DCF) and 103.33 (EVA)

The multiple analysis used primarily as a sanity check to see whether *fair price* and *fair value* were in the same price range, the results were:

- P/E based share price: DKK 251.15
- P/BV based share price: DKK 239.68

The multiples sanity check enforced our belief that EVA and DCF results are indeed reasonable, thus that time horizons and expected future developments are fair. Having concluded at a fair price for RBREW stock well above the market price of DKK 118.5 the question is whether the stock is actually a sound investment opportunity.

Literature proves that Value stocks historically outperform Growth stocks. Given RBREW's current characteristics of negative P/E, low P/BV as well as a low MVA pr share we find it clear that RBREW is a value stock. Combining these findings we therefore conclude that not only is RBREW currently undervalued by traditional standards (DCF, EVA and multiples), in fact this is also the case based on historical stock market data. Therefore we recommend buying RBREW stock with a 2-5 year holding period in mind.

Chapter 7 - Conclusion

In the analyzed period RBREW has introduced and partly implemented two different growth strategies, *MACH II* and *Double Up* while the former focused on international and top line growth the latter concentrated on organic growth in addition to realizing economic benefits from the previous growth strategy. However, as RBREW incurred severe impairment losses in 2008 wiping out nearly half of its equity the company was forced to abandon its MACH II strategy and focus on earnings in order to bring down debt.

RBREW's main advantage is a relatively strong presence in the Danish and Baltic markets. In Denmark they are the second largest brewer and the company also produces products under license from PepsiCo and Heineken which gives them considerable competitive strength. The strong profile of RBREW's Baltic brands is a considerable advantage as this market is a fast growing one.

The company suffers from being a relatively small player on the international scene, and lacks a strong international brand in order to fully gain from economies of scale with regards to marketing competitive leverage.

ROIC and EBITA margins have been steadily decreasing throughout the period primarily due to increasing production costs. The result of decreasing margins, increase in production costs and debt has had the effect that the company's liquidity is now low, the combination of these factors implies that RBREW will not be able bring down debt through operations. As a result, RBREW's weakness is their large debt; assets must be divested to reach the strategic goal of a debt-to-EBITDA of 3.

A possible solution to the large debt issue could be to divest some of the company's assets, ideally the property in Aarhus or profitable foreign business units, the latter should though be a last resort undertaking as doing will hurt the company's revenue generation.

The current financial crisis represents the largest threat to RBREW, as it does to other companies, where consumers will be inclined to reduce their spending. At the moment the greatest threat is in Eastern Europe due to uncertainties regarding consumer spending. This could be realized in sales moving from the on-trade to the off-trade segments where buyers have more bargaining power.

RBREW has managed to increase its revenues, partly acquisitions, in the analysis period ranging back to 2005; however, these revenue increases have not been realized in the bottom line which improved slightly between 2005 and 2006 but has declined since then culminating in a huge loss in 2008. Furthermore, the company has also experienced a diminishing ROIC in the period whilst its main competitor Carlsberg has managed to show improvements.

The main challenge has though been RBREW's inability to reduce production costs as share of revenue, the outlook here is though a bit brighter as the company will most likely reap the benefits of an increased focus on this area by restructuring its operations.

RBREW's main problem is its high debt and the effect the impairment losses in 2008 had on the company's debt-to-equity ratio; as a result RBREW has been forced to renegotiate their debt financing in extremely difficult times of the current financial crisis.

As of January 1st 2009 RBREW's share price as listed on the Copenhagen Stock Exchange was DKK 118.5. Through our analysis and valuation using the DCF and EVA models we determined that the fair price of the stock was 251.73 and 253.60, respectively. This is a large difference from the market's estimation of the stock price, the reasons of which can be several.

First and foremost we concluded that the length of the budgeting period and revenue estimates have a large effect on the outcome. The foundation for the DCF model is to determine the horizon year from which the company is assumed to experience stable growth, this makes the DCF model difficult to use when a company is in a turnaround phase.

Another issue could be that the market might have taken into account a possible fire sale by one of RBREW's large investor and therefore expects a discount on the share price; this is a factor that neither the DCF nor EVA models have taken into account.

As a result of the divergence between actual and theoretical prices, one might conclude that theoretical valuation has little use. We do however not agree, theoretical models are by nature a bit theoretical, and will always have shortcomings in explaining the surrounding world. They do pose as great tools of analysis, but needless to say the analyst must form her own opinion as to the output.

RBREW's P/BV of 1.15 equals a market value of equity of DKK 102.64 pr. share, in other words future earnings are valued at DKK 16 pr. share implying that the market has a very negative future earnings expectation for RBREW, expectations we find far too pessimistic.

We feel confident that RBREW is a value stock, trading at values below those of the industry while not being far worse off. Furthermore history shows that value close to consistently outperform growth stocks, adding to this our rather conservative economic forecast we can only conclude that the market is currently mispricing RBREW, the stock is too cheap to pass up on. With a 2-5 year holding period in mind we recommend to buy RBREW stock!

Chapter 8 - Perspectives

The main purpose of thesis was to determine the fair value of a single share in a publicly traded company which entails reaching a concrete result, to do so a number of issues had to be analyzed, calculated, assumed and forecasted. It also presented the possibility of reaching a result which would be far from the market price.

This was done using the tools and methods the authors have found appropriate for the company and industry in question, they are however by no means limited to this industry alone.

The outside-in approach which was used in the analysis is highly relevant in our case as it enables us to first identify external aspects of the industry in question before determining the company's capabilities. That being said, the Resource Based View in strategic management is by no means dismissed as vigorous internal analysis was conducted as well.

In choosing the main valuation methods for this thesis the authors strived to find those that are not easy to manipulate from the company's (e.g. share buy-backs to boost EPS) or analyst's perspective (choosing those that support their own evaluation while discarding others) though they were also given some attention. This was done in order to determine whether theoretical and practical valuations could go hand in hand, the result was positive.

The inputs and assumptions that were used in the models can of course be debated; how high should the risk premium be on debt and equity in the WACC calculations? What is the appropriate forecasting period?

RBREW is, as mentioned before, a publicly traded company which made it challenging for the authors during the valuation stage as the share price had experienced a rollercoaster ride during the analyzing process. When work started on the thesis the company was traded at around DKK 130 pr share and during the process it managed to dive down to DKK 34.5 when lowest only to climb again and stabilize around DKK 80 as this is being written.

Consequently it created a mental bias with the authors; one which made the results from the valuation difficult to digest, however, after giving the thesis a critical overhaul the result did not change in any significant way, on the contrary, it created a stronger view with the authors that the market was/is indeed undervaluing stocks at the moment.

Using the market as a benchmark in a valuation project like this creates some caveats, one of which is that the sensitivity analysis enabled us to come closer to the market's perceived value of RBREW than our original calculations. This created some reservations regarding the findings; however, as reverse engineering was not the purpose of this thesis simply changing the parameters to fit the market expectations would not be an optimal method to reach qualified results.

The authors are confident in their results, the horizon is appropriate as the company in question is in its essence a production company and thus incurs heavy investment in production facilities which in turn must be given time to create return on investment.

A longer horizon could be applied; however, doing so creates even more uncertainty regarding future revenues and industry environment. An example of an industry where a longer horizon could be applied would be the pharmaceutical industry where the company's produce is protected by a patent with a finite horizon.

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Appendices

Appendix 1 A: Base case Income Statement

DKK '000	2005	2006	2007	2008	2009e	2010e	2011e	2012e	2013e
Net Revenue	3.190.959	3.439.026	3.881.762	4.178.703	4.095.129	4.054.178	4.135.261	4.259.319	4.387.099
Production costs	-1.581.411	-1.742.900	-2.129.173	-2.433.298	-2.408.965	-2.360.786	-2.408.001	-2.480.241	-2554648,721
Gross Profit	**1.609.548**	**1.696.126**	**1.752.589**	**1.745.405**	**1.686.164**	**1.693.392**	**1.727.260**	**1.779.078**	**1.832.450**
Sales and distribution expenses	-1.136.413	-1.191.225	-1.268.783	-1.387.543	-1.332.041	-1.278.760	-1.253.184	-1.240.653	-1.228.246
Administrative expenses	-171.697	-200.680	-249.042	-226.844	-213.233	-200.439	-196.431	-196.431	-196.431
Other operating income	6.149	43.512	9.289	3.835	15.696	15.696	15.696	15.696	15.696
Operating profit before special items	**307.587**	**347.733**	**244.053**	**134.853**	**156.586**	**229.889**	**293.341**	**357.691**	**423.470**
Special income	5.022	0	128.068	0	0	0	0	0	0
Special expenses	0	-14.329	-107.823	-50.125	-30.000	-30.000	-30.000	-30.000	-30.000
Impairment losses	0	0	0	-384.957	0	0	0	0	0
Profit/Loss before financial income and expenses	**312.609**	**333.404**	**264.298**	**-300.229**	**126.586**	**199.889**	**263.341**	**327.691**	**393.470**
Income after tax from investments	25.800	26.098	27.998	22.654	25.638	25.638	25.638	25.638	25.638
Dividend from subsidiaries and associates	0	0	0	0	0	0	0	0	0
Impairment losses on investments and balances	0	0	0	-70.104	0	0	0	0	0
Financial income	9.048	20.330	26.704	33.899	22.495	22.495	22.495	22.495	22.495
Financial Expenses	-50.357	-59.479	-98.836	-139.185	-200.000	-200.000	-200.000	-200.000	-200.000
Profit/Loss before tax	**297.100**	**320.353**	**220.164**	**-452.965**	**-25.282**	**48.022**	**111.474**	**175.823**	**241.602**
Tax on profit/loss for the year	**-72.942**	**-90.014**	**-64.930**	**-30.200**	**-64.522**	**-64.522**	**-64.522**	**-64.522**	**-64.522**
Net profit/loss for the year	**224.158**	**230.339**	**155.234**	**-483.165**	**-89.803**	**-16.500**	**46.952**	**111.302**	**177.081**

Appendix 1 B: Base case Assets – Common Sized

DKK '000	2005	2006	2007	2008	2009e	2010e	2011e	2012e	2013e
Non-Current Assets									
Goodwill	10,06%	9,40%	12,57%	7,45%	7,45%	7,45%	7,45%	7,45%	7,45%
Trademarks	5,45%	5,07%	7,17%	4,02%	4,02%	4,02%	4,02%	4,02%	4,02%
Distribution rights	0,33%	0,29%	0,22%	0,17%	0,17%	0,17%	0,17%	0,17%	0,17%
Intangible assets	**15,84%**	**14,76%**	**19,96%**	**11,64%**	**11,64%**	**11,64%**	**11,64%**	**11,64%**	**11,64%**
Land and buildings	22,28%	21,04%	19,85%	15,40%	17,42%	17,72%	18,02%	18,22%	17,92%
Project development properties	0,00%	0,00%	0,00%	9,57%	9,77%	9,87%	9,67%	9,39%	9,12%
Plant and machinery	12,96%	11,66%	12,59%	12,67%	14,65%	15,29%	15,08%	14,85%	14,62%
Other fixtures and fittings, tools and equipment	7,49%	6,91%	6,19%	5,15%	5,18%	6,29%	6,37%	6,17%	6,21%
Property, plant and equipment in progress	0,81%	1,89%	1,48%	6,98%	3,94%	2,60%	1,51%	0,75%	1,28%
Property, plant and equipment (PP&E)	**43,53%**	**41,49%**	**40,11%**	**49,76%**	**50,96%**	**51,76%**	**50,66%**	**49,39%**	**49,14%**
Investment in subsidiaries	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
Investments on associates	6,72%	6,73%	5,81%	2,10%	2,10%	2,10%	2,10%	2,10%	2,10%
Receivables from subsidiaries	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
Receivables from associates	0,80%	0,72%	0,66%	0,49%	0,49%	0,49%	0,49%	0,49%	0,49%
Other investmens	0,09%	0,08%	0,08%	1,36%	1,36%	1,36%	1,36%	1,36%	1,36%
Other receivables	0,42%	0,64%	0,30%	0,29%	0,29%	0,29%	0,29%	0,29%	0,29%
Financial assets	**8,02%**	**8,16%**	**6,85%**	**4,24%**	**4,24%**	**4,24%**	**4,24%**	**4,24%**	**4,24%**
Non-current assets	**67,39%**	**64,41%**	**66,92%**	**65,64%**	**66,83%**	**67,64%**	**66,53%**	**65,26%**	**65,02%**
Current Assets									
Raw materials and consumables	3,13%	2,83%	4,36%	2,92%	2,92%	2,92%	2,92%	2,92%	2,92%
Work in progress	0,55%	0,50%	0,67%	0,65%	0,65%	0,65%	0,65%	0,65%	0,65%
Finished goods and purchased finished goods	4,27%	4,71%	4,03%	6,35%	6,35%	6,35%	6,35%	6,35%	6,35%
Inventories	**7,95%**	**8,04%**	**9,06%**	**9,92%**	**9,92%**	**9,92%**	**9,92%**	**9,92%**	**9,92%**
Trade receivables	12,52%	12,86%	14,89%	12,96%	12,96%	12,96%	12,96%	12,96%	12,96%
Receivables from subsidiaries	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
Receivables from associates	0,12%	0,04%	0,03%	0,02%	0,02%	0,02%	0,02%	0,02%	0,02%
Other reiceivables	0,69%	1,09%	1,65%	2,72%	2,72%	2,72%	2,72%	2,72%	2,72%
Prepayments	1,34%	1,27%	0,81%	3,52%	3,52%	3,52%	3,52%	3,12%	1,97%
Receivables	**14,66%**	**15,26%**	**17,37%**	**19,23%**	**19,23%**	**19,23%**	**19,23%**	**18,83%**	**17,67%**
Cash at bank and in hand	**8,99%**	**10,71%**	**4,07%**	**2,16%**	**1,14%**	**2,45%**	**5,40%**	**4,67%**	**4,43%**
Non-current assets held for sale	**0,91%**	**0,84%**	**0,00%**	**0,00%**	**0,00%**	**0,00%**	**0,00%**	**0,00%**	**0,00%**
Current assets	**32,51%**	**34,85%**	**30,50%**	**31,31%**	**30,29%**	**31,60%**	**34,55%**	**33,42%**	**32,03%**
Assets	99,90%	99,26%	97,41%	96,95%	97,12%	98,44%	99,74%	97,43%	97,33%

Appendix 1 C: Base case Liabilities and Equity – Common Sized

DKK '000	2005	2006	2007	2008	2009e	2010e	2011e	2012e	2013e
Share Capital	2,00%	1,80%	1,52%	1,34%	1,37%	1,38%	1,35%	1,31%	1,28%
Revaluation reserves	0,00%	0,00%	0,00%	4,31%	3,81%	3,30%	2,84%	1,98%	2,00%
Translation reserve	-0,22%	-0,27%	-0,20%	-2,45%	-2,32%	-1,16%	-0,26%	-0,31%	-1,17%
Hedging reserve	-0,24%	0,06%	0,26%	-0,83%	-0,20%	0,05%	0,19%	0,22%	0,23%
Retained earnings	32,16%	29,63%	24,74%	10,55%	10,55%	10,55%	10,55%	10,55%	12,83%
Proposed dividend	2,00%	1,80%	1,52%	0,00%	0,00%	0,00%	1,23%	1,43%	1,44%
Equity of Parent Company Shareholders	**35,69%**	**33,01%**	**27,84%**	**12,92%**	**13,21%**	**14,12%**	**15,91%**	**15,19%**	**16,60%**
Minority interest	**0,34%**	**0,38%**	**1,00%**	**0,84%**	**0,84%**	**0,84%**	**0,84%**	**0,84%**	**0,84%**
Equity	**36,03%**	**33,39%**	**28,84%**	**13,76%**	**14,05%**	**14,96%**	**16,75%**	**16,03%**	**17,44%**
Deferred tax	4,47%	3,71%	3,29%	4,29%	4,29%	4,29%	4,29%	4,29%	4,29%
Mortgage debt	17,52%	17,26%	19,31%	17,58%	17,58%	17,58%	17,58%	17,02%	16,53%
Credit institutions	18,41%	18,91%	20,36%	23,19%	23,19%	23,19%	22,73%	22,07%	21,43%
Non-current liabilities	**40,40%**	**39,88%**	**42,96%**	**45,06%**	**45,06%**	**45,06%**	**44,60%**	**43,38%**	**42,24%**
Mortgage debt	1,68%	1,71%	0,02%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
Credit institutions	3,74%	4,02%	5,88%	14,34%	14,34%	14,21%	13,90%	13,50%	12,99%
Repurchase obligations, returnable packaging	3,02%	2,63%	2,51%	1,77%	1,74%	2,03%	2,16%	2,14%	2,21%
Trade payables	8,74%	10,01%	9,03%	12,52%	12,52%	12,52%	12,52%	12,52%	12,52%
Payables to subsidiaries	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
Corporation tax	0,00%	1,78%	1,41%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
VAT, exice dutes, etc.	2,31%	2,18%	2,54%	1,47%	1,37%	1,62%	1,76%	1,83%	1,89%
Other payables	3,98%	3,67%	4,21%	8,03%	8,03%	8,03%	8,03%	8,03%	8,03%
Current liabilities	**23,47%**	**25,99%**	**25,61%**	**38,14%**	**38,01%**	**38,42%**	**38,38%**	**38,02%**	**37,65%**
Liabilities	**63,87%**	**65,88%**	**68,57%**	**83,20%**	**83,07%**	**83,48%**	**82,99%**	**81,41%**	**79,89%**
Liabilities and Equity	**99,90%**	**99,26%**	**97,41%**	**96,95%**	**97,12%**	**98,44%**	**99,74%**	**97,43%**	**97,33%**

Appendix 1 D: Base case Assets - Nominal

DKK '000	2005	2006	2007	2008	2009e	2010e	2011e	2012e	2013e
Non-Current Assets									
Goodwill	320.861	323.398	487.861	311.275	305.050	301.999	308.039	317.280	326.799
Trademarks	173.946	174.236	278.351	167.885	164.527	162.882	166.140	171.124	176.258
Distribution rights	10.587	9.854	8.524	7.186	7.042	6.972	7.111	7.325	7.544
Intangible assets	**505.394**	**507.488**	**774.736**	**486.346**	**476.619**	**471.853**	**481.290**	**495.729**	**510.601**
Land and buildings	710.810	723.509	770.679	643.363	713.230	718.230	745.200	776.200	786.334
Project development properties	0	0	0	400.000	400.000	400.000	400.000	400.000	400.000
Plant and machinery	413.396	400.842	488.715	529.291	600.000	620.000	623.800	632.400	641.200
Other fixtures and fittings, tools and equipment	238.870	237.618	240.091	214.997	212.000	255.000	263.442	262.877	272.430
Property, plant and equipment in progress	25.930	64.888	57.536	291.787	161.540	105.311	62.333	32.055	56.000
Property, plant and equipment (PP&E)	**1.389.006**	**1.426.857**	**1.557.021**	**2.079.438**	**2.086.770**	**2.098.541**	**2.094.775**	**2.103.532**	**2.155.964**
Investment in subsidiaries	0	0	0	0	0	0	0	0	0
Investments on associates	214.409	231.285	225.691	87.650	85.897	85.038	86.739	66.120	117.778
Receivables from subsidiaries	0	0	0	0	0	0	0	0	0
Receivables from associates	25.460	24.664	25.481	20.634	20.221	20.019	6.628	21.032	21.663
Other investmens	2.834	2.838	3.018	56.900	55.762	22.757	14.422	27.998	46.248
Other receivables	13.338	21.875	11.592	11.939	11.700	11.583	11.815	12.169	12.534
Financial assets	**256.041**	**280.662**	**265.782**	**177.123**	**173.581**	**139.398**	**119.605**	**127.319**	**198.223**
Non-current assets	**2.150.441**	**2.215.007**	**2.597.539**	**2.742.907**	**2.736.970**	**2.709.792**	**2.695.670**	**2.726.580**	**2.864.788**
Current Assets									
Raw materials and consumables	99.935	97.284	169.316	122.194	119.750	118.553	120.924	124.551	128.288
Work in progress	17.521	17.353	25.816	27.177	26.633	26.367	26.894	27.701	28.532
Finished goods and purchased finished goods	136.113	161.983	156.461	265.302	259.996	257.396	262.544	270.420	278.533
Inventories	**253.569**	**276.620**	**351.593**	**414.673**	**406.380**	**402.316**	**410.362**	**422.673**	**435.353**
Trade receivables	399.406	442.238	577.847	541.566	530.735	525.427	535.936	552.014	568.574
Receivables from subsidiaries	0	0	0	0	0	0	0	0	0
Receivables from associates	3.695	1.318	1.012	1.008	988	978	998	1.027	1.058
Other reiceivables	22.091	37.360	64.035	113.679	111.405	110.291	112.497	115.872	119.348
Prepayments	42.611	43.775	31.435	147.191	144.247	142.805	145.661	133.021	86.224
Receivables	**467.803**	**524.691**	**674.329**	**803.444**	**787.375**	**779.501**	**795.091**	**801.935**	**775.205**
Cash at bank and in hand	**286.995**	**368.320**	**157.832**	**90.384**	**46.602**	**99.205**	**223.246**	**198.784**	**194.520**
Non-current assets held for sale	**28.988**	**28.988**	**0**	**0**	0	0	0	0	0
Current assets	**1.037.355**	**1.198.619**	**1.183.754**	**1.308.501**	1.240.356	1.281.022	1.428.699	1.423.391	1.405.078
Assets	**3.187.796**	**3.413.626**	**3.781.293**	**4.051.408**	**3.977.326**	**3.990.814**	**4.124.369**	**4.149.971**	**4.269.865**

Appendix 1 E: Base case Liabilities and Equity - Nominal

DKK '000	2005	2006	2007	2008	2009e	2010e	2011e	2012e	2013e
Share Capital	63.700	61.800	59.000	56.000	56.000	56.000	56.000	56.000	56.000
Revaluation reserves	0	0	0	180.000	156.196	133.893	117.519	84.509	87.960
Translation reserve	-7.159	-9.194	-7.694	-102.279	-94.999	-46.924	-10.600	-13.301	-51.400
Hedging reserve	-7.643	1.975	10.057	-34.603	-8.000	2.000	8.000	9.500	10.000
Retained earnings	1.026.159	1.018.823	960.411	440.788	431.972	427.653	436.206	449.292	562.777
Proposed dividend	63.700	61.800	59.000	0	0	0	51.000	61.000	63.000
Equity of Parent Company Shareholders	**1.138.757**	**1.135.204**	**1.080.774**	**539.906**	**541.169**	**572.622**	**658.125**	**647.000**	**728.337**
Minority interest	**10.993**	**12.917**	**38.689**	**34.922**	**34.224**	**33.881**	**34.559**	**35.596**	**36.664**
Equity	**1.149.750**	**1.148.121**	**1.119.463**	**574.828**	**575.393**	**606.503**	**692.684**	**682.595**	**765.001**
Deferred tax	142.478	127.720	127.718	179.378	175.790	174.033	177.513	182.839	188.324
Mortgage debt	559.171	593.540	749.751	734.655	719.962	712.762	727.018	725.000	725.000
Credit institutions	587.353	650.375	790.260	968.888	949.510	940.015	940.000	940.000	940.000
Non-current liabilities	**1.289.002**	**1.371.635**	**1.667.729**	**1.882.921**	**1.845.263**	**1.826.810**	**1.844.531**	**1.847.839**	**1.853.324**
Mortgage debt	53.738	58.732	953	0	0	0	0	0	0
Credit institutions	119.477	138.106	228.433	599.335	587.348	576.262	575.000	575.000	570.000
Repurchase obligations, returnable packaging	96.332	90.554	97.533	74.056	71.455	82.473	89.441	91.003	96.812
Trade payables	278.839	344.338	350.407	523.175	512.712	507.584	517.736	533.268	549.266
Payables to subsidiaries	0	0	0	0	0	0	0	0	0
Corporation tax	0	61.262	54.759	0	0	0	0	0	0
VAT, exice dutes, etc.	73.762	74.821	98.764	61.439	56.215	65.530	72.813	78.136	83.069
Other payables	126.896	126.057	163.252	335.654	328.941	325.652	332.165	342.129	352.393
Current liabilities	**749.044**	**893.870**	**994.101**	**1.593.659**	**1.556.671**	**1.557.501**	**1.587.155**	**1.619.537**	**1.651.541**
Liabilities	**2.038.046**	**2.265.505**	**2.661.830**	**3.476.580**	**3.401.933**	**3.384.311**	**3.431.685**	**3.467.375**	**3.504.865**
Liabilities and Equity	**3.187.796**	**3.413.626**	**3.781.293**	**4.051.408**	**3.977.326**	**3.990.814**	**4.124.369**	**4.149.971**	**4.269.865**

Appendix 2 A: Base case NOPAT and Total Investor Funds

NOPAT (DKK '000)	2005	2006	2007	2008	2009e	2010e	2011e	2012e	2013e
Note: ignoring Operating leases									
Net Income	220.638	230.339	155.234	-483.165	-89.803	-16.500	46.952	111.302	177.081
Changes in deferred taxes	-13.881	-14.758	-2	51.660	-3.588	-1.758	3.481	5.325	5.485
Goodwill amortization	1.279	1.296	1.336	439.953	18.444	21.523	22.640	25.050	17.294
Income from investment in assoiciates (deduct)	-25.800	-26.098	-27.998	-22.654	-25.638	-25.638	-25.638	-25.638	-25.638
Adjusted Net income	186.178	190.779	128.570	-14.206	-100.584	-22.372	47.435	116.040	174.223
Interest expense after tax	36.257	43.295	74.127	104.389	150.000	150.000	150.000	150.000	150.000
Income available to investors	222.435	234.074	202.697	90.183	49.416	127.628	197.435	266.040	324.223
Restructuring charges (special expenses)	0	14.329	107.823	50.125	30.000	30.000	30.000	30.000	30.000
After-tax non-operating income (special income)	-3.767	0	-96.051	0	0	0	0	0	0
Interest income after tax	-6.786	-15.108	-20.028	-25.424	-16.871	-16.871	-16.871	-16.871	-16.871
NOPAT	**211.882**	**233.295**	**194.441**	**114.884**	**62.544**	**140.757**	**210.564**	**279.168**	**337.351**
Taxes on EBITA									
Provision for income taxes (from income statement)	72.942	90.014	64.930	30.200	64.522	64.522	64.522	64.522	64.522
Tax shield on interest expense, net (25% corp tax)	14.100	16.837	24.709	52.258	32.888	29.756	28.613	26.191	33.934
Tax on financial income (25%)	-2.533	-5.875	-6.676	-9.492	-5.624	-5.624	-5.624	-5.624	-5.624
Tax on non-operating income	-1.406	0	-32.017	0	0	0	0	0	0
Taxes on EBITA	**83.103**	**100.976**	**50.946**	**72.966**	**91.786**	**88.654**	**87.511**	**85.089**	**92.832**
Reported EBITA	308.866	349.029	245.389	136.190	157.918	231.168	294.594	358.931	424.698
Taxes on EBITA	-83.103	-100.976	-50.946	-72.966	-91.786	-88.654	-87.511	-85.089	-92.832
Change in deferred taxes	-13.881	-14.758	-2	51.660	-3.588	-1.758	3.481	5.325	5.485
NOPAT	**211.882**	**233.295**	**194.441**	**114.884**	**62.544**	**140.756**	**210.564**	**279.168**	**337.351**

DKK '000	2005	2006	2007	2008†	2009e	2010e	2011e	2012e	2013e
Operating current assets[1]	1.034.195	1.169.631	1.183.754	1.308.501	1.240.356	1.281.022	1.428.699	1.423.391	1.405.078
Non-interest-bearing current liabilities[2]	-575.829	-697.032	-764.715	-994.324	-969.323	-981.239	-1.012.155	-1.044.537	-1.081.541
Operating working Capital	458.366	472.599	419.039	314.177	271.034	299.783	416.544	378.855	323.537
Net property, plant & equipment[3]	1.420.396	1.426.857	1.557.021	2.079.438	2.086.770	2.098.541	2.094.775	2.103.532	2.155.964
Other operating assets, net of other liabilities*	13.338	21.875	11.592	11.939	11.700	11.583	11.815	12.169	12.534
Operating invested capital (ex goodwill)	1.892.100	1.921.331	1.987.652	2.405.554	2.369.504	2.409.908	2.523.134	2.494.556	2.492.035
Goodwill	290.094	323.398	487.861	311.275	305.050	301.999	308.039	317.280	326.799
Other intangible assets (trade marks, Distribution rights	188.099	184.090	286.875	175.071	171.570	169.854	173.251	178.448	183.802
Cumulative goodwill amortization									
Operating capital (including goodwill)	2.370.293	2.428.819	2.762.388	2.891.900	2.846.123	2.881.761	3.004.424	2.990.285	3.002.636
Excess cash and securities**	28.988	28.988	0	0	0	0	0	0	0
Investments (associates and other)	217.243	234.123	228.709	144.550	141.659	107.795	101.161	94.118	164.026
Non-operating investments (receivables from associates)	25.460	24.664	25.481	20.634	20.221	20.019	6.628	21.032	21.663
Total investor funds	**2.641.984**	**2.716.594**	**3.016.578**	**3.057.084**	**3.008.004**	**3.009.575**	**3.112.214**	**3.105.434**	**3.188.325**
Total Equity	1.171.362	1.148.121	1.119.463	574.828	575.393	606.503	692.684	682.595	765.001
Cumulative goodwill amortization									
Deferred income taxes	150.883	127.720	127.718	179.378	175.790	174.033	177.513	182.839	188.324
Adjusted equity	1.322.245	1.275.841	1.247.181	754.206	751.183	780.535	870.197	865.434	953.325
All interest-bearing debt	1.319.739	1.440.753	1.769.397	2.302.878	2.256.820	2.229.039	2.242.018	2.240.000	2.235.000
Total investor funds	**2.641.984**	**2.716.594**	**3.016.578**	**3.057.084**	**3.008.004**	**3.009.575**	**3.112.214**	**3.105.434**	**3.188.325**

Appendix 2 B: Base case NWC change, ROIC and Operating margin

DKK '000	2005	2006	2007	2008	2009e	2010e	2011e	2012e	2013e
Net working Capital (operating working capital)	458.366	472.599	419.039	314.177	271.034	299.783	416.544	378.855	323.537
Net working capital as share of revenue	14,36%	13,74%	10,80%	7,52%	6,62%	7,39%	10,07%	8,89%	7,37%
Change in Net working capital	*NA*	*3,11%*	*-11,33%*	*-25,02%*	*-13,73%*	*10,61%*	*38,95%*	*-9,05%*	*-14,60%*

ROIC	2005	2006	2007	2008	2009e	2010e	2011e	2012e	2013e
Return on Invested Capital	#NA	8,83%	7,16%	3,81%	2,05%	4,68%	7,00%	8,97%	10,86%

Operating Margin	2005	2006	2007	2008	2009e	2010e	2011e	2012e	2013e
Operating Margin	9,49%	10,11%	6,29%	3,23%	3,82%	5,67%	7,09%	8,40%	9,65%

Appendix 3 A: Base case Cash flow Statement

Cash flow statement ('000)	2005	2006	2007	2008	2009e	2010e	2011e	2012e	2013e
Net profit/loss for the year	220.638	230.339	155.234	-483.165	-89.803	-16.500	46.952	111.302	177.081
Adjustments for non-cash operating items	274.865	292.992	239.666	744.950	269.174	269.174	269.174	269.174	269.174
Change in working capital:									
Change in receivables	-41.327	-44.604	-45.364	51.578	-16.069	-7.874	15.590	6.843	-26.730
Change in inventories	-7.590	-23.106	-14.472	-81.622	-8.293	4.064	-8.046	-12.311	-12.680
Change in payables	49.734	64.478	-10.812	123.737	-17.177	-8.417	16.665	25.497	26.262
Total change in working capital	817	-3.232	-70.648	93.693	-41.539	-12.227	24.208	20.029	-13.148
Cash flows from operating activities before financial income and expenses	**496.320**	**520.099**	**324.252**	**355.478**	**137.832**	**240.448**	**340.335**	**400.506**	**433.107**
Financial income	5.045	20.322	26.923	34.003	21.573	25.705	27.051	27.083	25.353
Financial expenses	-47.686	-60.984	-92.823	-151.865	-88.340	-98.503	-107.883	-111.647	-101.593
Cash flow from financing activities	*-42.641*	*-40.662*	*-65.900*	*-117.862*	*-66.766*	*-72.798*	*-80.831*	*-84.564*	*-76.240*
Cash flow from operating activities	**453.679**	**479.437**	**258.352**	**237.616**	**71.066**	**167.651**	**259.504**	**315.941**	**356.867**
Corporation tax paid	-71.282	-54.197	-106.895	-134.408	-91.696	-91.696	-91.696	-91.696	-91.696
Cash flow from operating activities	**382.397**	**425.240**	**151.457**	**103.208**	**-20.629**	**75.955**	**167.808**	**224.246**	**265.172**
Dividends received from subsidiaries and associates	8.414	20.146	15.958	14.336	14.714	14.714	14.714	14.714	14.714
Sale of securities	3.992	3.668	0	0	0	0	0	0	0
Sale of PP&E	26.013	14.690	212.141	45.349	0	0	0	0	0
Purchase of PP&E	-168.612	-257.732	-222.543	-519.107	-83.000	-83.000	-83.000	-83.000	-83.000
Free cash flow	**252.204**	**206.012**	**157.013**	**-356.214**	**-88.916**	**7.669**	**99.522**	**155.959**	**196.885**
Sale of associates	0	0	17.990	0	0	0	0	0	0
Acquisition of subsidiaries	-239.718	0	-393.477	-126.546	0	0	0	0	0
Acquisition of intangible and financial assets	-37.979	-85.216	-2.340	-3.045	-1.000	-1.200	-2.800	-3.000	-3.800
Cash flow from investing activities	**-407.890**	**-304.444**	**-372.271**	**-589.013**	**-69.287**	**-69.487**	**-71.087**	**-71.287**	**-72.087**
Proceeds from raising of non-current debt	519.612	178.541	300.123	141.986	268.065	268.066	249.250	132.999	93.000
Repayment of non-current debt	-46.030	-80.816	-69.923	-16.049	-53.205	-53.205	-53.205	-141.693	-121.624
Change in current debt to credit institutions	-67.584	103.619	-5.036	391.799	10.333	10.333	10.333	10.333	10.333
Change in financing of subsidiaries	0	0	0	0	0	0	0	0	1
Dividends paid	-56.654	-60.714	-57.722	-54.901	-57.498	-57.498	-57.498	-57.498	-57.498
Acquisition of shares for treasury	-107.097	-180.139	-162.598	-46.244	-124.020	-124.020	-124.020	-124.020	-124.020
Sale of treasury shares	1.784	110	6.854	1.551	2.575	2.575	2.575	2.575	2.575
Cash flow from financing activities	**244.031**	**-39.399**	**11.698**	**418.142**	**46.251**	**46.252**	**27.436**	**-177.304**	**-197.233**
Change in cash and cash equivalents	**218.538**	**81.397**	**-209.116**	**-67.663**	**-43.665**	**52.721**	**124.158**	**-24.344**	**-4.147**
Cash and cash equivalents at 1 January	67.697	286.995	368.320	157.832	90.384	46.602	99.205	223.246	198.784
Exchange adjustment	**760**	**-72**	**-1.372**	**215**	**-117**	**-117**	**-117**	**-117**	**-117**
Cash and equivalents at 31 December	**286.995**	**368.320**	**157.832**	**90.384**	**46.602**	**99.205**	**223.246**	**198.784**	**194.520**

Appendix 3 B: Base case Common Sized Income Statement

Common sized income statement	**2005**	**2006**	**2007**	**2008**	**2009e**	**2010e**	**2011e**	**2012e**	**2013e**
Net Revenue DKK '000)	3.190.959	3.439.026	3.881.762	4.178.703	4.095.129	4.054.178	4.135.261	4.259.319	4.387.099
Change in net revenue	*11,22%*	*7,77%*	*12,87%*	*7,65%*	-2,00%	-1,00%	2,00%	3,00%	3,00%
Other Operating Income	6.149	43.512	9.289	3.835	15.696	15.696	15.696	15.696	15.696
Sales (million hectolitres)	5,8	6,4	7,1	7,5					
Net Revenue	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%
Cost of sales (production costs)	1.581.411	1.742.900	2.129.173	2.433.298	2.408.965	2.360.786	2.408.001	2.480.241	2.554.649
Production costs/net revenue	49,56%	50,68%	54,85%	58,23%	58,83%	58,23%	58,23%	58,23%	58,23%
Change in production costs		*-9,27%*	*34,64%*	*14,28%*	-0,01	-0,02	0,02	0,03	0,03
Sales and distribution expenses	1.136.413	1.191.225	1.268.783	1.387.543	1.332.041	1.278.760	1.253.184	1.240.653	1.228.246
Sales and distribution expenses/net revenue	35,61%	34,64%	32,69%	33,21%	32,53%	31,54%	30,30%	29,13%	28,00%
Change in distribution expenses		*4,82%*	*6,51%*	*9,36%*	-4,00%	-4,00%	-2,00%	-1,00%	-1,00%
Depreciation on distribution	1279	*1.296*	*1.336*	*1.337*	1.332	1.279	1.253	1.241	1.228
Administrative expenses	171.697	200.680	249.042	226.844	213.233	200.439	196.431	196.431	196.431
Administrative expenses/net revenue	5,38%	5,84%	6,42%	5,43%	5,21%	4,94%	4,75%	4,61%	4,48%
Change in administrative expenses		*16,88%*	*24,10%*	*-8,91%*	-6,00%	-6,00%	-2,00%	0,00%	0,00%
Total expenses (share of net revenue)	90,55%	91,15%	93,95%	96,86%	96,56%	94,72%	93,29%	91,97%	90,71%
Core operating income (EBITA) (operating Mar	9,45%	8,85%	6,05%	3,14%	3,44%	5,28%	6,71%	8,03%	9,29%
EBITA	308.866	349.029	245.389	136.190	157.918	231.168	294.594	358.931	424.698

Appendix 4 A: Worst case Income Statement

DKK '000	**2005**	**2006**	**2007**	**2008**	**2009e**	**2010e**	**2011e**	**2012e**	**2013e**
Net Revenue	3.190.959	3.439.026	3.881.762	4.178.703	4.013.226	3.973.094	4.052.556	4.174.133	4.299.357
Production costs	-1.581.411	-1.742.900	-2.129.173	-2.433.298	-2.408.965	-2.360.786	-2.408.001	-2.480.241	-2554648,721
Gross Profit	**1.609.548**	**1.696.126**	**1.752.589**	**1.745.405**	**1.604.261**	**1.612.308**	**1.644.555**	**1.693.891**	**1.744.708**
Sales and distribution expenses	-1.136.413	-1.191.225	-1.268.783	-1.387.543	-1.332.041	-1.278.760	-1.253.184	-1.240.653	-1.228.246
Administrative expenses	-171.697	-200.680	-249.042	-226.844	-213.233	-200.439	-196.431	-196.431	-196.431
Other operating income	6.149	43.512	9.289	3.835	15.696	15.696	15.696	15.696	15.696
Operating profit before special items	**307.587**	**347.733**	**244.053**	**134.853**	**74.683**	**148.806**	**210.636**	**272.504**	**335.728**
Special income	5.022	0	128.068	0	0	0	0	0	0
Special expenses	0	-14.329	-107.823	-50.125	-30.000	-30.000	-30.000	-30.000	-30.000
Impairment losses	0	0	0	-384.957	0	0	0	0	0
Profit/Loss before financial income and expens	**312.609**	**333.404**	**264.298**	**-300.229**	**44.683**	**118.806**	**180.636**	**242.504**	**305.728**
Income after tax from investments	25.800	26.098	27.998	22.654	25.638	25.638	25.638	25.638	25.638
Dividend from subsidiaries and associates	0	0	0	0	0	0	0	0	0
Impairment losses on investments and balances	0	0	0	-70.104	0	0	0	0	0
Financial income	9.048	20.330	26.704	33.899	22.495	22.495	22.495	22.495	22.495
Financial Expenses	-50.357	-59.479	-98.836	-139.185	-200.000	-200.000	-200.000	-200.000	-200.000
Profit/Loss before tax	**297.100**	**320.353**	**220.164**	**-452.965**	**-107.184**	**-33.062**	**28.769**	**90.637**	**153.860**
Tax on profit/loss for the year	**-72.942**	**-90.014**	**-64.930**	**-30.200**	**-64.522**	**-64.522**	**-64.522**	**-64.522**	**-64.522**
Net profit/loss for the year	**224.158**	**230.339**	**155.234**	**-483.165**	**-171.706**	**-97.583**	**-35.753**	**26.116**	**89.339**

Appendix 4 B: Worst case Assets – Common Sized

DKK '000	2005	2006	2007	2008	2009e	2010e	2011e	2012e	2013e
Non-Current Assets									
Goodwill	10,06%	9,40%	12,57%	7,45%	7,45%	7,45%	7,45%	7,45%	7,45%
Trademarks	5,45%	5,07%	7,17%	4,02%	4,02%	4,02%	4,02%	4,02%	4,02%
Distribution rights	0,33%	0,29%	0,22%	0,17%	0,17%	0,17%	0,17%	0,17%	0,17%
Intangible assets	**15,84%**	**14,76%**	**19,96%**	**11,64%**	**11,64%**	**11,64%**	**11,64%**	**11,64%**	**11,64%**
Land and buildings	22,28%	21,04%	19,85%	15,40%	17,42%	17,72%	18,02%	18,22%	17,92%
Project development properties	0,00%	0,00%	0,00%	9,57%	9,77%	9,87%	9,67%	9,39%	9,12%
Plant and machinery	12,96%	11,66%	12,59%	12,67%	14,65%	15,29%	15,08%	14,85%	14,62%
Other fixtures and fittings, tools and equipment	7,49%	6,91%	6,19%	5,15%	5,18%	6,29%	6,37%	6,17%	6,21%
Property, plant and equipment in progress	0,81%	1,89%	1,48%	6,98%	3,94%	2,60%	1,51%	0,75%	1,28%
Property, plant and equipment (PP&E)	**43,53%**	**41,49%**	**40,11%**	**49,76%**	**50,96%**	**51,76%**	**50,66%**	**49,39%**	**49,14%**
Investment in subsidiaries	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
Investments on associates	6,72%	6,73%	5,81%	2,10%	2,10%	2,10%	2,10%	2,10%	2,10%
Receivables from subsidiaries	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
Receivables from associates	0,80%	0,72%	0,66%	0,49%	0,49%	0,49%	0,49%	0,49%	0,49%
Other investmens	0,09%	0,08%	0,08%	1,36%	1,36%	1,36%	1,36%	1,36%	1,36%
Other receivables	0,42%	0,64%	0,30%	0,29%	0,29%	0,29%	0,29%	0,29%	0,29%
Financial assets	**8,02%**	**8,16%**	**6,85%**	**4,24%**	**4,24%**	**4,24%**	**4,24%**	**4,24%**	**4,24%**
Non-current assets	**67,39%**	**64,41%**	**66,92%**	**65,64%**	**66,83%**	**67,64%**	**66,53%**	**65,26%**	**65,02%**
Current Assets									
Raw materials and consumables	3,13%	2,83%	4,36%	2,92%	2,92%	2,92%	2,92%	2,92%	2,92%
Work in progress	0,55%	0,50%	0,67%	0,65%	0,65%	0,65%	0,65%	0,65%	0,65%
Finished goods and purchased finished goods	4,27%	4,71%	4,03%	6,35%	6,35%	6,35%	6,35%	6,35%	6,35%
Inventories	**7,95%**	**8,04%**	**9,06%**	**9,92%**	**9,92%**	**9,92%**	**9,92%**	**9,92%**	**9,92%**
Trade receivables	12,52%	12,86%	14,89%	12,96%	12,96%	12,96%	12,96%	12,96%	12,96%
Receivables from subsidiaries	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
Receivables from associates	0,12%	0,04%	0,03%	0,02%	0,02%	0,02%	0,02%	0,02%	0,02%
Other reiceivables	0,69%	1,09%	1,65%	2,72%	2,72%	2,72%	2,72%	2,72%	2,72%
Prepayments	1,34%	1,27%	0,81%	3,52%	3,52%	3,52%	3,52%	3,12%	1,97%
Receivables	**14,66%**	**15,26%**	**17,37%**	**19,23%**	**19,23%**	**19,23%**	**19,23%**	**18,83%**	**17,67%**
Cash at bank and in hand	**8,99%**	**10,71%**	**4,07%**	**2,16%**	**1,14%**	**2,45%**	**5,85%**	**7,19%**	**8,44%**
Non-current assets held for sale	**0,91%**	**0,84%**	**0,00%**	**0,00%**	**0,00%**	**0,00%**	**0,00%**	**0,00%**	**0,00%**
Current assets	**32,51%**	**34,85%**	**30,50%**	**31,31%**	**30,29%**	**31,60%**	**35,00%**	**35,94%**	**36,03%**
Assets	99,90%	99,26%	97,41%	96,95%	97,12%	98,44%	100,19%	99,95%	101,33%

Appendix 4 C: Worst case Liabilities and Equity – Common Sized

DKK '000	2005	2006	2007	2008	2009e	2010e	2011e	2012e	2013e
Share Capital	2,00%	1,80%	1,52%	1,34%	1,37%	1,38%	1,35%	1,31%	1,28%
Revaluation reserves	0,00%	0,00%	0,00%	4,31%	3,81%	3,30%	2,84%	1,98%	2,00%
Translation reserve	-0,22%	-0,27%	-0,20%	-2,45%	-2,32%	-1,16%	-0,26%	-0,31%	-1,17%
Hedging reserve	-0,24%	0,06%	0,26%	-0,83%	-0,20%	0,05%	0,19%	0,22%	0,23%
Retained earnings	32,16%	29,63%	24,74%	10,55%	10,55%	10,55%	10,55%	10,55%	12,83%
Proposed dividend	2,00%	1,80%	1,52%	0,00%	0,00%	0,00%	1,23%	1,43%	1,44%
Equity of Parent Company Shareholders	**35,69%**	**33,01%**	**27,84%**	**12,92%**	**13,21%**	**14,12%**	**15,91%**	**15,19%**	**16,60%**
Minority interest	**0,34%**	**0,38%**	**1,00%**	**0,84%**	**0,84%**	**0,84%**	**0,84%**	**0,84%**	**0,84%**
Equity	**36,03%**	**33,39%**	**28,84%**	**13,76%**	**14,05%**	**14,96%**	**16,75%**	**16,03%**	**17,44%**
Deferred tax	4,47%	3,71%	3,29%	4,29%	4,29%	4,29%	4,29%	4,29%	4,29%
Mortgage debt	17,52%	17,26%	19,31%	17,58%	17,58%	17,58%	17,58%	17,58%	17,58%
Credit institutions	18,41%	18,91%	20,36%	23,19%	23,19%	23,19%	23,19%	23,19%	23,03%
Non-current liabilities	**40,40%**	**39,88%**	**42,96%**	**45,06%**	**45,06%**	**45,06%**	**45,06%**	**45,06%**	**44,90%**
Mortgage debt	1,68%	1,71%	0,02%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
Credit institutions	3,74%	4,02%	5,88%	14,34%	14,34%	14,21%	13,90%	14,34%	14,34%
Repurchase obligations, returnable packaging	3,02%	2,63%	2,51%	1,77%	1,74%	2,03%	2,16%	2,14%	2,21%
Trade payables	8,74%	10,01%	9,03%	12,52%	12,52%	12,52%	12,52%	12,52%	12,52%
Payables to subsidiaries	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
Corporation tax	0,00%	1,78%	1,41%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
VAT, exice dutes, etc.	2,31%	2,18%	2,54%	1,47%	1,37%	1,62%	1,76%	1,83%	1,89%
Other payables	3,98%	3,67%	4,21%	8,03%	8,03%	8,03%	8,03%	8,03%	8,03%
Current liabilities	**23,47%**	**25,99%**	**25,61%**	**38,14%**	**38,01%**	**38,42%**	**38,38%**	**38,87%**	**39,00%**
Liabilities	**63,87%**	**65,88%**	**68,57%**	**83,20%**	**83,07%**	**83,48%**	**83,44%**	**83,93%**	**83,90%**
Liabilities and Equity	**99,90%**	**99,26%**	**97,41%**	**96,95%**	**97,12%**	**98,44%**	**100,19%**	**99,95%**	**101,33%**

Appendix 4 D: Worst case Assets - Nominal

DKK '000	2005	2006	2007	2008	2009e	2010e	2011e	2012e	2013e
Non-Current Assets									
Goodwill	320.861	323.398	487.861	311.275	305.050	301.999	308.039	317.280	326.799
Trademarks	173.946	174.236	278.351	167.885	164.527	162.882	166.140	171.124	176.258
Distribution rights	10.587	9.854	8.524	7.186	7.042	6.972	7.111	7.325	7.544
Intangible assets	**505.394**	**507.488**	**774.736**	**486.346**	**476.619**	**471.853**	**481.290**	**495.729**	**510.601**
Land and buildings	710.810	723.509	770.679	643.363	713.230	718.230	745.200	776.200	786.334
Project development properties	0	0	0	400.000	400.000	400.000	400.000	400.000	400.000
Plant and machinery	413.396	400.842	488.715	529.291	600.000	620.000	623.800	632.400	641.200
Other fixtures and fittings, tools and equipment	238.870	237.618	240.091	214.997	212.000	255.000	263.442	262.877	272.430
Property, plant and equipment in progress	25.930	64.888	57.536	291.787	161.540	105.311	62.333	32.055	56.000
Property, plant and equipment (PP&E)	**1.389.006**	**1.426.857**	**1.557.021**	**2.079.438**	**2.086.770**	**2.098.541**	**2.094.775**	**2.103.532**	**2.155.964**
Investment in subsidiaries	0	0	0	0	0	0	0	0	0
Investments on associates	214.409	231.285	225.691	87.650	85.897	85.038	86.739	66.120	117.778
Receivables from subsidiaries	0	0	0	0	0	0	0	0	0
Receivables from associates	25.460	24.664	25.481	20.634	20.221	20.019	6.628	21.032	21.663
Other investmens	2.834	2.838	3.018	56.900	55.762	22.757	14.422	27.998	46.248
Other receivables	13.338	21.875	11.592	11.939	11.700	11.583	11.815	12.169	12.534
Financial assets	**256.041**	**280.662**	**265.782**	**177.123**	**173.581**	**139.398**	**119.605**	**127.319**	**198.223**
Non-current assets	**2.150.441**	**2.215.007**	**2.597.539**	**2.742.907**	**2.736.970**	**2.709.792**	**2.695.670**	**2.726.580**	**2.864.788**
Current Assets									
Raw materials and consumables	99.935	97.284	169.316	122.194	119.750	118.553	120.924	124.551	128.288
Work in progress	17.521	17.353	25.816	27.177	26.633	26.367	26.894	27.701	28.532
Finished goods and purchased finished goods	136.113	161.983	156.461	265.302	259.996	257.396	262.544	270.420	278.533
Inventories	**253.569**	**276.620**	**351.593**	**414.673**	**406.380**	**402.316**	**410.362**	**422.673**	**435.353**
Trade receivables	399.406	442.238	577.847	541.566	530.735	525.427	535.936	552.014	568.574
Receivables from subsidiaries	0	0	0	0	0	0	0	0	0
Receivables from associates	3.695	1.318	1.012	1.008	988	978	998	1.027	1.058
Other reiceivables	22.091	37.360	64.035	113.679	111.405	110.291	112.497	115.872	119.348
Prepayments	42.611	43.775	31.435	147.191	144.247	142.805	145.661	133.021	86.224
Receivables	**467.803**	**524.691**	**674.329**	**803.444**	**787.375**	**779.501**	**795.091**	**801.935**	**775.205**
Cash at bank and in hand	**286.995**	**368.320**	**157.832**	**90.384**	**46.602**	**99.205**	**242.061**	**306.089**	**370.244**
Non-current assets held for sale	**28.988**	**28.988**	**0**	**0**	0	0	0	0	0
Current assets	**1.037.355**	**1.198.619**	**1.183.754**	**1.308.501**	1.240.357	1.281.022	1.447.515	1.530.696	1.580.802
Assets	**3.187.796**	**3.413.626**	**3.781.293**	**4.051.408**	**3.977.326**	**3.990.814**	**4.143.184**	**4.257.276**	**4.445.589**

Appendix 4 E: Worst case Liabilities and Equity - Nominal

DKK '000	**2005**	**2006**	**2007**	**2008**	**2009e**	**2010e**	**2011e**	**2012e**	**2013e**
Share Capital	63.700	61.800	59.000	56.000	56.000	56.000	56.000	56.000	56.000
Revaluation reserves	0	0	0	180.000	156.196	133.893	117.519	84.509	87.960
Translation reserve	-7.159	-9.194	-7.694	-102.279	-94.999	-46.924	-10.600	-13.301	-51.400
Hedging reserve	-7.643	1.975	10.057	-34.603	-8.000	2.000	8.000	9.500	10.000
Retained earnings	1.026.159	1.018.823	960.411	440.788	431.972	427.653	436.206	449.292	562.777
Proposed dividend	63.700	61.800	59.000	0	0	0	51.000	61.000	63.000
Equity of Parent Company Shareholders	**1.138.757**	**1.135.204**	**1.080.774**	**539.906**	**541.169**	**572.622**	**658.125**	**647.000**	**728.337**
Minority interest	**10.993**	**12.917**	**38.689**	**34.922**	**34.224**	**33.881**	**34.559**	**35.596**	**36.664**
Equity	**1.149.750**	**1.148.121**	**1.119.463**	**574.828**	**575.393**	**606.503**	**692.684**	**682.595**	**765.001**
Deferred tax	142.478	127.720	127.718	179.378	175.790	174.033	177.513	182.839	188.324
Mortgage debt	559.171	593.540	749.751	734.655	719.962	712.762	727.018	748.828	771.293
Credit institutions	587.353	650.375	790.260	968.888	949.510	940.015	958.815	987.580	1.010.207
Non-current liabilities	**1.289.002**	**1.371.635**	**1.667.729**	**1.882.921**	**1.845.263**	**1.826.810**	**1.863.346**	**1.919.247**	**1.969.824**
Mortgage debt	53.738	58.732	953	0	0	0	0	0	0
Credit institutions	119.477	138.106	228.433	599.335	587.348	576.262	575.000	610.897	629.224
Repurchase obligations, returnable packaging	96.332	90.554	97.533	74.056	71.455	82.473	89.441	91.003	96.812
Trade payables	278.839	344.338	350.407	523.175	512.712	507.584	517.736	533.268	549.266
Payables to subsidiaries	0	0	0	0	0	0	0	0	0
Corporation tax	0	61.262	54.759	0	0	0	0	0	0
VAT, exice dutes, etc.	73.762	74.821	98.764	61.439	56.215	65.530	72.813	78.136	83.069
Other payables	126.896	126.057	163.252	335.654	328.941	325.652	332.165	342.129	352.393
Current liabilities	**749.044**	**893.870**	**994.101**	**1.593.659**	**1.556.671**	**1.557.501**	**1.587.155**	**1.655.434**	**1.710.765**
Liabilities	**2.038.046**	**2.265.505**	**2.661.830**	**3.476.580**	**3.401.933**	**3.384.311**	**3.450.501**	**3.574.681**	**3.680.589**
Liabilities and Equity	**3.187.796**	**3.413.626**	**3.781.293**	**4.051.408**	**3.977.326**	**3.990.814**	**4.143.184**	**4.257.276**	**4.445.590**

Appendix 5 A: Worst case NOPAT and Total Investor Funds

NOPAT (DKK '000)	**2005**	**2006**	**2007**	**2008**	**2009e**	**2010e**	**2011e**	**2012e**	**2013e**
Note: ignoring Operating leases									
Net Income	220.638	230.339	155.234	-483.165	-171.706	-97.583	-35.753	26.116	89.339
Changes in deferred taxes	-13.881	-14.758	-2	51.660	-3.588	-1.758	3.481	5.325	5.485
Goodwill amortization	1.279	1.296	1.336	439.953	18.444	21.523	22.640	25.050	17.294
Income from investment in assoiciates (deduct)	-25.800	-26.098	-27.998	-22.654	-25.638	-25.638	-25.638	-25.638	-25.638
Adjusted Net income	186.178	190.779	128.570	-14.206	-182.487	-103.456	-35.270	30.853	86.481
Interest expense after tax	36.257	43.295	74.127	104.389	150.000	150.000	150.000	150.000	150.000
Income available to investors	222.435	234.074	202.697	90.183	-32.487	46.544	114.730	180.853	236.481
Restructuring charges (special expenses)	0	14.329	107.823	50.125	30.000	30.000	30.000	30.000	30.000
After-tax non-operating income (special income)	-3.767	0	-96.051	0	0	0	0	0	0
Interest income after tax	-6.786	-15.108	-20.028	-25.424	-16.871	-16.871	-16.871	-16.871	-16.871
NOPAT	**211.882**	**233.295**	**194.441**	**114.884**	**-19.358**	**59.673**	**127.859**	**193.982**	**249.609**
Taxes on EBITA									
Provision for income taxes (from income statement)	72.942	90.014	64.930	30.200	64.522	64.522	64.522	64.522	64.522
Tax shield on interest expense, net (25% corp tax)	14.100	16.837	24.709	52.258	32.888	29.756	28.613	26.191	33.934
Tax on financial income (25%)	-2.533	-5.875	-6.676	-9.492	-5.624	-5.624	-5.624	-5.624	-5.624
Tax on non-operating income	-1.406	0	-32.017	0	0	0	0	0	0
Taxes on EBITA	**83.103**	**100.976**	**50.946**	**72.966**	**91.786**	**88.654**	**87.511**	**85.089**	**92.832**
Reported EBITA	308.866	349.029	245.389	136.190	76.015	150.084	211.889	273.745	336.956
Taxes on EBITA	-83.103	-100.976	-50.946	-72.966	-91.786	-88.654	-87.511	-85.089	-92.832
Change in deferred taxes	-13.881	-14.758	-2	51.660	-3.588	-1.758	3.481	5.325	5.485
NOPAT	**211.882**	**233.295**	**194.441**	**114.884**	**-19.358**	**59.673**	**127.859**	**193.982**	**249.610**

DKK '000	**2005**	**2006**	**2007**	**2008†**	**2009e**	**2010e**	**2011e**	**2012e**	**2013e**
Operating current assets[1]	1.034.195	1.169.631	1.183.754	1.308.501	1.240.357	1.281.022	1.447.515	1.530.696	1.580.802
Non-interest-bearing current liabilities[2]	-575.829	-697.032	-764.715	-994.324	-969.323	-981.239	-1.012.155	-1.044.537	-1.081.541
Operating working Capital	458.366	472.599	419.039	314.177	271.034	299.783	435.360	486.160	499.261
Net property, plant & equipment[3]	1.420.396	1.426.857	1.557.021	2.079.438	2.086.770	2.098.541	2.094.775	2.103.532	2.155.964
Other operating assets, net of other liabilities*	13.338	21.875	11.592	11.939	11.700	11.583	11.815	12.169	12.534
Operating invested capital (ex goodwill)	1.892.100	1.921.331	1.987.652	2.405.554	2.369.505	2.409.907	2.541.950	2.601.861	2.667.760
Goodwill	290.094	323.398	487.861	311.275	305.050	301.999	308.039	317.280	326.799
Other intangible assets (trade marks, Distribution rights	188.099	184.090	286.875	175.071	171.570	169.854	173.251	178.448	183.802
Cumulative goodwill amortization									
Operating capital (including goodwill)	2.370.293	2.428.819	2.762.388	2.891.900	2.846.124	2.881.760	3.023.240	3.097.589	3.178.360
Excess cash and securities**	28.988	28.988	0	0	0	0	0	0	0
Investments (associates and other)	217.243	234.123	228.709	144.550	141.659	107.795	101.161	94.118	164.026
Non-operating investments (receivables from associates)	25.460	24.664	25.481	20.634	20.221	20.019	6.628	21.032	21.663
Total investor funds	**2.641.984**	**2.716.594**	**3.016.578**	**3.057.084**	**3.008.004**	**3.009.575**	**3.131.030**	**3.212.739**	**3.364.049**
Total Equity	1.171.362	1.148.121	1.119.463	574.828	575.393	606.503	692.684	682.595	765.001
Cumulative goodwill amortization									
Deferred income taxes	150.883	127.720	127.718	179.378	175.790	174.033	177.513	182.839	188.324
Adjusted equity	1.322.245	1.275.841	1.247.181	754.206	751.183	780.535	870.197	865.434	953.325
All interest-bearing debt	1.319.739	1.440.753	1.769.397	2.302.878	2.256.820	2.229.039	2.260.833	2.347.305	2.410.724
Total investor funds	**2.641.984**	**2.716.594**	**3.016.578**	**3.057.084**	**3.008.004**	**3.009.575**	**3.131.030**	**3.212.739**	**3.364.049**

Appendix 5 B: Worst case NWC change, ROIC and Operating margin

DKK '000	2005	2006	2007	2008	2009e	2010e	2011e	2012e	2013e
Net working Capital (operating working capital)	458.366	472.599	419.039	314.177	271.034	299.783	435.360	486.160	499.261
Net working capital as share of revenue	14,36%	13,74%	10,80%	7,52%	6,75%	7,55%	10,74%	11,65%	11,61%
Change in Net working capital	*NA*	*3,11%*	*-11,33%*	*-25,02%*	*-13,73%*	*10,61%*	*45,22%*	*11,67%*	*2,69%*

ROIC	2005	2006	2007	2008	2009e	2010e	2011e	2012e	2013e
Return on Invested Capital	#NA	8,83%	7,16%	3,81%	-0,63%	1,98%	4,25%	6,20%	7,77%

Operating Margin	2005	2006	2007	2008	2009e	2010e	2011e	2012e	2013e
Operating Margin	9,49%	10,11%	6,29%	3,23%	1,86%	3,75%	5,20%	6,53%	7,81%

Appendix 6 A: Worst case Cash flow Statement

Cash flow statement ('000)	2005	2006	2007	2008	2009e	2010e	2011e	2012e	2013e
Net profit/loss for the year	220.638	230.339	155.234	-483.165	-171.706	-97.583	-35.753	26.116	89.339
Adjustments for non-cash operating items	274.865	292.992	239.666	744.950	269.174	269.174	269.174	269.174	269.174
Change in working capital:									
Change in receivables	-41.327	-44.604	-45.364	51.578	-16.069	-7.874	15.590	6.843	-26.730
Change in inventories	-7.590	-23.106	-14.472	-81.622	-8.293	4.064	-8.046	-12.311	-12.680
Change in payables	49.734	64.478	-10.812	123.737	-17.177	-8.417	16.665	25.497	26.262
Total change in working capital	817	-3.232	-70.648	93.693	-41.539	-12.227	24.208	20.029	-13.148
Cash flows from operating activities before financial income and expenses	**496.320**	**520.099**	**324.252**	**355.478**	**55.930**	**159.365**	**257.630**	**315.319**	**345.365**
Financial income	5.045	20.322	26.923	34.003	21.573	25.705	27.051	27.083	25.353
Financial expenses	-47.686	-60.984	-92.823	-151.865	-88.340	-98.503	-107.883	-111.647	-101.593
Cash flow from financing activities	*-42.641*	*-40.662*	*-65.900*	*-117.862*	*-66.766*	*-72.798*	*-80.831*	*-84.564*	*-76.240*
Cash flow from operating activities	**453.679**	**479.437**	**258.352**	**237.616**	**-10.837**	**86.567**	**176.798**	**230.755**	**269.125**
Corporation tax paid	-71.282	-54.197	-106.895	-134.408	-91.696	-91.696	-91.696	-91.696	-91.696
Cash flow from operating activities	**382.397**	**425.240**	**151.457**	**103.208**	**-102.532**	**-5.128**	**85.103**	**139.059**	**177.430**
Dividends received from subsidiaries and associates	8.414	20.146	15.958	14.336	14.714	14.714	14.714	14.714	14.714
Sale of securities	3.992	3.668	0	0	0	0	0	0	0
Sale of PP&E	26.013	14.690	212.141	45.349	0	0	0	0	0
Purchase of PP&E	-168.612	-257.732	-222.543	-519.107	-83.000	-83.000	-83.000	-83.000	-83.000
Free cash flow	**252.204**	**206.012**	**157.013**	**-356.214**	**-170.819**	**-73.415**	**16.816**	**70.773**	**109.143**
Sale of associates	0	0	17.990	0	0	0	0	0	0
Acquisition of subsidiaries	-239.718	0	-393.477	-126.546	0	0	0	0	0
Acquisition of intangible and financial assets	-37.979	-85.216	-2.340	-3.045	-1.000	-1.200	-2.800	-3.000	-3.800
Cash flow from investing activities	**-407.890**	**-304.444**	**-372.271**	**-589.013**	**-69.287**	**-69.487**	**-71.087**	**-71.287**	**-72.087**
Proceeds from raising of non-current debt	519.612	178.541	300.123	141.986	349.968	349.149	350.771	218.186	180.742
Repayment of non-current debt	-46.030	-80.816	-69.923	-16.049	-53.205	-53.205	-53.205	-53.205	-53.205
Change in current debt to credit institutions	-67.584	103.619	-5.036	391.799	10.333	10.333	10.333	10.333	10.333
Change in financing of subsidiaries	0	0	0	0	0	0	0	0	1
Dividends paid	-56.654	-60.714	-57.722	-54.901	-57.498	-57.498	-57.498	-57.498	-57.498
Acquisition of shares for treasury	-107.097	-180.139	-162.598	-46.244	-124.020	-124.020	-124.020	-124.020	-124.020
Sale of treasury shares	1.784	110	6.854	1.551	2.575	2.575	2.575	2.575	2.575
Cash flow from financing activities	**244.031**	**-39.399**	**11.698**	**418.142**	**128.154**	**127.335**	**128.957**	**-3.628**	**-41.071**
Change in cash and cash equivalents	**218.538**	**81.397**	**-209.116**	**-67.663**	**-43.665**	**52.720**	**142.973**	**64.145**	**64.272**
Cash and cash equivalents at 1 January	67.697	286.995	368.320	157.832	90.384	46.602	99.205	242.061	306.089
Exchange adjustment	**760**	**-72**	**-1.372**	**215**	**-117**	**-117**	**-117**	**-117**	**-117**
Cash and equivalents at 31 December	**286.995**	**368.320**	**157.832**	**90.384**	**46.602**	**99.205**	**242.061**	**306.089**	**370.244**

Appendix 6 B: Worst case Common Sized Income Statement

Common Sized Income Statement	2005	2006	2007	2008	2009e	2010e	2011e	2012e	2013e
Net Revenue DKK '000)	3.190.959	3.439.026	3.881.762	4.178.703	4.013.226	3.973.094	4.052.556	4.174.133	4.299.357
Change in net revenue	*11,22%*	*7,77%*	*12,87%*	*7,65%*	-2,00%	-1,00%	2,00%	3,00%	3,00%
Other Operating Income	6.149	43.512	9.289	3.835	15.696	15.696	15.696	15.696	15.696
Sales (million hectolitres)	5,8	6,4	7,1	7,5					
Change in volume	*20,83%*	*10,34%*	*10,94%*	*5,63%*					
Net Revenue	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%
Cost of sales (production costs)	1.581.411	1.742.900	2.129.173	2.433.298	2.408.965	2.360.786	2.408.001	2.480.241	2.554.649
Production costs/net revenue	49,56%	50,68%	54,85%	58,23%	60,03%	59,42%	59,42%	59,42%	59,42%
Change in production costs		*-9,27%*	*34,64%*	*14,28%*	-0,01	-0,02	0,02	0,03	0,03
Sales and distribution expenses	1.136.413	1.191.225	1.268.783	1.387.543	1.332.041	1.278.760	1.253.184	1.240.653	1.228.246
Sales and distribution expenses/net revenue	35,61%	34,64%	32,69%	33,21%	33,19%	32,19%	30,92%	29,72%	28,57%
Change in distribution expenses		*4,82%*	*6,51%*	*9,36%*	-4,00%	-4,00%	-2,00%	-1,00%	-1,00%
Depreciation on distribution	1279	*1.296*	*1.336*	*1.337*	1.332	1.279	1.253	1.241	1.228
Administrative expenses	171.697	200.680	249.042	226.844	213.233	200.439	196.431	196.431	196.431
Administrative expenses/net revenue	5,38%	5,84%	6,42%	5,43%	5,31%	5,04%	4,85%	4,71%	4,57%
Change in administrative expenses		*16,88%*	*24,10%*	*-8,91%*	-6,00%	-6,00%	-2,00%	0,00%	0,00%
Total expenses (share of net revenue)	90,55%	91,15%	93,95%	96,86%	98,53%	96,65%	95,19%	93,85%	92,56%
Core operating income (EBITA) (operating Mar	9,45%	8,85%	6,05%	3,14%	1,47%	3,35%	4,81%	6,15%	7,44%
EBITA	308.866	349.029	245.389	136.190	76.015	150.084	211.889	273.745	336.956

Appendix 7 A: Best case Income Statement

DKK '000	2005	2006	2007	2008	2009e	2010e	2011e	2012e	2013e
Net Revenue	3.190.959	3.439.026	3.881.762	4.178.703	4.177.032	4.135.261	4.217.966	4.344.505	4.474.841
Production costs	-1.581.411	-1.742.900	-2.129.173	-2.433.298	-2.360.786	-2.313.570	-2.359.841	-2.430.637	-2.503.556
Gross Profit	**1.609.548**	**1.696.126**	**1.752.589**	**1.745.405**	**1.816.246**	**1.821.691**	**1.858.125**	**1.913.869**	**1.971.285**
Sales and distribution expenses	-1.136.413	-1.191.225	-1.268.783	-1.387.543	-1.332.041	-1.278.760	-1.253.184	-1.240.653	-1.228.246
Administrative expenses	-171.697	-200.680	-249.042	-226.844	-213.233	-200.439	-196.431	-196.431	-196.431
Other operating income	6.149	43.512	9.289	3.835	15.696	15.696	15.696	15.696	15.696
Operating profit before special items	**307.587**	**347.733**	**244.053**	**134.853**	**286.667**	**358.188**	**424.206**	**492.482**	**562.304**
Special income	5.022	0	128.068	0	0	0	0	0	0
Special expenses	0	-14.329	-107.823	-50.125	-30.000	-30.000	-30.000	-30.000	-30.000
Impairment losses	0	0	0	-384.957	0	0	0	0	0
Profit/Loss before financial income and expens	**312.609**	**333.404**	**264.298**	**-300.229**	**256.667**	**328.188**	**394.206**	**462.482**	**532.304**
Income after tax from investments	25.800	26.098	27.998	22.654	40.000	40.000	40.000	40.000	40.000
Dividend from subsidiaries and associates	0	0	0	0	0	0	0	0	0
Impairment losses on investments and balances	0	0	0	-70.104	0	0	0	0	0
Financial income	9.048	20.330	26.704	33.899	22.495	22.495	22.495	22.495	22.495
Financial Expenses	-50.357	-59.479	-98.836	-139.185	-200.000	-200.000	-200.000	-200.000	-200.000
Profit/Loss before tax	**297.100**	**320.353**	**220.164**	**-452.965**	**119.163**	**190.684**	**256.702**	**324.977**	**394.800**
Tax on profit/loss for the year	**-72.942**	**-90.014**	**-64.930**	**-30.200**	**-29.791**	**-47.671**	**-64.175**	**-81.244**	**-98.700**
Net profit/loss for the year	**224.158**	**230.339**	**155.234**	**-483.165**	**89.372**	**143.013**	**192.526**	**243.733**	**296.100**

Appendix 7 B: Best case Assets – Common Sized

DKK '000	2005	2006	2007	2008	2009e	2010e	2011e	2012e	2013e
Non-Current Assets									
Goodwill	10,06%	9,40%	12,57%	7,45%	7,45%	7,45%	7,45%	7,45%	7,45%
Trademarks	5,45%	5,07%	7,17%	4,02%	4,02%	4,02%	4,02%	4,02%	4,02%
Distribution rights	0,33%	0,29%	0,22%	0,17%	0,17%	0,17%	0,17%	0,17%	0,17%
Intangible assets	**15,84%**	**14,76%**	**19,96%**	**11,64%**	**11,64%**	**11,64%**	**11,64%**	**11,64%**	**11,64%**
Land and buildings	22,28%	21,04%	19,85%	15,40%	17,42%	17,72%	18,02%	18,22%	17,92%
Project development properties	0,00%	0,00%	0,00%	9,57%	0,00%	0,00%	0,00%	0,00%	0,00%
Plant and machinery	12,96%	11,66%	12,59%	12,67%	14,65%	15,29%	15,08%	14,85%	14,62%
Other fixtures and fittings, tools and equipment	7,49%	6,91%	6,19%	5,15%	5,18%	6,29%	6,37%	6,17%	6,21%
Property, plant and equipment in progress	0,81%	1,89%	1,48%	6,98%	3,94%	2,60%	1,51%	0,75%	1,28%
Property, plant and equipment (PP&E)	**43,53%**	**41,49%**	**40,11%**	**49,76%**	**41,19%**	**41,90%**	**40,98%**	**40,00%**	**40,03%**
Investment in subsidiaries	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
Investments on associates	6,72%	6,73%	5,81%	2,10%	2,10%	2,10%	2,10%	2,10%	2,10%
Receivables from subsidiaries	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
Receivables from associates	0,80%	0,72%	0,66%	0,49%	0,49%	0,49%	0,49%	0,49%	0,49%
Other investmens	0,09%	0,08%	0,08%	1,36%	1,36%	1,36%	1,36%	1,36%	1,36%
Other receivables	0,42%	0,64%	0,30%	0,29%	0,29%	0,29%	0,29%	0,29%	0,29%
Financial assets	**8,02%**	**8,16%**	**6,85%**	**4,24%**	**4,24%**	**4,24%**	**4,24%**	**4,24%**	**4,24%**
Non-current assets	**67,39%**	**64,41%**	**66,92%**	**65,64%**	**57,07%**	**57,77%**	**56,86%**	**55,87%**	**55,90%**
Current Assets									
Raw materials and consumables	3,13%	2,83%	4,36%	2,92%	2,92%	2,92%	2,92%	2,92%	2,92%
Work in progress	0,55%	0,50%	0,67%	0,65%	0,65%	0,65%	0,65%	0,65%	0,65%
Finished goods and purchased finished goods	4,27%	4,71%	4,03%	6,35%	6,35%	6,35%	6,35%	6,35%	6,35%
Inventories	**7,95%**	**8,04%**	**9,06%**	**9,92%**	**9,92%**	**9,92%**	**9,92%**	**9,92%**	**9,92%**
Trade receivables	12,52%	12,86%	14,89%	12,96%	12,96%	12,96%	12,96%	12,96%	12,96%
Receivables from subsidiaries	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
Receivables from associates	0,12%	0,04%	0,03%	0,02%	0,02%	0,02%	0,02%	0,02%	0,02%
Other reiceivables	0,69%	1,09%	1,65%	2,72%	2,72%	2,72%	2,72%	2,72%	2,72%
Prepayments	1,34%	1,27%	0,81%	3,52%	3,52%	3,52%	3,52%	3,12%	1,97%
Receivables	**14,66%**	**15,26%**	**17,37%**	**19,23%**	**19,23%**	**19,23%**	**19,23%**	**18,83%**	**17,67%**
Cash at bank and in hand	**8,99%**	**10,71%**	**4,07%**	**2,16%**	**5,36%**	**10,49%**	**11,12%**	**11,56%**	**11,90%**
Non-current assets held for sale	**0,91%**	**0,84%**	**0,00%**	**0,00%**	**0,00%**	**0,00%**	**0,00%**	**0,00%**	**0,00%**
Current assets	**32,51%**	**34,85%**	**30,50%**	**31,31%**	**34,51%**	**39,64%**	**40,27%**	**40,31%**	**39,49%**
Assets	99,90%	99,26%	97,41%	96,95%	91,58%	96,61%	95,79%	94,94%	95,67%

Appendix 7 C: Best case Liabilities and Equity – Common Sized

DKK '000	2005	2006	2007	2008	2009e	2010e	2011e	2012e	2013e
Share Capital	2,00%	1,80%	1,52%	1,34%	1,37%	1,38%	1,35%	1,31%	1,28%
Revaluation reserves	0,00%	0,00%	0,00%	4,31%	2,81%	3,30%	2,84%	1,98%	2,00%
Translation reserve	-0,22%	-0,27%	-0,20%	-2,45%	-2,32%	-1,16%	-0,26%	-0,31%	-1,17%
Hedging reserve	-0,24%	0,06%	0,26%	-0,83%	-0,20%	0,05%	0,19%	0,22%	0,23%
Retained earnings	32,16%	29,63%	24,74%	10,55%	14,92%	17,32%	20,50%	23,28%	27,80%
Proposed dividend	2,00%	1,80%	1,52%	0,00%	0,00%	0,00%	1,23%	1,43%	1,44%
Equity of Parent Company Shareholders	**35,69%**	**33,01%**	**27,84%**	**12,92%**	**16,59%**	**20,89%**	**25,86%**	**27,92%**	**31,58%**
Minority interest	**0,34%**	**0,38%**	**1,00%**	**0,84%**	**0,84%**	**0,84%**	**0,84%**	**0,84%**	**0,84%**
Equity	**36,03%**	**33,39%**	**28,84%**	**13,76%**	**17,42%**	**21,73%**	**26,70%**	**28,76%**	**32,41%**
Deferred tax	4,47%	3,71%	3,29%	4,29%	4,29%	4,29%	4,29%	4,29%	4,29%
Mortgage debt	17,52%	17,26%	19,31%	17,58%	17,58%	17,58%	17,58%	17,58%	17,58%
Credit institutions	18,41%	18,91%	20,36%	23,19%	13,42%	13,32%	7,58%	4,61%	2,37%
Non-current liabilities	**40,40%**	**39,88%**	**42,96%**	**45,06%**	**35,29%**	**35,19%**	**29,45%**	**26,49%**	**24,24%**
Mortgage debt	1,68%	1,71%	0,02%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
Credit institutions	3,74%	4,02%	5,88%	14,34%	15,19%	15,49%	15,16%	15,17%	14,37%
Repurchase obligations, returnable packaging	3,02%	2,63%	2,51%	1,77%	1,74%	2,03%	2,16%	2,14%	2,21%
Trade payables	8,74%	10,01%	9,03%	12,52%	12,52%	12,52%	12,52%	12,52%	12,52%
Payables to subsidiaries	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
Corporation tax	0,00%	1,78%	1,41%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
VAT, exice dutes, etc.	2,31%	2,18%	2,54%	1,47%	1,37%	1,62%	1,76%	1,83%	1,89%
Other payables	3,98%	3,67%	4,21%	8,03%	8,03%	8,03%	8,03%	8,03%	8,03%
Current liabilities	**23,47%**	**25,99%**	**25,61%**	**38,14%**	**38,86%**	**39,69%**	**39,64%**	**39,69%**	**39,02%**
Liabilities	**63,87%**	**65,88%**	**68,57%**	**83,20%**	**74,15%**	**74,88%**	**69,09%**	**66,18%**	**63,26%**
Liabilities and Equity	**99,90%**	**99,26%**	**97,41%**	**96,95%**	**91,58%**	**96,61%**	**95,79%**	**94,94%**	**95,67%**

Appendix 7 D: Best case Assets - Nominal

DKK '000	2005	2006	2007	2008	2009e	2010e	2011e	2012e	2013e
Non-Current Assets									
Goodwill	320.861	323.398	487.861	311.275	305.050	301.999	308.039	317.280	326.799
Trademarks	173.946	174.236	278.351	167.885	164.527	162.882	166.140	171.124	176.258
Distribution rights	10.587	9.854	8.524	7.186	7.042	6.972	7.111	7.325	7.544
Intangible assets	**505.394**	**507.488**	**774.736**	**486.346**	**476.619**	**471.853**	**481.290**	**495.729**	**510.601**
Land and buildings	710.810	723.509	770.679	643.363	713.230	718.230	745.200	776.200	786.334
Project development properties	0	0	0	400.000	0	0	0	0	0
Plant and machinery	413.396	400.842	488.715	529.291	600.000	620.000	623.800	632.400	641.200
Other fixtures and fittings, tools and equipment	238.870	237.618	240.091	214.997	212.000	255.000	263.442	262.877	272.430
Property, plant and equipment in progress	25.930	64.888	57.536	291.787	161.540	105.311	62.333	32.055	56.000
Property, plant and equipment (PP&E)	**1.389.006**	**1.426.857**	**1.557.021**	**2.079.438**	**1.686.770**	**1.698.541**	**1.694.775**	**1.703.532**	**1.755.964**
Investment in subsidiaries	0	0	0	0	0	0	0	0	0
Investments on associates	214.409	231.285	225.691	87.650	85.897	85.038	86.739	66.120	117.778
Receivables from subsidiaries	0	0	0	0	0	0	0	0	0
Receivables from associates	25.460	24.664	25.481	20.634	20.221	20.019	6.628	21.032	21.663
Other investmens	2.834	2.838	3.018	56.900	55.762	22.757	14.422	27.998	46.248
Other receivables	13.338	21.875	11.592	11.939	11.700	11.583	11.815	12.169	12.534
Financial assets	**256.041**	**280.662**	**265.782**	**177.123**	**173.581**	**139.398**	**119.605**	**127.319**	**198.223**
Non-current assets	**2.150.441**	**2.215.007**	**2.597.539**	**2.742.907**	**2.336.970**	**2.309.792**	**2.295.670**	**2.326.580**	**2.464.788**
Current Assets									
Raw materials and consumables	99.935	97.284	169.316	122.194	119.750	118.553	120.924	124.551	128.288
Work in progress	17.521	17.353	25.816	27.177	26.633	26.367	26.894	27.701	28.532
Finished goods and purchased finished goods	136.113	161.983	156.461	265.302	259.996	257.396	262.544	270.420	278.533
Inventories	**253.569**	**276.620**	**351.593**	**414.673**	**406.380**	**402.316**	**410.362**	**422.673**	**435.353**
Trade receivables	399.406	442.238	577.847	541.566	530.735	525.427	535.936	552.014	568.574
Receivables from subsidiaries	0	0	0	0	0	0	0	0	0
Receivables from associates	3.695	1.318	1.012	1.008	988	978	998	1.027	1.058
Other reiceivables	22.091	37.360	64.035	113.679	111.405	110.291	112.497	115.872	119.348
Prepayments	42.611	43.775	31.435	147.191	144.247	142.805	145.661	133.021	86.224
Receivables	**467.803**	**524.691**	**674.329**	**803.444**	**787.375**	**779.501**	**795.091**	**801.935**	**775.205**
Cash at bank and in hand	**286.995**	**368.320**	**157.832**	**90.384**	**219.472**	**425.284**	**459.861**	**492.532**	**521.919**
Non-current assets held for sale	**28.988**	**28.988**	**0**	**0**	0	0	0	0	0
Current assets	**1.037.355**	**1.198.619**	**1.183.754**	**1.308.501**	1.413.227	1.607.101	1.665.314	1.717.140	1.732.477
Assets	**3.187.796**	**3.413.626**	**3.781.293**	**4.051.408**	**3.750.197**	**3.916.892**	**3.960.984**	**4.043.719**	**4.197.265**

Appendix 7 E: Best case Liabilities and Equity - Nominal

DKK '000	2005	2006	2007	2008	2009e	2010e	2011e	2012e	2013e
Share Capital	63.700	61.800	59.000	56.000	56.000	56.000	56.000	56.000	56.000
Revaluation reserves	0	0	0	180.000	115.244	133.893	117.519	84.509	87.960
Translation reserve	-7.159	-9.194	-7.694	-102.279	-94.999	-46.924	-10.600	-13.301	-51.400
Hedging reserve	-7.643	1.975	10.057	-34.603	-8.000	2.000	8.000	9.500	10.000
Retained earnings	1.026.159	1.018.823	960.411	440.788	611.064	702.150	847.626	991.561	1.219.740
Proposed dividend	63.700	61.800	59.000	0	0	0	51.000	61.000	63.000
Equity of Parent Company Shareholders	**1.138.757**	**1.135.204**	**1.080.774**	**539.906**	**679.309**	**847.119**	**1.069.545**	**1.189.269**	**1.385.300**
Minority interest	**10.993**	**12.917**	**38.689**	**34.922**	**34.224**	**33.881**	**34.559**	**35.596**	**36.664**
Equity	**1.149.750**	**1.148.121**	**1.119.463**	**574.828**	**713.533**	**881.000**	**1.104.104**	**1.224.865**	**1.421.964**
Deferred tax	142.478	127.720	127.718	179.378	175.790	174.033	177.513	182.839	188.324
Mortgage debt	559.171	593.540	749.751	734.655	719.962	712.762	727.018	748.828	771.293
Credit institutions	587.353	650.375	790.260	968.888	549.510	540.015	313.266	196.549	103.894
Non-current liabilities	**1.289.002**	**1.371.635**	**1.667.729**	**1.882.921**	**1.445.262**	**1.426.810**	**1.217.797**	**1.128.216**	**1.063.511**
Mortgage debt	53.738	58.732	953	0	0	0	0	0	0
Credit institutions	119.477	138.106	228.433	599.335	622.079	627.843	626.928	646.102	630.250
Repurchase obligations, returnable packaging	96.332	90.554	97.533	74.056	71.455	82.473	89.441	91.003	96.812
Trade payables	278.839	344.338	350.407	523.175	512.712	507.584	517.736	533.268	549.266
Payables to subsidiaries	0	0	0	0	0	0	0	0	0
Corporation tax	0	61.262	54.759	0	0	0	0	0	0
VAT, exice dutes, etc.	73.762	74.821	98.764	61.439	56.215	65.530	72.813	78.136	83.069
Other payables	126.896	126.057	163.252	335.654	328.941	325.652	332.165	342.129	352.393
Current liabilities	**749.044**	**893.870**	**994.101**	**1.593.659**	**1.591.402**	**1.609.082**	**1.639.083**	**1.690.639**	**1.711.791**
Liabilities	**2.038.046**	**2.265.505**	**2.661.830**	**3.476.580**	**3.036.664**	**3.035.892**	**2.856.879**	**2.818.854**	**2.775.302**
Liabilities and Equity	**3.187.796**	**3.413.626**	**3.781.293**	**4.051.408**	**3.750.196**	**3.916.892**	**3.960.983**	**4.043.719**	**4.197.265**

Appendix 8 A: Best case NOPAT and Total Investor Funds

NOPAT (DKK '000)	2005	2006	2007	2008	2009e	2010e	2011e	2012e	2013e
Note: ignoring Operating leases									
Net Income	220.638	230.339	155.234	-483.165	89.372	143.013	192.526	243.733	296.100
Changes in deferred taxes	-13.881	-14.758	-2	51.660	-3.588	-1.758	3.481	5.325	5.485
Goodwill amortization	1.279	1.296	1.336	439.953	1.322	1.233	1.211	1.200	1.200
Income from investment in assoiciates (deduct)	-25.800	-26.098	-27.998	-22.654	-40.000	-40.000	-40.000	-40.000	-40.000
Adjusted Net income	186.178	190.779	128.570	-14.206	47.106	102.488	157.218	210.258	262.785
Interest expense after tax	36.257	43.295	74.127	104.389	135.971	140.049	140.218	141.182	131.925
Income available to investors	222.435	234.074	202.697	90.183	183.077	242.537	297.436	351.440	394.710
Restructuring charges (special expenses)	0	14.329	107.823	50.125	30.000	30.000	30.000	30.000	30.000
After-tax non-operating income (special income)	-3.767	0	-96.051	0	0	0	0	0	0
Interest income after tax	-6.786	-15.108	-20.028	-25.424	-16.871	-16.871	-16.871	-16.871	-16.871
NOPAT	**211.882**	**233.295**	**194.441**	**114.884**	**196.206**	**255.665**	**310.564**	**364.569**	**407.839**
Taxes on EBITA									
Provision for income taxes (from income statement)	72.942	90.014	64.930	30.200	0	0	0	0	0
Tax shield on interest expense, net (25% corp tax)	14.100	16.837	24.709	52.258	64.039	59.997	59.824	58.859	68.103
Tax on financial income (25%)	-2.533	-5.875	-6.676	-9.492	-5.624	-5.624	-5.624	-5.624	-5.624
Tax on non-operating income	-1.406	0	-32.017	0	0	0	0	0	0
Taxes on EBITA	**83.103**	**100.976**	**50.946**	**72.966**	**58.415**	**54.373**	**54.200**	**53.235**	**62.479**
Reported EBITA	308.866	349.029	245.389	136.190	287.999	359.467	425.459	493.723	563.533
Taxes on EBITA	-83.103	-100.976	-50.946	-72.966	-58.415	-54.373	-54.200	-53.235	-62.479
Change in deferred taxes	-13.881	-14.758	-2	51.660	-3.588	-1.758	3.481	5.325	5.485
NOPAT	**211.882**	**233.295**	**194.441**	**114.884**	**225.997**	**303.336**	**374.740**	**445.813**	**506.539**

DKK '000	2005	2006	2007	2008[†]	2009e	2010e	2011e	2012e	2013e
Operating current assets[1]	1.034.195	1.169.631	1.183.754	1.308.501	1.413.227	1.607.101	1.665.314	1.717.140	1.732.477
Non-interest-bearing current liabilities[2]	-575.829	-697.032	-764.715	-994.324	-969.323	-981.239	-1.012.155	-1.044.537	-1.081.541
Operating working Capital	458.366	472.599	419.039	314.177	443.905	625.862	653.160	672.603	650.937
Net property, plant & equipment[3]	1.420.396	1.426.857	1.557.021	2.079.438	1.686.770	1.698.541	1.694.775	1.703.532	1.755.964
Other operating assets, net of other liabilities*	13.338	21.875	11.592	11.939	11.700	11.583	11.815	12.169	12.534
Operating invested capital (ex goodwill)	1.892.100	1.921.331	1.987.652	2.405.554	2.142.375	2.335.986	2.359.749	2.388.304	2.419.435
Goodwill	290.094	323.398	487.861	311.275	305.050	301.999	308.039	317.280	326.799
Other intangible assets (trade marks, Distribution rights	188.099	184.090	286.875	175.071	171.570	169.854	173.251	178.448	183.802
Cumulative goodwill amortization									
Operating capital (including goodwill)	2.370.293	2.428.819	2.762.388	2.891.900	2.618.994	2.807.839	2.841.039	2.884.033	2.930.036
Excess cash and securities**	28.988	28.988	0	0	0	0	0	0	0
Investments (associates and other)	217.243	234.123	228.709	144.550	141.659	107.795	101.161	94.118	164.026
Non-operating investments (receivables from associates)	25.460	24.664	25.481	20.634	20.221	20.019	6.628	21.032	21.663
Total investor funds	**2.641.984**	**2.716.594**	**3.016.578**	**3.057.084**	**2.780.874**	**2.935.654**	**2.948.829**	**2.999.183**	**3.115.724**
Total Equity	1.171.362	1.148.121	1.119.463	574.828	713.533	881.000	1.104.104	1.224.865	1.421.964
Cumulative goodwill amortization									
Deferred income taxes	150.883	127.720	127.718	179.378	175.790	174.033	177.513	182.839	188.324
Adjusted equity	1.322.245	1.275.841	1.247.181	754.206	889.323	1.055.033	1.281.617	1.407.703	1.610.288
All interest-bearing debt	1.319.739	1.440.753	1.769.397	2.302.878	1.891.551	1.880.620	1.667.212	1.591.479	1.505.437
Total investor funds	**2.641.984**	**2.716.594**	**3.016.578**	**3.057.084**	**2.780.874**	**2.935.653**	**2.948.829**	**2.999.182**	**3.115.725**

Appendix 8 B: Best case NWC change, ROIC and Operating margin

DKK '000	2005	2006	2007	2008	2009e	2010e	2011e	2012e	2013e
Net working Capital (operating working capital)	458.366	472.599	419.039	314.177	443.905	625.862	653.160	672.603	650.937
Net working capital as share of revenue	14,36%	13,74%	10,80%	7,52%	10,63%	15,13%	15,49%	15,48%	14,55%
Change in Net working capital	*NA*	*3,11%*	*-11,33%*	*-25,02%*	*41,29%*	*40,99%*	*4,36%*	*2,98%*	*-3,22%*

ROIC	2005	2006	2007	2008	2009e	2010e	2011e	2012e	2013e
Return on Invested Capital	#NA	8,83%	7,16%	3,81%	6,42%	9,19%	10,58%	12,36%	13,60%

Operating Margin	2005	2006	2007	2008	2009e	2010e	2011e	2012e	2013e
Operating Margin	9,49%	10,11%	6,29%	3,23%	6,86%	8,66%	10,06%	11,34%	12,57%

Appendix 9 A: Best case Cash flow Statement

Cash flow statement ('000)	2005	2006	2007	2008	2009e	2010e	2011e	2012e	2013e
Net profit/loss for the year	220.638	230.339	155.234	-483.165	89.372	143.013	192.526	243.733	296.100
Adjustments for non-cash operating items	274.865	292.992	239.666	744.950	269.174	269.174	269.174	269.174	269.174
Change in working capital:									
Change in receivables	-41.327	-44.604	-45.364	51.578	-16.069	-7.874	15.590	6.843	-26.730
Change in inventories	-7.590	-23.106	-14.472	-81.622	-8.293	4.064	-8.046	-12.311	-12.680
Change in payables	49.734	64.478	-10.812	123.737	-17.177	-8.417	16.665	25.497	26.262
Total change in working capital	817	-3.232	-70.648	93.693	-41.539	-12.227	24.208	20.029	-13.148
Cash flows from operating activities before financial income and expenses	**496.320**	**520.099**	**324.252**	**355.478**	**317.007**	**399.961**	**485.909**	**532.936**	**552.126**
Financial income	5.045	20.322	26.923	34.003	21.573	25.705	27.051	27.083	25.353
Financial expenses	-47.686	-60.984	-92.823	-151.865	-88.340	-98.503	-107.883	-111.647	-101.593
Cash flow from financing activities	*-42.641*	*-40.662*	*-65.900*	*-117.862*	*-66.766*	*-72.798*	*-80.831*	*-84.564*	*-76.240*
Cash flow from operating activities	**453.679**	**479.437**	**258.352**	**237.616**	**250.241**	**327.163**	**405.077**	**448.372**	**475.886**
Corporation tax paid	-71.282	-54.197	-106.895	-134.408	-98.000	-98.000	-100.000	-110.000	-130.000
Cash flow from operating activities	**382.397**	**425.240**	**151.457**	**103.208**	**152.241**	**229.163**	**305.077**	**338.372**	**345.886**
Dividends received from subsidiaries and associates	8.414	20.146	15.958	14.336	14.714	14.714	14.714	14.714	14.714
Sale of securities	3.992	3.668	0	0	0	0	0	0	0
Sale of PP&E	26.013	14.690	212.141	45.349	0	0	0	0	0
Purchase of PP&E	-168.612	-257.732	-222.543	-519.107	-92.000	-92.000	-92.000	-92.000	-92.000
Free cash flow	**252.204**	**206.012**	**157.013**	**-356.214**	**74.955**	**151.876**	**227.791**	**261.086**	**268.600**
					0,15	0,15	0,15	0,15	0,15
Sale of associates	0	0	17.990	0	0	0	0	0	0
Acquisition of subsidiaries	-239.718	0	-393.477	-126.546	0	0	0	0	0
Acquisition of intangible and financial assets	-37.979	-85.216	-2.340	-3.045	-1.000	-1.200	-2.800	-3.000	-3.800
Cash flow from investing activities	**-407.890**	**-304.444**	**-372.271**	**-589.013**	**-78.287**	**-78.487**	**-80.087**	**-80.287**	**-81.087**
Proceeds from raising of non-current debt	519.612	178.541	300.123	141.986	277.065	277.066	100.000	80.000	75.000
Repayment of non-current debt	-46.030	-80.816	-69.923	-16.049	-53.205	-53.205	-53.205	-53.205	-53.205
Change in current debt to credit institutions	-67.584	103.619	-5.036	391.799	10.333	10.333	10.333	10.333	10.333
Change in financing of subsidiaries	0	0	0	0	0	0	0	0	1
Dividends paid	-56.654	-60.714	-57.722	-54.901	-57.498	-57.498	-100.000	-100.000	-100.000
Acquisition of shares for treasury	-107.097	-180.139	-162.598	-46.244	-124.020	-124.020	-150.000	-165.000	-170.000
Sale of treasury shares	1.784	110	6.854	1.551	2.575	2.575	2.575	2.575	2.575
Cash flow from financing activities	**244.031**	**-39.399**	**11.698**	**418.142**	**55.251**	**55.252**	**-190.297**	**-225.297**	**-235.296**
Change in cash and cash equivalents	**218.538**	**81.397**	**-209.116**	**-67.663**	**129.206**	**205.928**	**34.694**	**32.789**	**29.504**
Cash and cash equivalents at 1 January	67.697	286.995	368.320	157.832	90.384	219.472	425.284	459.861	492.532
Exchange adjustment	**760**	**-72**	**-1.372**	**215**	**-117**	**-117**	**-117**	**-117**	**-117**
Cash and equivalents at 31 December	**286.995**	**368.320**	**157.832**	**90.384**	**219.472**	**425.284**	**459.861**	**492.532**	**521.919**

Appendix 9 B: Best case Common Sized Income Statement

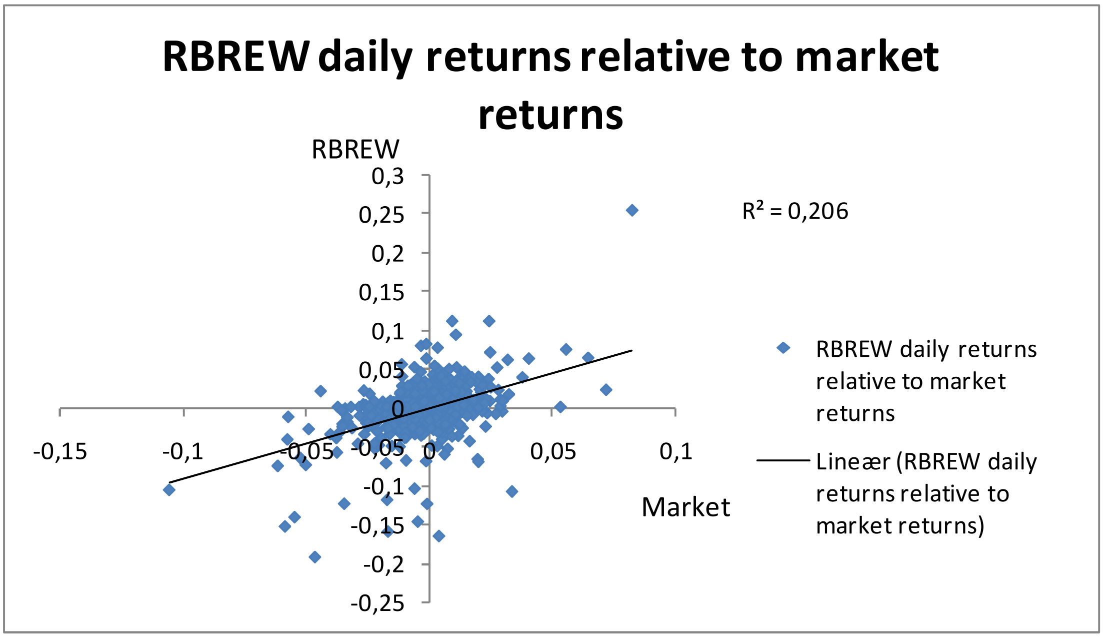
Common Sized Income Statement	2005	2006	2007	2008	2009e	2010e	2011e	2012e	2013
Net Revenue DKK '000)	3.190.959	3.439.026	3.881.762	4.178.703	4177031,519	4135261,204	4217966,428	4344505,421	4474840,6
Change in net revenue	*11,22%*	*7,77%*	*12,87%*	*7,65%*	-2,00%	-1,00%	2,00%	3,00%	3,00%
Other Operating Income	6.149	43.512	9.289	3.835	15.696	15.696	15.696	15.696	15.696
Sales (million hectolitres)	5,8	6,4	7,1	7,5					
Change in volume	*20,83%*	*10,34%*	*10,94%*	*5,63%*					
Net Revenue	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%
					2.360.786	2.313.570	2.359.841	2.430.637	2.503.556
Cost of sales (production costs)	1.581.411	1.742.900	2.129.173	2.433.298	2.408.965	2.360.786	2.408.001	2.480.241	2.554.649
Production costs/net revenue	49,56%	50,68%	54,85%	58,23%	57,67%	57,09%	57,09%	57,09%	57,09%
Change in production costs		*-9,27%*	*34,64%*	*14,28%*	-0,01	-0,02	0,02	0,03	0,03
Sales and distribution expenses	1.136.413	1.191.225	1.268.783	1.387.543	1.332.041	1.278.760	1.253.184	1.240.653	1.228.246
Sales and distribution expenses/net revenue	35,61%	34,64%	32,69%	33,21%	31,89%	30,92%	29,71%	28,56%	27,45%
Change in distribution expenses		*4,82%*	*6,51%*	*9,36%*	-4,00%	-4,00%	-2,00%	-1,00%	-1,00%
Depreciation on distribution	1279	*1.296*	*1.336*	*1.337*	1.332	1.279	1.253	1.241	1.228
Administrative expenses	171.697	200.680	249.042	226.844	213.233	200.439	196.431	196.431	196.431
Administrative expenses/net revenue	5,38%	5,84%	6,42%	5,43%	5,10%	4,85%	4,66%	4,52%	4,39%
Change in administrative expenses		*16,88%*	*24,10%*	*-8,91%*	-6,00%	-6,00%	-2,00%	0,00%	0,00%
Total expenses (share of net revenue)	90,55%	91,15%	93,95%	96,86%	94,67%	92,86%	91,46%	90,17%	88,93%
Core operating income (EBITA) (operating Marg	9,45%	8,85%	6,05%	3,14%	5,33%	7,14%	8,54%	9,83%	11,07%
EBITA	308.866	349.029	245.389	136.190	287.999	359.467	425.459	493.723	563.533

Appendix 10 A: Market return

Market Returns (average) '05-'09		
Daily Returns	-0,00014	-0,01%
Daily variance	0,000167	0,02%
Daily Standard Deviation	0,012914	1,29%
Monthly Returns	-0,0029	-0,29%
Monthly variance	0,003502	0,35%
Monthly Standard Deviatio	0,059178	5,92%
Yearly Returns	-0,03479	-3,48%
Yearly variance	0,042024	4,20%
Yearly Standard Deviation	0,204997	20,50%

Appendix 10 B: Royal Unibrew returns

RBREW Returns (average) '05-'09		
Daily Returns	-0,00112	-0,11%
Daily variance	0,000665	0,07%
Daily Standard Deviation	0,025785	2,58%
Monthly Returns	-0,01342	-1,34%
Monthly variance	0,013962	1,40%
Monthly Standard Deviatio	0,11816	11,82%
Yearly Returns	-0,2819	-28,19%
Yearly variance	0,167541	16,75%
Yearly Standard Deviation	0,409317	40,93%



Appendix 10 C: Beta

RBREW Beta	
Daily Covarianve with market	0,000151
Daily Market Variance	0,000167
Monthly Covariance with marl	0,003171
Monthly Variance, market	0,003502
Yearly Covariance with market	0,038049
Yearly Market Variance	0,042024
BETA daily	0,904557
BETA monthly	0,905425
BETA Yearly	0,905425

Appendix 10 D: CAPM

RiskFree	0,03307	
BETA	0,905425	
market premium	0,067	
CAPM	0,093733	9,37%

Appendix 10 E: Cost of Capital

	2009e	2010e	2011e	2012e	2013e
Tax rate (Current Danish):	25%	25%	25%	25%	25%
Market data:	**2009e**	**2010e**	**2011e**	**2012e**	**2013e**
Risk free rate (10 year treasury note) pr January 1st 2009	3,307%	3,307%	3,307%	3,307%	3,307%
Equity risk premium	6,70%	6,70%	6,70%	6,70%	6,70%
Return on market portfolio	10,01%	10,01%	10,01%	10,01%	10,01%

Royal Unibrew cost of debt:	**2009e**	**2010e**	**2011e**	**2012e**	**2013e**
Spread on RBREW over risk free rate	0,04	0,04	0,04	0,04	0,04
Interest rate on debt (before tax)	7,31%	7,31%	7,31%	7,31%	7,31%
Interest rate on debt (after tax)	5,48%	5,48%	5,48%	5,48%	5,48%
Royal Unibrew cost of equity:					
Unlevered beta (asset beta)	0,905424769	0,905425	0,905425	0,905425	0,905424769
Cost of unlevered equity	9,37%	9,37%	9,37%	9,37%	9,37%
Discount factor	0,914299541	0,9143	0,9143	0,9143	0,914299541
Accumulated discount factor	0,914299541	0,835944	0,764303	0,698802	0,638914153
Levered beta (equity beta)	2,093087923	2,05099	1,992902	2,018169	1,978090414
Cost of levered equity	17,33%	17,05%	16,66%	16,83%	16,56%
Discount factor	0,852291935	0,854346	0,857196	0,855954	0,857925733
Accumulated discount factor	0,852291935	0,728152	0,624169	0,53426	0,458355204

Weighted average cost of capital:	**2009e**	**2010e**	**2011e**	**2012e**	**2013e**
WACC (after tax)	10,61%	10,61%	10,61%	10,61%	10,61%
Discount factor	0,90410604	0,904106	0,904106	0,904106	0,90410604
Accumulated discount factor	0,90410604	0,817408	0,739023	0,668155	0,604083332
Market value weights (end of year) DKK '000:					
Market value of debt (= book value)	2.256.820	2.229.039	2.260.833	2.347.305	2.410.724
Market value of equity	1.720.506	1.761.774	1.882.352	1.909.970	2.034.865
Total market value used for CoC calculation (total assets on Balance Sheet)	3.977.326	3.990.814	4.143.185	4.257.276	4.445.589
Debt / Total market value	57%	57%	57%	57%	57%
Equity / Total market value	43%	43%	43%	43%	43%
Total market value	100%	100%	100%	100%	100%
Debt /equity	1,311719312	1,265224	1,201068	1,228975	1,184709854

Appendix 11 A: Valuation EVA

	2009e	2010e	2011e	2012e	2013e
EVA	-261.705	-178.287	-108.646	-50.928	7.973
PV of residual income	-236.609	-145.733	-80.292	-34.028	4.817
SUM	-496.663				
SUM 2012	-462.635				
ROIC	2,05%	4,68%	7,00%	8,97%	10,86%
WACC	10,61%	10,61%	10,61%	10,61%	10,61%
Spreads	-8,56%	-5,93%	-3,61%	-1,64%	0,26%

Continuing Value	**3.192.993**
PV of Continuing Value	1.928.834
PV of RBREW	1.432.170.804
No of shares	5.600.000
P per share	255,74

Appendix 11 B: Valuation DCF

FREE CASH FLOW '000	2009e	2010e	2011e	2012e	2013
Free Cash Flow	-88.916	7.669	99.522	155.959	196.885
WACC	10,61%	10,61%	10,61%	10,61%	10,61%
Discount Factor	90,41%	81,74%	73,90%	66,82%	60,41%
PV of FCF	-80.389	6.268	73.549	104.205	118.935
Total PV (d:G)	**103.633**				

	Horizon Value 2013
Assumptions	
g	1,50%
Free cash flow in T+1	196.885
WACC (after tax)	10,61%
PV Horizon	2.162.032
PV at t=0	1.306.048
PV of RBREW	**1.409.680.209**
No of shares	5.600.000
P per share	**251,73**

Appendix 12 A: Financial ratios

Ratios Analysis	2005	2006	2007	2008	2009e	2010e	2011e	2012e	2013e
Current ratio	1,38	1,34	1,19	0,82	0,80	0,82	0,91	0,92	0,92
Quick ratio	1,05	1,03	0,84	0,56	0,54	0,56	0,65	0,67	0,67
Debt ratio	0,41	0,42	0,47	0,57	0,57	0,56	0,55	0,55	0,54
Debt-to-equity	1,77	1,97	2,38	6,05	5,91	5,58	4,98	5,24	4,81
Return on total assets (ROA)	7,03%	6,75%	4,11%	-11,93%	-2,26%	-0,41%	1,13%	2,61%	3,98%
Return on Equity (ROE)	19,50%	20,06%	13,87%	-84,05%	-15,61%	-2,72%	6,78%	16,31%	23,15%
Earnings per share (EPS)	40,03	41,13	27,72	-86,28	-16,04	-2,95	8,38	19,88	31,62
Price Earning (P/E)	13,29	17,99	19,26	-1,37	N/A	N/A	N/A	N/A	N/A

Appendix 12 B: Market Value Added

MVA calculations	2005	2006	2007	2008
Book value share price	180,49	185,78	189,74	102,65
Book value of equity	1.149.750.000,00	1.148.121.000,00	1.119.463.000,00	574.828.000,00
Market share price	532,00	740,00	534,00	118,50
No of shares	6.370.000,00	6.180.000,00	5.900.000,00	5.600.000,00
Market cap	3.388.840.000,00	4.573.200.000,00	3.150.600.000,00	663.600.000,00
MVA	2.239.090.000,00	3.425.079.000,00	2.031.137.000,00	88.772.000,00
MVA pr share	351,51	554,22	344,26	15,85

Appendix 13 A: CAGR Calculations

$$CAGR(t_0, t_n) = \left(\frac{V(t_n)}{V(t_0)}\right)^{\frac{1}{t_n - t_0}} - 1$$

Appendix 13 B: Net Revenue

$$CAGR(2005{,}2008) = \left(\frac{4178{,}7}{3191}\right)^{\frac{1}{3}} - 1 = 0{,}094 = 9{,}4\%$$

Appendix 13 C: Growth in Consumption, Latvia

$$CAGR(2007{,}2012) = \left(\frac{-92.9}{74}\right)^{\frac{1}{5}} - 1 = 0.0465 = 4.65\%$$

Appendix 13 D: Growth in Consumption, Lithuania

$$CAGR(2007{,}2012) = \left(\frac{114.8}{93.6}\right)^{\frac{1}{5}} - 1 = 0.0417 = 4.17\%$$

Appendix 13 E: MACH II growth (target)

$$CAGR(2004{,}2007) = \left(\frac{4.5}{3}\right)^{\frac{1}{3}} - 1 = 0.145 = 14.5\%$$

Appendix 14 A: Extension of BCG, used and discussed in chapter 5

GROWTH **(Stars)** **Business risk:** ***High*** **Financial risk needs to be:** ***Low*** **Funding By:** ***Equity***	**LAUNCH** **(Question Marks)** **Business risk:** ***Very High*** **Financial risk needs to be:** ***Very Low*** **Funding By:** ***Equity***
MATURITY **(Cash Cows)** **Business risk:** ***Medium*** **Financial risk can be:** ***Medium*** **Funding By:** ***Debt and*** ***Equity***	**DECLINE** **(Dogs)** **Business risk:** ***Low*** **Financial risk can be:** ***High*** **Funding By:** ***Debt***

Different markets call for different funding strategies, depending on the characteristics of the business and its environment the sources of funding can vary. For this purpose the Growth/Share Matrix discussed in Chapter 4 has been extended to include the appropriate financing strategies for the different 'quadrants' in the matrix.[1] This extension of the matrix seeks to find a way to balance the business and funding risks that are facing organizations engaged in multiple products and/or markets by stating that high business risk should be supported by low financial risk. In this relation funding with debt is viewed as riskier than with equity as debt carries the obligation to pay interest.

[1] Johnson *et al*

Appendix 15 A: Regional growth, discussed in chapter 5

Net revenue (mDKK)	**2008**	**2007**	**2006**	**2005**
Western Europe	2,536.2	2,489.6	2,414.1	2,371.1
Revenue Growth (year on year)	*1.87%*	*3.13%*	*1.81%*	*4.00%*
Volume Growth (year on year)	*-2.63%*	*0.00%*	*5.56%*	*5.56%*
Eastern Europe	1,129.2	909.3	671.5	576.5
Revenue Growth (year on year)	*24.18%*	*35.41%*	*16.48%*	*60.58%*
Volume Growth (year on year)	*18.52%*	*22.73%*	*15.79%*	*15.79%*
Malt and Overseas Markets	513.3	482.9	353.4	243.4
Revenue Growth (year on year)	*6.30%*	*36.64%*	*45.19%*	*5.83%*
Volume Growth (year on year)	*0.00%*	*50.00%*	*33.33%*	*33.33%*
Total	4,178.7	3,881.8	3,439.0	3,191.0
Growth (year on year)	*7.65%*	*12.88%*	*7.77%*	*11.22%*

Appendix 16 A: Organization of Royal Unibrew as displayed in the 2008 Annual Report

GROUP STRUCTURE

Segment	Ownership	Currency	Share capital
Western Europe			
Subsidiaries			
Aktieselskabet Cerekem International LTD., Faxe, Denmark	100.0%	DKK	1,000,000
Albani Sverige AB, Sweden	100.0%	SEK	305,000
Centre Nordique d'Alimentation EURL, France	100.0%	EUR	200,000
Ceres S.p.A., Italy	100.0%	EUR	206,400
Faxe Getränke-Vertrieb GmbH, Germany	100.0%	EUR	127,823
Maribo Bryghus A/S, Maribo, Denmark	100.0%	DKK	1,805,500
Associates			
Hansa Borg Skandinavisk Holding A/S, Faxe, Denmark	25.0%	DKK	53,577,400
Hansa Borg Holding ASA, Norway	100.0%	NOK	54,600,000
Hansa Borg Bryggeriene ASA, Norway	100.0%	NOK	29,065,000
Nuuk Imeq A/S, Nuuk, Greenland		DKK	38,000,000
Eastern Europe			
Subsidiaries			
AB Kalnapilio-Tauro Grupe, Lithuania	100.0%	LTL	62,682,000
Royal Unibrew Services UAB, Lithuania	100.0%	LTL	150,000
SIA "Cido Grupa", Latvia	100.0%	LVL	785,074
Royal Unibrew Polska Sp. z o. o., Poland	100.0%	PLN	107,302,400
Malt and Overseas Markets			
Subsidiaries			
Supermalt UK Ltd., UK	100.0%	GBP	9,700,000
Vitamalt (West Africa) Ltd., UK	100.0%	GBP	10,000
Drinktech Holding AG, Switzerland	100.0%	CHF	100,000
Impec Holding SAS, Guadeloupe	51.0%	EUR	5,294,000
Import-Export Compagnie S.A., Guadeloupe	100.0%	EUR	304,898
Impec Martinique S.A., Martinique	100.0%	EUR	8,000
The Danish Brewery Group Inc., USA	100.0%	USD	100,000
St. Vincent Breweries Ltd., St. Vincent	76.5%	XCD	18,310,000
Antigua Brewery Ltd., Antigua	93.0%	XCD	21,747,075
Antigua PET Plant Ltd., Antigua	75.0%	XCD	1,500,000
Dominica Brewery & Beverages Ltd., Dominica	58.0%	XCD	10,000,000
Royal Unibrew Caribbean Ltd., Puerto Rico	100.0%	USD	200,000
Associates			
Solomon Breweries Limited, Solomon Islands	35.2%	SBD	21,600,000

Activity: Production, sales and distribution | Sales and distribution | Holding company | Other activity

Appendix 17 A: Continuously Compounded Stock returns

The reason for using continuously compounded returns instead of discretely compounded returns is that over large periods of time they give a more accurate result, that is, the sum of discretely compounded returns within a time period tend to be higher than the actual return over the same period. However, by using continuously compounded this sum is equal to the return over the period.[2]

[2] Peter Raahauge – Financial Models in Excel – lesson 2, Copenhagen Business School