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Valuation of Danisco -the sale of the Sugar Division

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Executive Summary

This thesis deals with the sale of Danisco's sugar division and sets out to evaluate the decision to accept Nordzucker AG's offer. The thesis is interesting because Danisco have been under a lot of pressure the past two years, both from shareholders and analysts, due to poor performance. Furthermore, Danisco have undergone a change moving from a conglomerate to a focused firm.

The Sugar segment has been accused of slowing down the growth in the Ingredients segment. The steady cash flow is reduced due to the uncertainty around the EU sugar reform. Despite a greater clarity around the future sugar reform, the investors are more interested in the greater growth potential in Ingredients.

By strategically and financially analysing Danisco's two segments I have been able to calculate an enterprise value for both the Ingredients segment and the Sugar segment. The calculated enterprise value of Sugar has been compared to the enterprise value in the sales agreement with Nordzucker AG. The calculated enterprise value of Ingredients constitutes, together with the received cash from the Sugar sale, the remaining Danisco.

To analyse the sales decision I have first looked at Danisco's strategic history. I found that Danisco have had a similar development in shareholder value, measured in stock price, when being a conglomerate and focused firm. Growth through acquisitions is an important strategy for Danisco. I found indications that acquisitions did not add shareholder value the first years. The frequent acquisition activity seemed to cancel out the increase in shareholder value from fully implemented acquisitions. The results were in line with research on the subjects, which is dubious.

I conservatively estimated the enterprise value of Sugar to be DKK 6.508 million. This was above the received sales price from Nordzucker, which was DKK 5.600 million in enterprise value plus DKK 600 million in compensation for a sugar quota. Despite of the slightly low price, I determined that the decision to sell was right because of the displeased investors. The sale fits with Danisco's strategy of becoming a first choice within ingredients and bio-actives which have a greater growth potential.

List of Content

1. INTRODUCTION	1
1.2 PROBLEM DEFINITION	2
1.3 LIMITATIONS.....	3
1.5 METHOD	3
1.5.1 Structure of the thesis and choices of theory.....	4
1.6 EVALUATION OF THE CHOICE OF MODELS AND DATA	5
2. PRESENTATION OF DANISCO TODAY	7
2.1 DANISCO’S STRATEGY	8
2.2 OWNERSHIP	8
2.3 PARTNERSHIPS	9
2.4 DIVISIONS IN INGREDIENTS	10
2.4.1 Emulsifiers.....	10
2.4.2 Gums & Systems (Texturants)	11
2.4.3 Sweeteners.....	11
2.4.4 Cultures.....	11
2.4.5 Genencor.....	12
2.5 THE SALE OF SUGAR	12
3. HISTORIC DANISCO STRATEGIC EVENTS.....	14
3.1 CONGLOMERATE VS FOCUSED FIRM	14
3.2 GROWTH THROUGH ACQUISITIONS.....	17
3.3 STRATEGIC EVENT ANALYSIS	18
3.4 SUMMARY OF STRATEGIC EVENT ANALYSIS	22
4. STRATEGIC ANALYSIS OF SUGAR	23
4.1 SUGARS STRATEGY	23
4.2 PESTEL	24
Source: Eirik Bang Søbørg.....	24
4.2.1 Political factors.....	24
4.2.2 Economical factors.....	27
4.2.3 Social factors.....	27
4.2.4 Technological.....	28
4.2.5 Environmental.....	29
4.2.6 Legislation.....	30
4.3 ANALYSIS OF SUGARS’ BUSINESS ENVIRONMENT	30
4.3.1 Barriers to entry.....	30
4.3.2 Buyer power	31
4.3.4 Supplier power	32
4.3.4 Substitute products	33
4.3.5 Rivalry.....	33
4.4 SWOT ANALYSIS SUGAR	34
4.4.1 Strengths.....	35
4.4.2 Weaknesses.....	35
4.4.3 Opportunities.....	36
4.4.4 Threats	36
4.5 CONCLUSION STRATEGIC ANALYSIS SUGAR	37
5. STRATEGIC ANALYSIS OF INGREDIENTS	39
5.1 PESTEL INGREDIENTS	39
5.1.1 Political factors.....	39
5.1.2 Economical factors.....	41
5.1.3 Social.....	43
5.1.4 Technological.....	44

The sale of Danisco's Sugar division

5.1.5 Environmental.....	44
5.1.6 Legal.....	45
5.2 ANALYSIS OF SUGAR'S BUSINESS ENVIRONMENT	45
5.2.1 Barriers to entry.....	45
5.2.2 Customer power.....	46
5.2.2 Supplier power.....	48
5.2.3 Substitute products.....	48
5.2.5 Rivalry.....	49
5.3 SWOT INGREDIENTS	50
5.3.1 Strengths.....	50
5.3.2 Weaknesses.....	51
5.3.3 Opportunities.....	52
5.3.4 Threats	52
5.3.5 Summary of the strategic analysis Ingredients.....	52
6. FINANCIAL ANALYSIS OF INGREDIENTS AND SUGAR.....	55
6.1 ADJUSTMENTS TO THE FINANCIAL STATEMENTS	55
6.2 HISTORIC FINANCIAL ANALYSIS SUGAR AND INGREDIENTS	56
6.2.1 Return on Invested Capital (ROIC).....	56
6.2.2 EBIT-margin	59
6.2.3 Capital Turnover.....	60
6.2.4 FGEAR.....	62
6.2.5 SPREAD.....	63
6.3 SUMMARY HISTORIC FINANCIAL ANALYSIS	64
7. BUDGET	65
7.1 FORECAST INGREDIENTS	65
7.1.1 Revenues.....	65
7.1.3 EBIT-margin	66
7.1.4 Capital Turnover and Invested Capital.....	66
7.2 FORECAST SUGAR.....	67
7.2.1 Revenues.....	67
7.2.2 EBITDA-margin.....	68
7.2.3 EBIT-margin	68
7.2.3 Capital Turnover and Invested Capital.....	68
7.2.4 FGEAR and Net interest-bearing debt.....	68
8. VALUATION OF SUGAR & INGREDIENTS	69
8.1 DCF VALUATION MODEL	69
8.1.1 WACC.....	70
8.1.2 Capital structure	70
8.1.3 Interest cost of debt (r_D):.....	71
8.1.4 Tax rate	72
8.2 CAPM.....	72
8.2.1 Beta (β).....	73
8.2.3 Terminal value	74
8.3 VALUATION AFTER THE DCF-MODEL	75
8.4 COMMENTS TO THE RESULTS	76
8.5 THE SALE OF SUGAR	78
9. CONCLUSION	79
10. THE RESULTS PUT IN PERSPECTIVE.....	82

Figures

Figure 1: Overview market segments and position.....	7
Figure 2: Targeted market share	10
Figure 3: Danisco stock price development.....	19
Figure 4: PESTEL Sugar.....	24
Figure 5: SWOT Sugar	34
Figure 6: PESTEL Ingredients.....	39
Figure 7: Geographical sales distribution	41
Figure 8 SWOT Ingredients.....	50
Figure 9: ROIC.....	57
Figure 10: ROIC Ingredients.....	57
Figure 11: ROIC Sugar	58
Figure 12: EBIT Margin	59
Figure 13: EBIT Margin Ingredients	59
Figure 14: EBIT Margin Sugar	60
Figure 15: Capital Turnover Ingredients.....	61
Figure 16: Capital Turnover Sugar	62
Figure 17: Valuation Sugar (in mDKK)	75
Figure 18: Valuation Ingredients (in mDKK).....	76

Tables

Table 1: Ownership structure.....	8
Table 2: Price development Sugar	25
Table 3: GDP development.....	43
Table 4: Capital Turnover	60
Table 5: FGEAR	62
Table 6: SPREAD	63
Table 7: Interest rate 5 year government bond	71
Table 8: Sensitivity analysis Sugar	77
Table 9: Sensitivity analysis Ingredients	77

1. Introduction

Danisco is a company that has undergone many strategic changes during its history. It has figured frequently in the media the past year. Most of the attention has been towards the Sugar division and a potential divestment due to the EU sugar reform.

Shareholders, analysts and media have not found Danisco to perform as expected. This has resulted in a drop in the stock price and unsatisfied shareholders. The media attention has led to my fascination of the company, which through history shows a large diversity in its strategies, moving from a conglomerate to a focused firm. Originally the thesis started out as an analysis of a potential spin-off of the Sugar division and its impact on shareholder value, but during my work the Sugar division was sold to German Nordzucker in July and it became more interesting to analyse the sale.

Due to all the media attention I find it interesting to strategically analyse and value Danisco with the purpose to evaluate, whether the achieved price for the Sugar division was fair under the conditions at the time. Furthermore, I find it interesting to analyse why they decided to sell the Sugar division and how this decision fit with previous strategic decisions. It is interesting to see how strategic choices during history have influenced shareholder value and if there have been a difference being a conglomerate or a focused firm. The sale of sugar is viewed as a further focusing of Danisco. At the same time Danisco's strategy to increase shareholder value has been to do so by acquisitive growth.

The trend at the end of the 1980's was that companies began to focus on core competences, as it became clear that diversity within the company often was not adding value. A large collection of empirical research meant to have proven that conglomerates were not maximising value. Therefore, many companies started to dispose units no longer compatible with their strategies. In Danisco's case the conglomerate era ended in 1999 with the sale of Danish Distillers and the acquirement of Finnish sugar company Cultor.¹

The last seven years they have reduced the numbers of divisions rapidly, from eight divisions in 2001 to four divisions in 2007. The sugar industry, in which Danisco is operating with its subsidiary Danisco

¹ Elling, J.O & Sørensen, O. (2005), "Regnskabsanalyse og værdiansættelse- en praktisk tilgang", p. 27

The sale of Danisco's Sugar division

Sugar, is experiencing a larger degree of regulation and restrictions from EU politicians and Danisco announced the sale on the 14th of July this year.

1.2 Problem definition

Based on the introduction the main question to be solved is:

“Was the sale of Sugar a good decision for its shareholders?”

A strategic and financial analysis will, together with an historical analysis of strategic events apparent impact on shareholder value, be used to discuss Danisco's ability to create shareholder value, and hence, if the sale of Sugar is also would do so. As mentioned in the introduction Danisco has been characterised by two major strategic features:

- Going from a conglomerate to a focused firm
- Creating shareholder value through acquisitions

To answer the stated question above the following parameter is necessary to be analysed and discussed:

- Did Danisco create more shareholder value as a conglomerate or a focused firm?
- Have the growth strategy through acquisitions been successful and have it differed from when being a conglomerate or a more focused firm?
- Did Danisco receive a fair price for its Sugar division?
- What factors impacted on the decision of the sale?
- What is Danisco left with and have they become more focused?

1.3 Limitations

Firstly, the analysis of the sale of Sugar is a recent event. Hence, it is too early to state whether it has proven been the right decision. What I seek to do with this thesis is to see whether the preconditions for a good decision, with respect to history, strategy and financial status, were present. To find the preconditions I conduct historic and financial analysis' resulting in a valuation of both Danisco Ingredients and Danisco Sugar. The two segments will from now on be referred to as Ingredients and Sugar.

When undertaking the valuation of Danisco I will only have access to publicly available information such as annual reports, news releases, and analysts' reports etc. Hence, I take the role equivalent of an external analyst. With regards to Sugar, I analyse the segment as if it were to continue a Danisco segment. This is to optimise the probability of estimating a fair value of Sugar.

The financial analysis is undertaken on the basis of income statements and balance sheets from the period between 2003/04 and 2007/08. The reformulated income statements and balance sheets will be the starting point for cash flow forecasts that will end in an estimation of Ingredients' and Sugar's value. Due to my formulated problem I have found it best to analyse Danisco's two reported segments separately. Danisco presents an overview of the segments' financial performance in their annual reports. The segment reporting is limited compared to the groups consolidated financial statement, but I view them to contain sufficient information for my analytical purposes.

1.5 Method

To answer my question under the formulation of the problem, I use a deductive method, where theory has been contributing to the structure of the thesis, and the data have been collected on the basis of this theory.² I use secondary quantitative and qualitative data as input to my analysis. Examples of secondary quantitative data are stock prices and annual reports, while secondary qualitative data is

² Ghauri P. and K. Grønhaug (2002) "Research Methods in Business Studies – A Practical Guide"

The sale of Danisco's Sugar division

news articles and written and official information on the internet. The models I have used are presented below in an explanation of the thesis' structure.

1.5.1 Structure of the thesis and choices of theory

To analyse the first two sub-questions I have conducted an event-analysis looking at the stock price development. First, during the time period Danisco is defined as a conglomerate, and furthermore after a given time period after an acquisition. This event analysis is held up against economic theory to see if Danisco theoretically have made the right strategic choices concerning growth through acquisitions. The theory presented before the analysis will act as a benchmark for Danisco's decisions.

In the following chapter I will conduct a strategic analysis. I will analyze the external and internal factors that impacts on Ingredients and Sugar. A PESTEL analysis will reveal what macroeconomic factors Danisco need to consider in their strategies. Michael Porter's "Five Forces" and SWOT-analyses will help in showing what strengths and possibilities Ingredients and Sugar have, and describe the markets structure and competition. The "Five Forces"-analysis has been criticised for providing a stagnant picture of the different participants within industries. I do not think that this has a negative effect on my analysis, even though both Ingredients and Sugar operate in dynamic markets. I am not seeking to analyse the dynamics, but rather to determine the business environment. The SWOT analysis is a simple and useful tool to establish a situation status for Ingredients and Sugar.

The next step is to analyse Ingredients and Sugar financially. I use the annual reports' segment statements in the period from 2003/04 to 2007/08 in this analysis. First, a reformulation of the income statement and balance sheet is necessary to assure every years performance is comparable with respect to accounting standards.

The results from the above analyses will be the basis for a forecast of the future cash flows to be used in a valuation of Ingredients and Sugar. I will use the Discounted Cash Flow- model (DCF) to value the two segments. The choice of the model is discussed later in this chapter.

To put my results in perspective I will perform a sensitivity analysis, to show how different values of the weighted average cost of capital (WACC) impacts the estimation of Ingredients' and Sugar's value.

The sale of Danisco's Sugar division

Furthermore, the economic conditions on the macro-level have changed drastically, since the sale of Sugar was sold. Hence, I find it useful to view my findings in today's perspective.

The last part sums up the thesis and concludes.

1.6 Evaluation of the choice of models and data

1.6.1 The Discounted Cash-Flow model

The available methods can be divided into two main categories: the direct and the indirect methods. The direct methods calculates the value of the equity based on the equity financed invested capital alone, while the indirect method calculates the total value of the invested capital disregarding how it is financed. In the end the indirect methods finds the value of the equity by deducting the debt used to finance the invested capital.

I have chosen to use an indirect method, more specifically the discounted cash flow model. This is the most commonly used valuation model among analysts. The arguments for choosing the DCF-model is that the valuation is left completely to the analyst. Hence, I have to critically review the information in the financial statements. This brings a necessary objectivity to my analysis.

An alternative indirect method is the EVA-model, which leaves most of the valuation to the accounting principles, and hence, uses the possibility that the competence in valuing the company's assets and liabilities is larger within the company than for the external analysts. This method is suitable when the financial statements contain many items.³

I have chosen to use the DCF-model because it is most commonly used by external analysts and it leaves me with the ability to accommodate the limited segment reporting. The models will ultimately give the same end result.

³ Elling, J.O & Sørensen, O. (2005), "Regnskabsanalyse og værdiansættelse- en praktisk tilgang", p. 22-23

The sale of Danisco's Sugar division

1.6.2 Evaluation of the data

Much of the data I have used is based on Danisco's own material, in the form of their annual reports and information on their homepage. My use of external news articles, analysts' statements and scientific papers counterbalance the potential subjectivity in Danisco's information material.

Due to the limited information in the annual reports I have been forced to make certain assumptions that will impact on my results. However, I view these assumptions to have a minor impact on my results as a whole. All assumptions found necessary is substantiated as far as possible to ensure the analysis' objectivity.

2. Presentation of Danisco today⁴

Danisco consists of two segments, Ingredients and Sugar. The Ingredient segment, with its four divisions and Genencor, is a world leader in food ingredients, enzymes and bio-based solutions for the industry. The products are produced mainly from raw materials such as vegetables, plant oils and animal fat among others. The ingredients are used globally in a wide range of industries such as bakery, dairy, beverages, animal feed, laundry detergents and bio-ethanol. In addition Danisco has one of Europe's most efficient sugar production platforms, which constitutes the second segment, Sugar.

Headquartered out of Copenhagen Danisco have 9500 employees at 120 locations in some 46 countries. The total revenue in 2007/08 was DKK 18.8 billion equivalent to approximately EUR 2.5 billion.

Figure 1: Overview market segments and position

	Emulsifiers	Functional systems	Textural ingredients	Sweeteners	Food enzymes	Feed enzymes	Technical enzymes	Starter cultures	Bio-preservation
Danisco (DK)	✓	✓	✓	✓	✓	✓	✓	✓	✓
Degussa/Cargill (USA)	✓	✓	✓		✓			✓	✓
Kerry Group (IE)	✓	✓	✓	✓	✓				✓
Huber (DK/USA)			✓						
Cognis (D)	✓		✓						
Novozymes (DK)					✓	✓	✓		
PAI/Chr. Hansen (DK)					✓			✓	
DSM (NL)		✓		✓	✓	✓	✓	✓	✓
ABF(UK)	✓	✓	✓		✓	✓			
Danisco's global position	1	1	2	1	2	2	2	2	1

Source: Danisco Investor Presentation

The figure shows that Danisco is number one or two in all of its Ingredients segments.

⁴ www.dansico.com

The sale of Danisco's Sugar division

2.1 Danisco's Strategy

Danisco's key focus and vision is to be the first choice provider of bio-based ingredients to industry globally. Their mission is to help their customers increase their competitiveness through innovative, sustainable and bio-based ingredient solutions that meet market demand for healthier and safer products. Hereunder Danisco's stated strategy:

- “- Organic and acquisitive growth by leveraging and strengthening our market access, applications and technology platform
- Talented people”⁵

2.2 Ownership

At the 30th April Danisco had approximately 61.100 investors of whom 44.300 were registered shareholders. The main change has been the increase in foreign investors from 17% to 28%. Primarily domestic financial institutions have reduced their positions the last two years. The trend over the past three years is that an increasing part of the shareholders are foreign.⁶ The table below shows the development over the last three year. I present this because it might be relevant when analysing the decision to divest sugar at the end of the thesis.

Table 1: Ownership structure

Investor group (%)	2005/06	2006/07	2007/08
Financial institutions	43,0%	41,5%	27,6%
Businesses	9,1%	10,6%	11,7%
Public institutions	1,7%	1,7%	1,7%
Unknown sector	1,9%	2,4%	6,2%
Private investors	23,3%	26,5%	24,8%
International	21,0%	17,3%	28,0%

Source: Danisco Annual Reports

⁵ Annual report 07/08, p. 2

⁶ Annual reports 05/06, 06/07, 07/08

The sale of Danisco's Sugar division

2.3 Partnerships⁷

In the light of increased prices for raw materials and growing consumer demand for healthy and safe food, Danisco is increasing the focus on R&D. This is done partly through collaboration with universities and other researchers. At the same time Danisco is moving into new business areas within bio-technology. The trend is that bio-technology will replace parts of the chemical processes. To capture market shares Danisco are making partnership-agreements on research and development with other companies in new high growth business areas. The advantage of partnerships is the possibilities of gaining access to a larger pool of knowledge.

American DuPont and Genencor, a Danisco division, announced a joint venture earlier this year. The goal is to develop and commercialize the leading, low cost technology solution for the production of cellulosic ethanol- the second generation bio-fuel.

In 2007 Danisco divested its Flavour division to Firmenich from Switzerland and entered into a partnership agreement. The divestment and strategic partnership was a result of a consolidation in the flavours and fragrance industry making Danisco a small player with only 2-3 % market share. With the partnership both Firmenich and Danisco can offer unique ingredients in their different business areas in the future.⁸

⁷ www.danisco.com

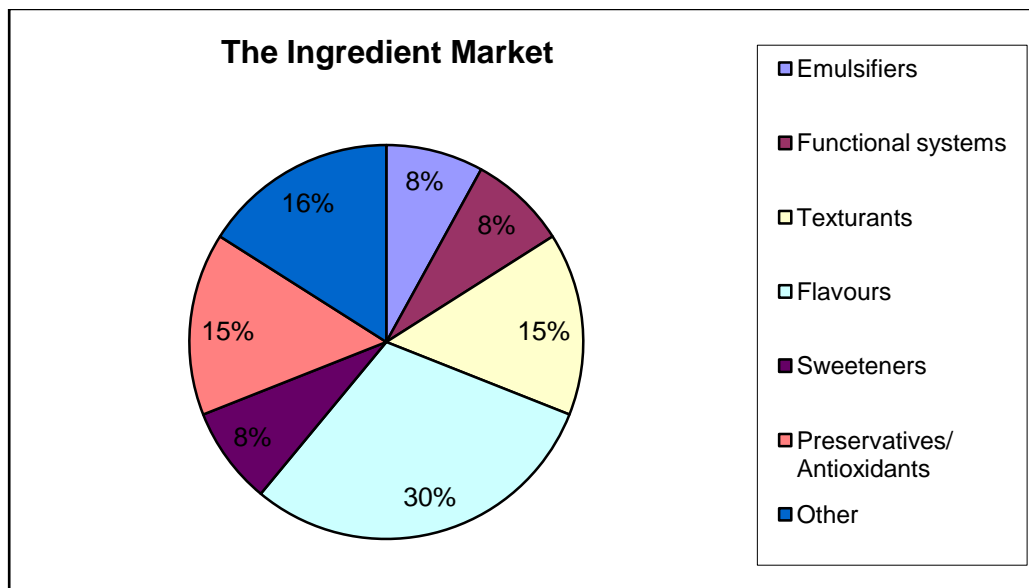
⁸ www.danisco.com/News 3rd of May 2007

The sale of Danisco's Sugar division

2.4 Divisions in Ingredients⁹

The DI segment consists of four food ingredient divisions plus Genencor. Hereunder I will present the divisions. The figure below show how much of the market each Ingredients division targets.

Figure 2: Targeted market share



Source: Danisco Investor Presentation

2.4.1 Emulsifiers

Emulsifiers bind together oil and water and are primarily used in food products like bread, margarine, cakes, ice-cream, dairy products and confectionary. It helps in giving food products a longer shelf life and is viewed as an indispensable ingredient. Also the plastic industry enjoys efficient solutions from Danisco's emulsifier division. GRINDSTED® SOFT-N-SAFE is one of Danisco's plasticisers. Vegetable oils, animal fat and organic acids are the most common raw materials in the production. Danisco have five production facilities throughout the world.

Danisco states that Emulsifiers has a solid platform for further growth, offering the broadest emulsifier programme on the market. The world emulsifier share of the food ingredient market is 8%, amounting to USD 1.48 billion or DKK 7.1 billion.

⁹ www.danisco.com/about_danisco/divisions

The sale of Danisco's Sugar division

2.4.2 Gums & Systems (Texturants)

Danisco is also a world leader in the development and production of texturant solutions to the food industry. The texturants are made from a wide portfolio of hydrocollides, which are thickening, gelling and stabilising agents. These agents consequently form the mouth feel and the eating experience of foods. They are sold to the food, health care and cosmetic industries all over the world. Seaweed, citrus fruits, carob seeds and guar seeds are some of the raw materials the ingredients are made from.

The texturant segment accounts for 15 % of the food ingredients market which is equal to a value of DKK 15.1 billions. The Emulsifier division and the Gum & System division reported combined revenues of DKK 5.1 billion in 2007/08.

2.4.3 Sweeteners

The Sweeteners division produces ingredients that replaces or reduces the sugar content in food. Wood, milk sugar and sucrose (sugar) are some of the raw materials used in the production of the ingredients. Sweeteners are an important ingredient in food marketed on the basis of a function and a health claim. These claims and function are aimed to help in reducing the risk of lifestyle deceases such as obesity, diabetes and tooth decay.

The Sweetener products are applied in the bakery, dairy, confectionary and pharmaceutical industries. This segment is also subject to much more rigorous standards, strict labelling laws and government approvals than many of the other segments. This is because they are functional food products. Functional food is food that claims to have health and/or nutritional benefits.

Sweeteners accounts for 8 per cent of the food ingredients market which corresponds to DKK 7.1 billion.

2.4.4 Cultures

Cultures Division develops and markets starter cultures, media, coagulants and enzymes for cheese, fresh dairy and other food products. Cultures are blends of natural microorganisms or strains. The division is also a market leader in probiotic cultures used in food, nutritional and dietary supplements markets as well as natural food protective solutions. Depending on the customers geographical location the cultures are sold in freeze-dried, liquid or frozen format.

The sale of Danisco's Sugar division

The current cultures market is valued to DKK 5.8 billions. In the cultures market cheese, dairy and dietary supplements accounts for 88 % of the market.

2.4.5 Genencor

In 2005 Danisco acquired the American biotechnology company Genencor. This was a strategic diversifying move into the industrial bio-technology market which is estimated to have a great potential. The acquisition made Danisco the second largest supplier of industrial enzymes in the world. Genencor develops innovative enzymes and bio-products to improve the performance and reduce the environmental impact of the cleaning, textiles, fuels and chemical industries.

Genencor is using a lot of resources lobbying in Washington and Brussels for the future the second generation bio fuel production. McKinsey have estimated this market to reach a value of USD 75 billion in year 2020. Furthermore, the Genencor Division and DuPont entered a joint venture, DuPont Danisco Cellulosic Ethanol LLC. The joint venture will develop and commercialise a low cost technology solution for the production of cellulosic ethanol. Cellulosic ethanol is made of non-food resources. The production of bio-fuel stopped because of the use of food raw materials, increasing the problem with high food prices and scarcity of food in places all over the world.

Genencor generate revenues of DKK 3.7 billion in 2007/08.

2.5 The sale of Sugar¹⁰

On the 14th of July Danisco officially announced the sale of Sugar to Nordzucker AG. The total price amounted to DKK 6.2 billion, which of DKK 5.600 was for the enterprise value plus an additional DKK 600 millions for upcoming sales of EU quotas.

Danisco does not expect to record any gains or loss with the divestment. The board expects to initiate a share buyback programme of between DKK 750 million and DKK 1.000 million. The sale will also be used to reduce debt, which in turn will lower the financial gearing substantially. The Board of Directors and Danisco's financial advisers mean that a sale is a more value-enhancing solution than a spin-off.

¹⁰ www.danisco.com/news 14th of July 2008

The sale of Danisco's Sugar division

Danisco will provide the Danish and Swedish beet farmers with DKK 150 million so they can acquire equity in Danisco Sugar. With the sale of Sugar Danisco is now a focused, bio-based and market driven ingredients provider.

3. Historic Danisco strategic events

As mentioned in the introduction Danisco have struggled with a decreasing stock price since May 2006. This chapter looks at major strategic events since the foundation of the conglomerate in 1989 up until today, to see how strategic choices have influenced shareholder value. I define shareholder value as the stock price. The findings will be held against economic research and theory to see in what way the results of the events are coherent with theories, and if Danisco from a theoretical point of view have made the right strategic decisions to maximize shareholder value. This would give an indication of how much one can rely on theory when making a strategic decision.

I define the period from 1989 to 1999 as a conglomerate period, and 1999 up to now as a period as a focused firm based on Elling et al (2005) statement. Danisco states that for many of their acquisitions they do not expect to them to be fully implemented and profitable until three years later.¹¹ Hence, I look especially at the stock price development up to three years after an acquisition.

The event analysis in this chapter will provide information whether being a conglomerate with acquisitive growth as strategy has given shareholder value, or if the focused firm strategy and acquisitive growth has performed better with respect to shareholder value. There exist a substantial amount of research on conglomerates, focused firms and mergers and acquisitions.

3.1 Conglomerate vs focused firm

Hereunder, I present the main findings in the research made on conglomerates and growth through acquisitions. The conglomerate strategy is based on creating growth by entering new markets with new products. Furthermore, it cannot be expected that the top management has explicit knowledge about this business area. The strategy was popular between 1960 and 1980, and in fact many companies are still conglomerates. Danisco stayed a conglomerate until 1999.¹²

¹¹ www.danisco.com/Investor_relations/Our_business/acquisitions_and_divestments

¹² Elling, J.O. & Sørensen, O. (2005), "Regnskabsanalyse og værdiansættelse- en praktisk tilgang", p. 27

The sale of Danisco's Sugar division

Martin and Sayrak¹³ surveyed the literature on the relationship between corporate diversification and shareholder value. They found that research could be put in three categories. The first category of research consists of a consensus among academic researchers, investment bankers and consultants that diversified firms destroy value. Results from different research papers found that diversified firms were traded at a 15 % discount compared to a portfolio of comparable stand-alone firms and the stock market seemed to react favourable to increases in corporate focus. The discount rate is understood as the difference between what the conglomerate division and a stand-alone firm receives for its company. Megginson et al contributes further to the notion that corporate diversification result in decreased shareholder wealth. They found that focus decreasing mergers result in a relative shareholder loss of 25 per cent by the third post merger year. Furthermore, they find that for every 10 per cent decrease in focus shareholders lose 9 per cent wealth.

The second research direction that has received a lot attention angles the research body towards that the discounts on diversified firms exist, but that this is due to other factors than diversification¹⁴. As a starting point the researchers mean that firms that choose to diversify are different from the typical focused firm and that they trade at a discount prior to diversifying. Hence, the researchers do not question that there exist a discount but they argue that the discount is a result of the acquiring firm and the acquired firm already is trading at discount prior to merger.¹⁵

Finally, the third research group means that there exists no diversification discount. On the contrary, they mean that corporate diversification creates shareholder value. This notion is based on the possibility of measurement errors in prior research¹⁶. A lot of the issues are claimed to relate to segment reporting. A large part of the criticism is due to that companies report aggregated segments that are not really related to each other, meaning that firms are more diversified than the reporting

¹³ Martin, John D., Sayrak Akin, "Corporate diversification and shareholder value: a survey on recent literature", *Journal of Finance* 9 (2003) p 37-57

¹⁴ Martin, John D., Sayrak Akin, Corporate diversification and shareholder value: a survey on recent literature, *Journal of Finance* 9 (2003) p 37-57

¹⁵ Lamont, Owen, Polk, Christopher, "Does diversification destroy value? Evidence from the industry shocks", *Journal of Financial Economics*, vol.63, issue 1 (2002)

¹⁶ Martin, John D., Sayrak Akin, Corporate diversification and shareholder value: a survey on recent literature, *Journal of Finance* 9 (2003) p 37-57

The sale of Danisco's Sugar division

standard makes it appear¹⁷. This is attributable to Danisco which reports five divisions under Ingredients.

The trend is that a significant body of evidence indicates that there has been a reduction in corporate diversifications, and there exists claims that the 1980's merger wave was a reaction to disappointment with conglomerates. But there is also research that claims that over 50 per cent of the assets registered on the US stock market are conglomerates. The large amount of evidence from research the past two decades have lead to that the notion that corporate diversification destroy shareholder value forms the basis for the treatment within corporate finance texts used in schools.¹⁸

Maksimovic et al¹⁹ finds that within –industry acquisition behaviour of conglomerate segments differs sharply from single segment firms. Segments of conglomerate firms are two to three times more lightly to acquire plants within their industry than single segment firms, and 36 per cent of conglomerate segments' growth comes from acquisitions, versus 9 per cent for single segment firms. This fits with Danisco's acquisition strategy, where they have bought sugar plants and other ingredient plants. Furthermore, they conclude that conglomerate segments are more lightly to make shareholder value adding acquisitions than a single segment firm and add that these acquisitions increase in productivity after the acquisition.

However, Martin et al²⁰, points to that later research has questioned the methods used to arrive at the notion above. The problem arises when comparing the value of the diversified firm to the sum of the values of its component businesses. The problem is defined as an endogenous problem; companies choose to diversify, hence it is not directly comparable to firms that are more focused. The fact that they are fundamentally different in strategy is called endogeneity problem. Recent studies have found that because of endogeneity the discount diminishes and even becomes a premium sometimes.

¹⁷ Villalonga, Beden, "Does Diversification Cause the Diversification Discount?", SSRN (2000)

¹⁸ Martin, John D., Sayrak Akin, Corporate diversification and shareholder value: a survey on recent literature, *Journal of Finance* 9 (2003) p 37-57

¹⁹ Maksimovic, Phillips, "The Industry Life Cycle, Acquisitions and Investment: Does Firm Organisation Matter?", *Journal of Finance*, vol. 63, issue 2 (2008)

²⁰ Martin, John D., Sayrak Akin, Corporate diversification and shareholder value: a survey on recent literature, *Journal of Finance* 9 (2003) p 37-57

The sale of Danisco's Sugar division

Matsusaka²¹ finds that acquirers in the late 1960's and early 1970's, the peak of conglomerate theory popularity, engaging in diversifying purchases realised positive abnormal returns as opposed to acquirers making focused acquisitions.

3.2 Growth through acquisitions

Danisco have over the years stated that acquisitions were a part of their growth strategy.²² This raises the question how these acquisitions have impacted shareholder value. In the event analysis I will also discuss indications of how shareholder value has been impacted by acquisitions. Tom Knutzen, CEO of Danisco, has stated that after years of acquisitions they are now looking to streamline the organisation and step by step increase their profitability.²³ This can indicate that Danisco's top management are aware that research claims acquisitions are costly to firm and shareholder value. Below, follows findings in research on acquisitions impact on the acquiring firms' shareholder wealth.

It is well documented that the majority of acquisitions fail to create shareholder value in the first post acquisitions years. Agrawal et al²⁴ showed that acquiring firms suffer a statistically significant loss of 10 per cent during a five year post acquisition period. This point is investigated further by Loughran and Vijh²⁵ which states that the performance of the acquiring firm depends on whether it was a tender offer or a merger and if it was made through cash or a stock offer. According to Loughran and Vijh firms that completes stock mergers makes a negative return of -25 per cent. Cash tender offers, on the other hand, makes positive and abnormal returns, of 61 per cent.

While target-firm shareholders generally enjoy positive short-term returns, investors in bidding firms frequently experience share price underperformance in the months following acquisition, with

²¹ Matsusaka, J. "Corporate diversification, value maximation, and organizational capabilities", The Journal of Business, in press (2001)

²² Annual report 2006/07

²³ Børsen, September 20th 2006

²⁴ Agrawal, A., Jaffe, J.F., Mandelker, G.N. "The post-merger performance of acquiring firms: a re-examination of an anomaly", Journal of Finance, vol. 47, (1992).

²⁵ Loughran, T., Vijh, A.M, "Do long-term shareholders benefit from corporate acquisitions", Journal of Finance, vol. 52, (1997)

The sale of Danisco's Sugar division

negligible overall wealth gains for portfolio holders (Agrawal and Jaffe²⁶). It is found a wide variation in acquisition performance in at the firm level²⁷.

In his original work on European acquisitions, Kitching²⁸ reported failure rates of 46–50%, based on managers' reports. More recently both Rostand²⁹ and Schoenberg (in press)³⁰ have reported equally poor failure rates of 44–45%, using comparable methodology. An examination of the returns to acquiring firm shareholders also reveals that acquisitions continue to produce negative average returns similar to those seen historically (Agrawal and Jaffe, 2000). Agrawal and Jaffe (2000), concludes after a review of research, that acquisitions yield abnormal negative returns in the long run. However, they underline the need for more research on the methodologies that gives these results. There are three possible reasons for this disturbing lack of improvement in M&A performance over the years:

- Executives are undertaking acquisitions driven by non-value maximizing motives.
- The prescriptions from the academic research are not reaching the practitioner community.
- The research to date is incomplete in some way.

Hence, the starting point for the analysis of the impact of Danisco's acquisitions on shareholder value is that it will decrease, as a drop in stock price, the following three years after the acquisition.

3.3 Strategic event analysis

The figure below shows the stock price development for Danisco on which the event analysis is based on. I have used OMX as a benchmark, and it can be seen that the two graphs frequently move together. From July 1999 to March 2000 the Danisco stock price dropped while the OMX- index increased. This might be related to the large investments in the packaging industry.

²⁶ Agrawal, A. & Jaffe, J.F. "The Post-merger performance Puzzle", SSRN, December 1999

²⁷ Cartwright, S. and R. Schoenberg (2006) "Thirty Years of Mergers and Acquisitions Research: Recent Advances and Further Opportunities" *British Journal of Management*. Volume 17, issue 1, pp. 1-5.

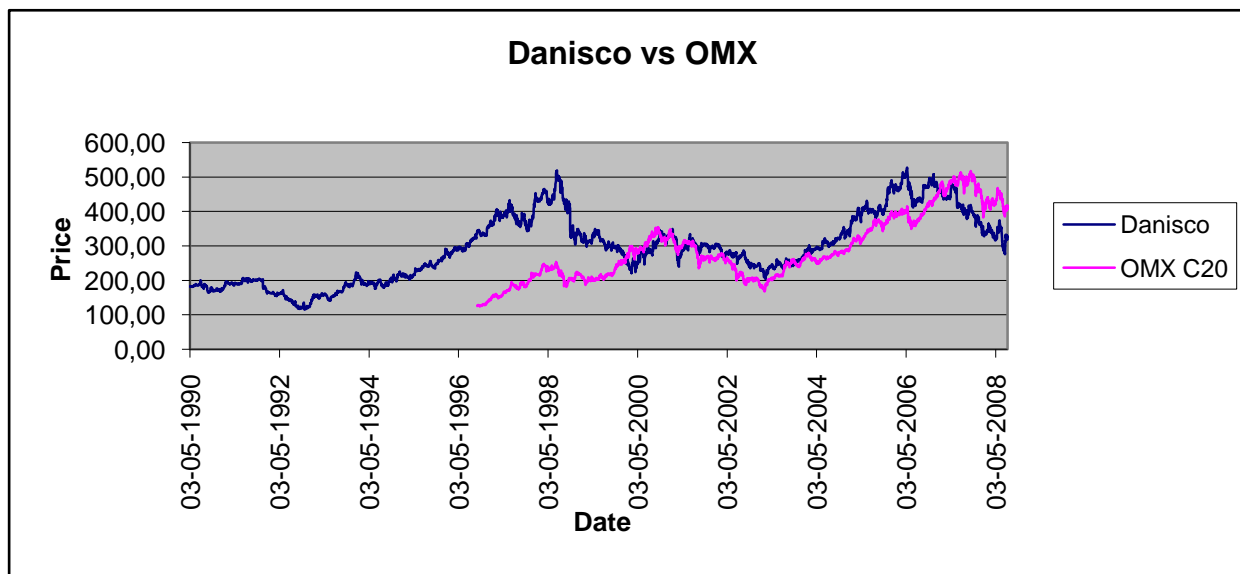
²⁸ Kitching, John, "Why do mergers miscarry?", *Harvard Business review*, 1967

²⁹ Rostand, A. "Optimizing Managerial Decisions During the Acquisition Integration Process". Paper presented to 14th Annual Strategic Management Society International Conference, Paris. 1994

³⁰ Schoenberg, R. (in press). "Measuring the Performance of Corporate Acquisitions: An Empirical Comparison of Alternative Metrics", *British Journal of Management*

The sale of Danisco's Sugar division

Figure 3: Danisco stock price development



In the period between 3rd of May 1990 to 24th of November 1992 Danisco's share price dropped 36 per cent from 183 DKK to 116 DKK. This was the period after the merger that formed the modern Danisco. According to the theory presented above mergers and acquisitions can impact negatively on shareholder value the following two to three years. Major strategic events this period consists of the building of an emulsifier plant in Malaysia (1990) and the acquisition of eight new sugar factories in Germany (1991). In the period prior to 1990 there had also been a number of plant acquisitions, both in the Ingredient sector and the Sugar sector. This indicates that Danisco's conglomerate was growing in size, but not in differentiation, in this period. However, the stock price did not increase, suggesting that shareholder value decreased. In view of theory this could be caused by post merger consolidation problems. This in turn indicates that the conglomerate structure is not an optimal company structure to maximize shareholder. At the same time the fall in stock price could be theoretically explained to the new acquisitions that not yet have performed to its potential.

In the following period up until 23rd of June 1997 the stock price increased and peaked at 433 DKK. After a short plunge between 23rd of June and 25th of November 1997 (344 DKK, which can be seen in light of numerous acquisitions of packaging businesses, the stock price again peaked 14th of July 1998 at 520 DKK. Danisco was still a conglomerate, indicating that the conglomerate corporate structure is

The sale of Danisco's Sugar division

not decreasing shareholder value, but instead could be a contributing factor to the increase. A further contribution is that the prior acquisitions of the sugar plants in 1991 are now streamlined and well functioning. This is in line with theory presented above, where research claims that the first years after an acquisition are difficult and rarely shareholder value adding.

Danisco made a lot of acquisitions within packaging and corrugated cardboard in 1995 and 1996, under the division Danisco Emballage. In 1997 and 1998 Danisco acquired more companies in several of its different market segments.

From the peak in July 1998 and to 14th of March 2000 the stock price decreases down to 222 DKK. This period is characterized by the transition from a conglomerate to a more focused company. The sale of Danish Distillers to Svensk Alkohol indicated the start of the new era. At the same time Danisco increased the focus on the remaining business segments Ingredients and Sugar through mergers (Finnsugar) and acquisitions (Cultor). The acquisitions made in the period and the merger with Finnish Cultor might have caused the decrease in stock price, and hence shareholder value, as presented as a possibility in the theory above.

The stock price increases between March 2000 and February 2001 with 58 per cent. A couple of years earlier Danisco made a lot of acquisitions in several of their business segment. This fits with the theory that acquisitions are not adding to shareholder value the first years after the acquisition or merger.

In the period from 2001 to 2003 the acquisition activity slows down, but Danisco acquires Belgian Flavour company, Perlarom, Florida Flavours and Australian Germantown which are all three in the Ingredient segment. The stock price decreases to 204 DKK 12th of March 2003 from 350 DKK 12th of February 2001. Looking back three years we see that the many different acquisitions within different business segment have passed the implementation period and might now contribute to increased shareholder value, in line with the theory stated above. However, the negative effects of the recent acquisitions seem to reduce the stock price. It is also an indication that focused firm theory does not increase shareholder value.

The sale of Danisco's Sugar division

From March 2003 to May 2006 the stock price has increased sharply looking at the period as a whole. It ended with the all time high notation of 527 DKK. Key events during this event are the acquisition of French food ingredient business Rhodia in 2004 and American biotechnology business Genencor. The acquisition of Rhodia is a continuation of the focus on ingredients and underlines Danisco's focused firm strategy. Genencor is interesting though, as it starts a new business segment within biotechnology. This is not a strategy that underlines focus on core competences, but merely sees an opportunity to grab a market share of the new and large 2nd generation Bio-fuel market. Hence, one could say that Danisco with this move took a step towards conglomerate again and therefore the positive development in the stock price cannot be attributed to either conglomerate nor focused firm strategies.

During the above period the investments three years earlier should be over the implementation stage, which impacts negatively on shareholder value according to theory. This seems to be the case since the stock price has risen. After the peak in May 2006 the stock price has decreased until the announcement of the sale of Sugar. This could be because of the acquisitions of Rhodia and Genencor one and two years earlier which according to research is not adding value to shareholders the next couple of years.

Another interesting feature is the lack of major events in the Sugar division in this period. The sugar industry has become predictable, and it is now clearer how much revenue Danisco can expect to achieve until the end of the regime in 2014/15. After this period the development is very uncertain at present time. There has also been an increased interest for the Ingredients division and during the period 2003 to 2006 it has surpassed Sugar in revenues. This being said, Sugar is still generating good revenue, but the scepticism to the sugar market development and the foreign investors interests in Ingredients forced a divestment, through a sale.

The trend in the stock price since May 2006 has, as mentioned, been negative. This is also a period where Danisco made a lot of effort in focusing on its core competences, through its "Unfolding the potential". Hence, this points to that the focused firm strategy did not add value to shareholders. On the other hand the acquisition of Genencor could have been reducing the effects.

3.4 Summary of strategic event analysis

In this chapter I have investigated how researchers' different theoretic findings fit with Danisco's strategies that might maximise shareholder value. The theories I have used, and found relevant for Danisco, were conglomerates versus focused firms and the growth through acquisitions.

I found that there had been a positive development of the stock price for the ten year period Danisco operated as a conglomerate. There was also a slight downturn in the beginning of the investigation period. The same results were found for the focused firm period from 1999 until present. In fact the stock price developments show a very similar picture. This indicates that whether Danisco is a conglomerate or a focused firm does not impact the shareholder value in any direction and is in line with research, which has not reached a consensus.

I also investigated how acquisitions influenced shareholder value, measured in stock price, with the starting point from theory that shareholder value for the acquirer is decreasing the first two to three years after an acquisition. I found reasons to support this theory as the stock price have had a negative development following major acquisitive activity. Danisco have stated in many of their acquisition statements that the new acquisition can be expected to perform after three years. The results have to be seen in light of that there could have been other events that have impacted the stock price apart from acquisition activity.

To a great extent the Danisco share follows the OMX- index when looking at the graph with exception from a few periods as mentioned above. A different development in stock price compared to the OMX-index would have made it easier to identify potential drops or increases in shareholder value due to acquisitions. This makes it even harder to make a solid conclusion whether the acquisitions have contributed to shareholder value or not, since the investors would have given approximately the same result to invest in the market portfolio. The stock prices used stems from two different time periods, which potentially was not subject to the same market conditions. However, Danisco is not considered to be impacted gravely by economic cycles.

4. Strategic Analysis of Sugar

This chapter contains an analysis of the business environment Danisco operates in. I have chosen to do an analysis of Ingredients and Sugar separately, in light of my problem formulation.

To analyse the external factors I conduct a PESTEL analysis. This analysis focuses on political, economical, social, technological, environmental and legal factors that impact on Ingredients and Sugar. This will be complemented with an analysis of Ingredients' and Sugar's environment in their business segments, after the principles of Porters Five Forces³¹. Finally, I use a SWOT-analysis to analyse Ingredients' and Sugar's strengths and weaknesses, and their opportunities and threats in the future.

4.1 Sugars strategy

It is important for a company to have a strategy that fits with its surroundings. Sugar have the following stated strategies³²:

- Maintaining its position as one of the most efficient sugar producers in Europe.
- Maximizing cash flow from sugar production, including increased efficiency and quality, and focus on sustainability.
- Capitalizing on by products and the asset base from sugar production.
- Strengthen their position in domestic markets and expand into new ones and be a close and creative partner to their customers.

Sugar acknowledges that the adaptation to the new sugar reform has been slower and more challenging than anticipated. Sugar's revenues declined with 11 % in 06/07 as compared to the previous year.³³ In March 2008 Sugar upgraded the long term outlook.³⁴ Sugar employs approximately 2000 people and their current sugar quota is around 922.000 tons.

³¹ Elling, J.O & Sørensen, O. (2005), "Regnskabsanalyse og værdiansættelse- en praktisk tilgang"

³² Annual report 06/07, p. 5

³³ Annual Report 06/07, p. 6

³⁴ www.danisco.com/media_relations/news March 4th 2008

4.2 PESTEL

Figure 4: PESTEL Sugar

<p>Political</p> <ul style="list-style-type: none"> - EU Sugar Regime - Sustainability 	<p>Economical</p> <ul style="list-style-type: none"> - Slow world economy - High prices on raw material 	<p>Social</p> <ul style="list-style-type: none"> - Larger population - Focus on health - Sustainability - Accidents in production
<p>Technological</p> <ul style="list-style-type: none"> - High tech production 	<p>Environmental</p> <ul style="list-style-type: none"> - Demand for low emissions - WWF report 	<p>Legal</p> <ul style="list-style-type: none"> - EU legislation

Source: Eirik Bang Sjøberg

4.2.1 Political factors

The Common Market Organization (CMO) in the sugar sector was established in 1968 aiming to ensure a fair income to European Union (EU) producers and self supply in the EU market.³⁵ The new EU Sugar Market Regime came into force in July 2006. The main object is to gradually, yet drastically reduce EU sugar prices, which have historically been much higher than the world market price. The prices on the world market have been low due to oversupply caused by EU producers dumping their excess production on the world market. EU has committed to reduce sugar production to stabilize the relationship between supply and demand, which has been artificially stable through subsidies.

The total European sugar production has historically fluctuated between 19-20 million tons and the export has amounted to around 5 million tons.³⁶ The target for the regime is to reduce the EU

³⁵EU sector facts and figures, Brussels 14 July
<http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/04/177&format=HTML&aged=0&language=EN&guiLanguage=en>

³⁶ EU sector facts and figures, Brussels, 14 July
<http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/04/177&format=HTML&aged=0&language=EN&guiLanguage=en>

The sale of Danisco's Sugar division

production to 13 million tons in 2009/10³⁷, which is a drop of one third for the period between 2004/5 and 2009/10, and the export from EU producers is estimated to drop by 4 million tons. The new EU Sugar Market Regime will remain in effect until 2014/15.

The CMO is a complex of production quotas, guaranteed prices, export refunds and import levies. The total EU quota is split among the member countries, and the member countries governments allocate the quota to local producers, such as Danisco. The quota is divided into an A quota and a B quota. The A quota corresponds to the domestic consumption, while the smaller B quota is intended to provide a surplus, so that demand can be met even in the event of crop failure. The B quota surplus can be exported to the world market and the exporting producer will receive an export subsidy corresponding to the difference between the world market price and the EU price. Any sugar production above the A and B quotas is referred to as C sugar, which must be either sold on the world market to the world market price, or stored and used as part of the following year's A and B quotas. The Council determines what portion of the total A and B quotas will be assigned to each member state.³⁸

Within the allocated quotas EU sugar producers have been offered an internal intervention price for raw and white sugar. For 2006/2007 the price for raw sugar was 496.80 EUR and 631.90 EUR for white sugar.³⁹ For raw sugar the price will be reduced gradually from 496 EUR to 335 EUR in 2009/10 and for white sugar the price will be reduced gradually from 631 EUR in 06/07 to 404 EUR in 2009/10. The table below shows the change in price on raw sugar, white sugar and sugar beet.

Table 2: Price development Sugar

Price development pr ton (EUR)	2006/07	2007/08	2008/09	2009/10
White sugar	631,90	631,90	541,50	404,40
Raw sugar	496,80	496,80	448,80	335,20
Sugar beet	32,86	29,78	27,83	26,29

Source: EU sugar reform

In comparison, the price in the world market averaged at 160 EUR and 190 EUR per ton for raw sugar and white sugar. So called least-developed-countries (LDC) will from the implementation of the new sugar regime in 2006 until 2009/10 be offered EU price on a restricted quota. After 2009, this

³⁷ www.danisco.com/ Investor Presentation May 2008

³⁸ Busse, M. & Jerosch, F., (2006) "Reform of the EU Market", Intereconomics

³⁹ EU sugar reform of 2006

The sale of Danisco's Sugar division

restriction is dropped and least-developed-countries get duty and quota free access to the EU sugar market.⁴⁰

The purpose of the reform of the sugar market regime is the EU's goal of employing a restructuring program in the period until the end of the 2009/10 marketing year to retire less competitive productive capacity within the Union and thereby increase the competitiveness of the European sugar industry vis-à-vis the world market. After the implementation of ten new nations in the EU community, the sugar production will exceed demand even more⁴¹. The new sugar regime seeks to reduce the sugar quotas by offering sugar refineries and sugar beet farmer assistance from restructuring funds. This is being financed by a restructuring levy. Regions that largely discontinue sugar production will be compensated for retiring sugar refineries and lost crops through additional regional assistance. The reduced intervention price should reduce production and the import of sugar from LDC countries. Furthermore, the goal is to stabilize the sugar markets and ensure fair standard of living for the agricultural community within the sugar sector world-wide⁴².

In 2003 Danisco signed the UN Global Compact which is a political initiative meant for companies to prioritize sustainability, meaning lower CO₂, energy consumption, obesity and health. The sustainability notion is becoming increasingly important to investors as nobody wants to increase their wealth if it means that it decreases others'.⁴³

Summing up the impact the reformation of the EU Sugar Regime, we see that a quota price reduction plan has been established. In May 2007 the European Commission decided that they had to improve the economic incentives to induce farmers to cut back on their production. The EU sugar reform seeks to align the world sugar market with the European sugar market and in a way that minimises European sugar producers' loss. Sugar believes the sugar industry will benefit from these incentives⁴⁴. The sugar reform which will be gradually implemented until its full effect in the marketing year 2009/10 will have a double negative effect on EU sugar producers, reduced quantity and intervention price and they will experience increased competition from outside-EU producers. Furthermore, there will be no

⁴⁰ The EU Sugar Policy Regime and Implications of Reform, July, 2008, United States department of Agriculture

⁴¹ The EU Sugar Policy Regime and Implications of Reform, July, 2008, United States department of Agriculture

⁴² EU Sugar reform of 2006

⁴³ Berlingske business July 27th 2008

⁴⁴ Annual report 06/07

The sale of Danisco's Sugar division

compensation for storage of overproduced sugar and for costs related to export of the overproduced sugar to the world market. As a result of the cut in export subsidies, production quotas, increased imports of world sugar and prices only the efficient EU sugar producers will survive. It is already established that inefficient sugar producers such as Greece, Italy, Portugal and Ireland will have to shut down their production or at least reduce production significantly⁴⁵. There is also an increased demand for sugar producers to take sustainability measures.

4.2.2 Economical factors

In general, Danisco is not impacted by economic cycles⁴⁶. Sugar has operated in very challenging conditions the past few years. Prices on key raw materials and energy have nearly doubled in 07/08 increasing the production costs.⁴⁷ Population growth is what drives sugar consumption. However, the U.S, EU and Japanese sugar markets are mature and showing little or no growth in sugar consumption.⁴⁸

I refer to the analysis of economical factors under Ingredients' strategic analysis for more information, since I assume that Sugar and Ingredients are impacted by many of the same economical factors.

4.2.3 Social factors

Sugar is a necessary ingredient in many products as sweetener, preservative, flavour enhancer and even in medicine. The latest addition is the use of sugar by-products to produce bio-fuel, which is a lot more environmental than traditional fuel manufactured from oil.⁴⁹ The population has become more aware of what is healthy and nutritional. The trend is that there is an increasing demand for healthy, nutritious food. Consumers are interested in consuming food that does not increase tooth decay, obesity and risk for getting diabetes.⁵⁰

⁴⁵ Busse, M. & Jerosch, F., (2006) "Reform of the EU Market", Intereconomics

⁴⁶ www.omx.dk

⁴⁷ Annual report 07/08, p.3

⁴⁸ Gudoschnikov, S., (2004), "The World Sugar Market" Woodhead Publishing

⁴⁹ European commission, "The European Sugar Sector A Long Term Competitive Future"

⁵⁰ www.danisco.com/about_danisco/strategic_focus

The sale of Danisco's Sugar division

Another important social factor is how Sugar interacts with its beet growers. The sugar beet farming industry has historically been the most rentable agricultural business⁵¹, and it is a traditional occupancy. Hence, this constitutes a social factor Sugar needs to consider. The dialog and cooperation between Sugar and the beet farmers is important, because without an agreement Sugar have no input for their sugar production and the beet farmers have to switch to less rentable agricultural products.

Summing up Sugar is well aware of its social responsibilities, and put a lot of effort in being accepted in its local communities. Sugar operates in northern Europe and therefore there are not many huge social and cultural differences that might impact significantly.

Danisco claims that within 20 year the population would have grown by 2 billion people, suggesting this will impact habits in a fundamental way. Therefore, Danisco needs to stay close to cultural and social trends.⁵² Right now these trends are towards healthy, nutritious, high quality food that is convenient.

4.2.4 Technological

The sugar producers of today need to be efficient. Therefore, it is necessary that their technology is as good as possible. Top technology will give competitive advantages. Sugars' production is a high end technology based business and is one of the most efficient producers in Europe.⁵³

Danisco needs to have the knowledge and the technological capability to produce solutions that meets customers' specific needs. The need for the ability to develop new products and patents are important.⁵⁴ There is a trend towards a demand for a new kind of sweeteners that combines the use of sweeteners and sugar⁵⁵.

⁵¹ Note to Folketinget regarding the EU sugar reform, p. 15, 2003

⁵² www.danisco.com/about_danisco/supply_chain_management/danisco_and_the_consumer

⁵³ www.danisco.com/sugar

⁵⁴ www.danisco.com/sugar

⁵⁵ www.danisco.com/sugar

4.2.5 Environmental

Danisco states that they strive to make products that are environmental friendly.⁵⁶ This is in line with the increased focus on environment awareness and sustainability. To communicate focus on environment is important for the reputation which again is important for investors and other stakeholders.

World Wildlife Fond (WWF)⁵⁷ released a report in 2004 emphasising how sugar distorts the soil, as up to 30 per cent of the beet that are pulled up is actually soil. This is an indirect impact on Sugar since the raw material they use causes these damages. Sugar beet growing could ultimately lead to wildlife disturbance and lack of water flow. In Andalucia, Spain, sugar beet irrigation has contributed to lower water levels in the Guadalquivir River, limiting the water to reach important wetlands during summer. The pollution of Danish coastal waters by sugar factory effluent has been linked to the occurrence of bacterial pathogens and an ulcer syndrome in cod.

Danisco already meets the high Danish standard of reduction in CO₂- emissions⁵⁸. The sugar production is very energy consuming and uses a lot of water, however, the water systems at the refineries reuses most of the water several times. Apart from the energy consumption and the use of pesticides, the production is as environmental friendly as it can be compared to other agricultural products⁵⁹. Sugar makes use of almost the whole sugar beet. A sugar beet contains 75 per cent water, 16-18 per cent sugar, 5-6 per cent beet fibre and 2-3 per cent other substances. The only thing which they have not found use for is 50 per cent of the water which is the main part of a sugar beet⁶⁰. A problem is that 10-30 per cent of the harvest is soil.⁶¹

Important in our time is the impact of climate changes. There are still those who are not convinced that the climate has changed. Jaggard et al⁶² found that climate changes will bring yield increases of 1 ton per hectare in northern Europe. In northern France, Belgium and Poland decreases of the same magnitude is projected for 2021-2050. Northern Europe is projected to get milder springs enabling

⁵⁶ www.danisco.com/about_danisco/sustainability

⁵⁷ WWF- report, (2004), "Sugar and The Environment"

⁵⁸ Annual report 06/07, p. 26

⁵⁹ www.agrologica.dk/ Borgen, Anders

⁶⁰ www.danisco.com/sugar

⁶¹ WWF- report, (2004), "Sugar and The Environment"

⁶² Jaggard et al, (2003), "Future climate impact on the productivity of sugar beet in Europe, Climatic change vol 58 n 1-2"

The sale of Danisco's Sugar division

them to start harvest earlier at the same time drought is expected to be a spreading problem. Drought problems are expected to double in areas where it already exists and become a serious problem in north-east France and Belgium. West and central Europe simulated an average drought loss of 7 percent between 1961-1990 to 18 per cent between 2021 and 2050. The annual variability in yields is expected to increase from 10 per cent to 15 per cent. Jaggard et al (2003) views this to have potentially serious consequences for the sugar industry. They also state that the findings are directly linked to the increase in CO₂-emissions.

4.2.6 Legislation

The laws and regulations are being made by the EU and is a minimum standard that the European producers have to follow. Additionally, each country can impose stricter laws and regulations. I refer to the political section, since most of the legislation factors are mentioned there, under the EU sugar regime.

4.3 Analysis of Sugars' business environment

In this section I will provide an overview over the business environment in the sugar industry. For this purpose I have chosen use Michael Porters "The Five Competitive Forces" from 1985. The purpose is to map Sugar's position in the market at present time.

Through five determinants shown in the figure above this analysis will show Sugars competitive abilities.

4.3.1 Barriers to entry

New competition in a market will, cet par, reduce the revenues of existing companies. Hence, a company's competitive strength is closely aligned with how easy it is for newcomers to establish in the market.⁶³

As a starting point the barriers to enter the European sugar market are extremely high. Firstly, sugar quotas are distributed to producing nations by EU. EU also set the price at which the different sugar products will be sold at. This means that the level of sugar available for sale is preset making it less

⁶³ Elling, J.O & Sørensen, O. (2003), "Regnskabsanalyse og værdiansættelse- en praktisk tilgang", p. 48

The sale of Danisco's Sugar division

attractive for a new company to enter. The EU Sugar Regime is gradually cutting the quotas and the prices making it even less attractive to enter the European sugar market.

Secondly, a new entrance in the European sugar market demands a high investment in production facilities and need farmers willing to produce sugar beets. These are high technological production facilities and the need for technical insight and know-how of the business is crucial. The right location of the plant is also important to minimize the transport from the beet growing fields to the refineries. If the farmers in the area are not willing to grow sugar beet, the foundation for setting up a production is also not present.

4.3.2 Buyer power

An advantage over the customers can lead to economic benefits through the ability to set higher prices and determine delivery schedules after the company's own wishes.⁶⁴ Most of the customers are industrial players using sugar in their production and 80 per cent of the production is sold to manufacturers of soft drinks, confectionary, jam, marmalade, bakery and dairy products. The remaining part is sold in the retail market under the brand Dansukker.⁶⁵ The bulk of the sales go to the Nordic and Baltic markets, but also to Northern European countries.

Danisco aims to collaborate with their customers in their product development. Value is added by focusing on service, logistics, technical support and assistance in product development. Exclusive knowledge and laboratories puts Sugar in a power position versus their customers in the food and beverage industry as they are working hard to stay ahead of trends. The sugar industry has an oligopolistic nature where the geographical situation separates the competitors⁶⁶.

⁶⁴ Elling, J.O & Sørensen, O. (2003), "Regnskabsanalyse og værdiansættelse- en praktisk tilgang", p. 49

⁶⁵ www.danisco.com/sugar

⁶⁶ http://www.dfat.gov.au/trade/negotiations/disputes/265_wto_eu_sugar_reform_091105.html

The sale of Danisco's Sugar division

4.3.4 Supplier power

Sugar is mutually dependent on the beet farmers which are allocated close to the production facilities. The sugar beet farmers have to be close to the refineries because the sugar beet needs to be processed as soon as possible because it deteriorates at a high pace.⁶⁷

The Danish sugar beet farming is an important agricultural production area in Denmark. After the EU sugar reform it has become less rentable.⁶⁸ Even so, it is still the most rentable agricultural production in Denmark due to the subsidies from EU⁶⁹. Beet farmers now demand more for their crops due to the rise in competing crops' prices.⁷⁰

In May 2008 the Swedish beet growers cancelled their agreement with Sugar for the delivery of sugar beets with effects from the following year. One month later the Danish beet growers did the same. A stable delivery of beet is vital with regards to a sale of Sugar.⁷¹ Therefore Sugar recently announced a new and better agreement with the beet growers which takes effect from the second half of August 2008 until 2010⁷².

The supplier and customer are mutually dependent on each other. The beet growers cannot sell their crop to other sugar producers due to the higher transport costs and hazard of deterioration of the beet. However, they could start a production of other agricultural products. The sugar industry is dependent of the sugar beet harvest. The harvest is in turn dependent on weather conditions, which is the most volatile factor for the sugar production.

It is expected that the number of sugar beet growers will decrease, in fact it has already happened, and after the lay down of Sugar's factory in Assens many of the smaller beet farmers becomes to inefficient and because of transport costs and small production sizes. Some of these farmers will definitely consider shifting to wheat production or other.⁷³

⁶⁷ www.danskesukkerroedyrkere.dk

⁶⁸ http://www.agrsci.dk/ny_navigation/forskning/institutter/institut_for_havebrugsproduktion/groensager_og_afgroedefysiologi/projekter/efterafgroeder_og_jordbearbejdning_i_sukkerroedyrkningen

⁶⁹ The WTO and EU Sugar Reform, Australian Government, Department of Foreign Affairs and Trade

⁷⁰ Annual Report 2007/08 p. 12

⁷¹ http://www.dr.dk/Nyheder/Penge/2008/06/16/053525.htm?wbc_purpose=updateh

⁷² http://sukkerroer.nu/cms/connect/agri/da/archive/news%20archive/2008/july/agrnews_20080715_nybrancheaftale_da.htm

⁷³ <http://www.folketinget.dk/samling/20051/Lovforslag/L237/PGF/24/spm/7/svar/endeligt/20060926/306959.HTM>

The sale of Danisco's Sugar division

4.3.4 Substitute products

The existence of substitute products is also important for the strategic decisions Sugar make to maximize revenues. This analysis seeks to find out how sensitive the sugar market is to new products which makes current products obsolete. The dangers that lies within this is that competing companies might win market shares based upon their abilities to produce a better product in a cheaper way. Many substitutes trigger tough competition which in turn presses the prices.⁷⁴

Immediately I do not see any dangers from substitute products. This is, again, due to the geographical aspect i.e. that the customers usually are geographically close to the suppliers. The only way is if we in the future should become completely independent from the use of sugar. Non sugar products, but Danisco develops these themselves.

4.3.5 Rivalry

The fifth force in Porters model concerns the competition. Who are the competing companies and what are the costs of having a business in this market?⁷⁵ As mentioned earlier sugar producers are located close to the raw material. Therefore, a lot of the competition disappears naturally due to geographical reasons. The food and beverage industry, which are their main customer of Sugar's products, also want to buy their ingredients which creates the lowest logistic costs.

The sugar market is highly regulated with a fixed prices and quotas for different types of sugar. Many of the European sugar producers operates in a monopoly situation, largely exempted from the EU competition rules, and the EU sugar sector has been called the "white gold" of European agriculture. Sugar beet farmers are much more profitable than any other agricultural sector. The European sugar market resembles a tacit collusion between sugar producers in the member states of EU, with few and large producers not really competing against each other.⁷⁶

⁷⁴ Elling, J.O & Sørensen, O. (2003), "Regnskabsanalyse og værdiansættelse- en praktisk tilgang", p. 50

⁷⁵ Elling, J.O & Sørensen, O. (2003), "Regnskabsanalyse og værdiansættelse- en praktisk tilgang", p. 50

⁷⁶ http://www.dfat.gov.au/trade/negotiations/disputes/265_wto_eu_sugar_reform_091105.html

The sale of Danisco's Sugar division

In a longer term Sugar might find them self competing on a free market, meaning that there is one big world market. It is more expensive to produce sugar from sugar beet than it is from sugar cane, but the chemical sugar product is identical. The beet was historically introduced to break the dependence of sugar cane from the colonies, and the tariffs now under change, were set up to protect the beet using sugar production. Approximately 75 per cent of sugar plants are sugar canes.⁷⁷

4.4 SWOT analysis Sugar

The SWOT- analysis looks at the strengths, weaknesses, opportunities and threats that the company is subject to. It is a tool for the external analyst to see if the chosen strategies are suitable with regards to the strength profile. This is vital so companies do not lay down strategic plans that cannot adapt to changes in the strength profile swiftly.⁷⁸

Figure 5: SWOT Sugar

Strengths	Weaknesses
<ul style="list-style-type: none">- High technological and efficient production- Developed focus in sustainability- Solid financially- Good dialog with customers	<ul style="list-style-type: none">- Vulnerable to climate changes- Highly regulated market- Uncertainty around production and price- Worsened relationship with suppliers
Opportunities	Threats
<ul style="list-style-type: none">- Limited due to EU regulations- Logistical improvements- New products, in non-food and pharmaceutical- Sale- Expansion	<ul style="list-style-type: none">- More competition in the market- Rising supplier power- Take over

Source: Eirik Bang Sjøberg

⁷⁷ European commission, "The European Sugar Sector A Long Term Competitive Future"

⁷⁸ Elling, J.O & Sørensen, O. (2003), "Regnskabsanalyse og værdiansættelse- en praktisk tilgang", p. 50

The sale of Danisco's Sugar division

4.4.1 Strengths

Sugar production facilities are high technological and efficient and according to them Sugar them self, their sugar processing is one of Europe's most efficient.

Furthermore, Sugar is financially strong and generates a stable and solid cash flow. The customers are mainly industrial players and are maintained because Sugar strives to develop its and the customers products through a continuous dialog.

Sugar has a good reputation socially and among its business partners, customers and farmers. They have sustainability at the top of their agenda. Sustainability has become increasingly important to investors and top management.⁷⁹ Environmentally their production comply to governmentally set restrictions for out-lets.

A further strength is that the sugar industry is not as influenced as many other businesses by the world business cycles, as mentioned earlier.

4.4.2 Weaknesses

The sugar industry is weather conditional and depends on a favourable weather for the sugar beet farmers to produce their crops. Sugar has never not produced its quota due to poor crops, but it is always a possibility that weather might cause smaller crops and a more slow and inefficient production.⁸⁰ The relationship with the beet farmers seems to have become more tense and culminated in a cancellation of the agreement by the farmers in June. They have now reached an agreement again with better terms for the farmers. I view it as understandable since both parties are experiencing lower prices for their commodities in the future in the future due to the new sugar regime.

As we know the sugar industry is highly regulated and in the strive to achieve balance between supply and demand on the European sugar market, without the possibility of dumping sugar on the world market, Sugar has been through a slightly unpredictable period. The positive side of this is that the

⁷⁹ Børsen, September 19th 2007

⁸⁰ www.danisco.com/sugar

The sale of Danisco's Sugar division

regulations are becoming more clear and predictable. However, they have to base their production strategies on decisions from the EU.

Sugar production is highly energy consuming and with high energy prices this becomes a challenge, and the need for efficiency is even greater. However, the potential competition is also exposed to this.

More and more emphasis is put on health and nutritious food, and sugar is not viewed as healthy. It still is a vital substance in many products as it is the substance which makes many foods eatable.⁸¹

As referred to under the PESTEL analysis earlier, the climate changes seem to increase the volatility of crop sizes. Northern Europe is, however, will seemingly be least impacted by this.⁸²

4.4.3 Opportunities

The EU sugar regime limits the opportunities for Sugar because of the uncertainty surrounding it. This is still the case even if more clarity is established with respect to quotas and prices. To increase revenues Sugar seeks to look at further efficiency measures and develop new products for new customers. Special attention will be put on cooperation, competences and willingness to change⁸³. The starting point for Sugars' strategies is that it will be separated from Danisco as a separate entity, and therefore they have focus on making sure that the demerger is made with a result that maximizes shareholders value.⁸⁴ The goal is to optimise the cash-flow.⁸⁵

4.4.4 Threats

A reduction in quotas and quota prices are already under way. This will reduce the potential of revenue growth. The EU sugar market has been regulated for 40 years and been a very predictable and safe market. The sugar market is changing and producers from third world countries are getting access to the EU market.

⁸¹ www.danisco.com/sugar

⁸² See PESTEL analysis, p. 36

⁸³ Annual Report 2006/07 p. 3

⁸⁴ Annual report 2007/08, p. 9

⁸⁵ Annual Report 2006/07, p. 8

The sale of Danisco's Sugar division

As mentioned in the PESTEL analysis under environmental factors, sugar production is weather conditional and the harvests volatile. Without a stable harvest of sugar beets, Sugar has no input for their production. As mentioned earlier it has become increasingly difficult and costly to reach agreements with the sugar beet growers.

Sugar cane based production as opposed to sugar beet based production is a potential threatening scenario for the future. Maybe import of sugar made from sugar canes will be the future solution to cover European sugar demand, since the sugar is cheaper to make in the third world countries. This is a scenario based on the Everything But Arms (EBA) agreement which allows the least developed countries to export limitless amounts of sugar into the EU from 2009.⁸⁶

A clear threat, and now also a fact, is that the Sugar division could be sold.

4.5 Conclusion strategic analysis Sugar

The PESTEL analysis has shown that Sugar is greatly impacted by the new EU sugar reform. It creates uncertainty for the European sugar producers and beet farmers. However, more clarity has been established regarding the future during the past year, where more specific quotas and prices have been set. What happens when the regime expires after the production season of 2014/15 is, although, uncertain. Despite the increased clarity in the new EU reform I mean that the political regulations of the sugar industry impacts negatively on Sugar.

The sugar industry is not viewed to be impacted by economic cycles, and prices and quotas are determined by the EU. As mentioned, there is no growth in the sugar consumption in Europe. Based on this, I find that the external economic factors have a neutral impact on Sugar.

A reason for the decreased sugar consumption is the focus on healthy and nutritious food. Sugar is not nutritious as it does not contain minerals or vitamins. However, sugar is still a vital ingredient in many products. However, Sugar has one of Europe's most efficient sugar productions.

⁸⁶ <http://www.folketinget.dk/samling/20051/Lovforslag/L237/PGF/24/spm/7/svar/endeligt/20060926/306959.HTM>

The sale of Danisco's Sugar division

Sugars production lives up to environmental standards. The production is very water intense, but the facilities reuse most of the water. Denmark has even stricter rules for emissions of CO₂ than the EU. A WWF- report claims that sugar production sets its marks in the nature. However, Sugar is very concerned with having an environment friendly production. There are currently no signs that climate changes will have a negative impact on the sugar beet crops the next 40 years, although the crop volatility is probable to increase.

The analysis of the business environment has established that the sugar market has high barriers to entry, which mean that the market is stable with regards to competition. The reason for this is the regulations from EU meaning that there is production limits, high start up costs and long relationships with beet growers.

The EU sugar regime's reduction of quotas and price will reduce revenues for both the producers of sugar and the suppliers of sugar beet. This might have made the negotiations for delivery of raw materials more difficult, as proven when the beet farmers cancelled the agreement with Sugar. However, a new agreement with better terms for the beet growers was made a month later. The supplier power issue has a neutral impact on Sugar, since they are mutually dependent on each other.

Sugar's customers are mostly northern European and the geographic location of production facilities are closely aligned due to transportation costs. Substitute products are no immediate threat since the geographic locations is important for the buyers' decision. In addition, Sugar is a market leader with respect to sugar based products.

There is little or no competition in the European sugar industry at the moment. It actually has an oligopolistic nature, geography is a natural constraint.

Based on the strategic analysis above, I view that the strategies stated by Sugar in the introduction to this chapter are appropriate in relation to the factors impacting Sugar. The opportunities are currently limited, but Sugar focuses on increased efficiency and development of new products for new customers is possible. However, Sugar is vulnerable to take over's by larger European sugar producers. The EU sugar regime limits are the main reasons for the low level of activity and opportunities in Sugar.

5. Strategic Analysis of Ingredients

In this section I will analyze Danisco's second business segment, Ingredients. I follow the same method as with Sugar. Ingredients' strategy is to become a superior supplier of bio-based ingredients and benefit from the synergies between the traditional ingredients business and the newer industrial biotech activities. They mention partnerships with industry leaders and joint ventures as the strategy to achieve this.

5.1 PESTEL Ingredients

Figure 6: PESTEL Ingredients

<p>Political</p> <ul style="list-style-type: none"> - FAA/EU Health directives - Traceability - Lobbying for bio-fuel 	<p>Economical</p> <ul style="list-style-type: none"> - Not impacted by cycles - Emerging market growth (BRIC) - Slow-down in advanced economies - Expensive raw materials - Weak US Dollar - Current high food prices 	<p>Social</p> <ul style="list-style-type: none"> - Population growth - Health awareness - High food prices - Lifestyle diseases - Sustainability - Increased standard of living in BRIC countries - Convenience
<p>Technological</p> <ul style="list-style-type: none"> - Top-ten patent grants - Focus on competent people and knowledge - Web-based customer communication - Increased R&D effort 	<p>Environmental</p> <ul style="list-style-type: none"> - Sustainability - Climate change 	<p>Legislation</p> <ul style="list-style-type: none"> - FDA/EU - Labelling - Closely linked to political factors - Less health regulations in China e.g

Source: Eirik Bang Sjøberg

5.1.1 Political factors

Ingredients operate world-wide and are therefore impacted by different political factors. The food and ingredients business is subject to strict rules regulated by the EU and the Food and Drug

The sale of Danisco's Sugar division

Administration (FDA) in the USA. People in the EU trusts in the food they are eating and rely on their perception of the safety and quality of the food. Therefore EU uses a lot of resources to make sure that the right regulations are imposed on the food and ingredient producers. Every new member state in the EU is granted some slack during a transition period.⁸⁷

Since January 2005 there have been strict rules with regards to the tracing of each substance in food in every step of the product development. Furthermore, demands for a precise and quantified declaration of the content are necessary. For food containing Generically Modified Organisms (GMO's) there are strict rules for the marketing, labelling and traceability. The EU also puts a lot of effort in controlling that their regulations are followed. They concentrate on risk areas.⁸⁸

The EU wants to make sure that the consumer can find out himself exactly what the food products contain, if it contains allergens, and the levels of the content. It is not enough to label something low fat and not explaining exactly what that definition contains. It is also important for the EU that manifold of food is maintained meaning that traditional, regional and new developed food and ingredients are available in the market and available in a safe way⁸⁹.

The food is now labelling nutrition values and many manufacturers have applied to start using health scales. This becomes a marketing tool for manufacturers. Denmark has had one of the most strict declaration rules in the EU, but there is a now common regulation under implementation which makes it easier for Ingredients than it has been to fit products into the European market.⁹⁰

In Asia the rules are not that strict, and China themselves are concerned with the lack of control of the food and ingredients made in China.⁹¹

The situation in the USA is similar to the one in Europe with strict regulations to the declaration of content on products. In the USA it has been allowed to write on the packages that the product will benefit your health as long as the declaration is well documented.

⁸⁷ http://europa.eu/pol/food/overview_da.htm

⁸⁸ http://europa.eu/pol/food/overview_da.htm

⁸⁹ http://europa.eu/pol/food/overview_da.htm

⁹⁰ <http://ing.dk/artikel/74806>

⁹¹ Børsen, July 11th 2007

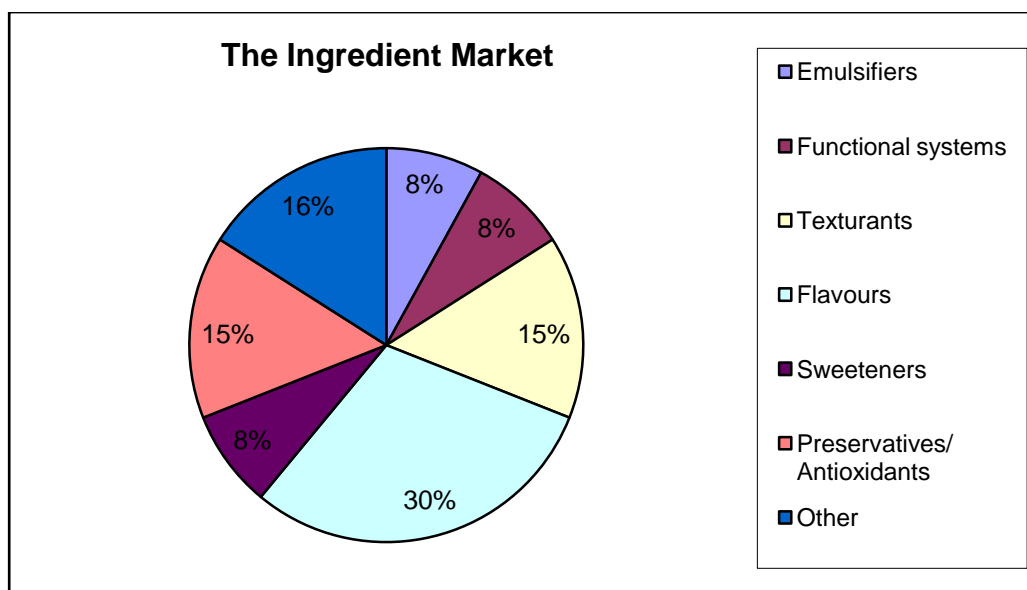
The sale of Danisco's Sugar division

Currently Ingredients, through its Genencor, division is lobbying politically for the bio-fuel production. There is also a strong political interest for this and political support is expected. This is because bio-fuel policies in the OECD Countries have been costly and ineffective.⁹² Danisco considers the overall political risks related to sales and production to be at a minimum due to the broad production platform.⁹³

5.1.2 Economical factors

Ingredients operate world-wide and the figure below shows sales by geography for 2007/2008.

Figure 7: Geographical sales distribution



Source: Investor Presentation, May 2008

As mentioned earlier in the strategic analysis of Sugar, Danisco and its competitors are not extremely influenced by economic cycles. However, there is a global slow-down in the economy. Credit risk is high, inflation increasing and the world suffers from high raw material prices, high energy prices and increased food prices.⁹⁴ It is the increased prices on raw materials that raise the food prices. Hence,

⁹² http://www.oecd.org/document/28/0,3343,en_2649_33717_41013916_1_1_1_1,00.html

⁹³ Annual Report 2007/08, p. 43

⁹⁴ Børsen, July 9th 2008 and June 4th 2008

The sale of Danisco's Sugar division

Ingredients and other ingredient companies receives a lot of requests from customers to develop products that reduces the impact of high prices on raw materials.⁹⁵

Ingredients is represented in the USA, which is the main market after Europe. The dollar is currently at around 4.8⁹⁶ which is very low and negative since Ingredients reports in DKK. On the other side, a low USD currency rate is usually good for exports, however to a lower price.

The slowdown is greater in advanced economies. The Americans, EU and Japan will be cutting their spending, after a period of high spending. India and China still have growth in their economy. However, the global GDP have been increasing well above trend. The global economy needs to adapt to the increased movement of purchasing power from commodity user to producers.⁹⁷

OECD' latest world economic outlook⁹⁸, Deutsche Bank and Merrill Lynch have analysed the situation for the BRIK-countries, which are Brazil, Russia, India and China. The development is that these countries are becoming less dependent on foreign investments and mature markets. Furthermore, the private consumption is increasing and self generated growth is imminent. Hence, the BRIK-countries and other under-developed countries' consumers becomes an interesting target for companies world-wide.⁹⁹ I have not chosen to analyse each country separately, since the development and features are the same for the BRIK countries, from the fact that all of them are maturing emerging markets.

GDP is a common indicator of how a countries economy is doing. A decline in the growth of the GDP is a signal that conditions for companies are worsened and that business activity is slower. The figure on the next page shows the forecasted changes in GDP for Ingredients main market.

⁹⁵ Børsen, August 24th 2007

⁹⁶ www.valutakurser.dk

⁹⁷ <http://www.imf.org/external/pubs/ft/survey/so/2008/RES071708A.htm>

⁹⁸ www.oecd.org/ World Economic Outlook

⁹⁹ Berlingske Tidende Business, July 27th 2008 , Deutsche Bank , Merrill Lynch

The sale of Danisco's Sugar division

Table 3: GDP development

GDP change (%)	2005	2006	2007	2008	2009
Euro area	1,7	2,9	2,6	1,7	1,4
USA	3,1	2,9	2,2	1,2	1,1
Brazil	3,2	3,8	5,4	4,8	4,5
Russia	6,4	7,4	8,1	7,5	6,5
India	9,2	9,7	8,7	7,8	8,0
China	10,4	11,6	11,9	10,0	9,5

Source: OECD

5.1.3 Social

Danisco operates out from the situation that the population is growing, there is a continuous urbanisation, focus on health and nutrition and an ongoing fight against lifestyle deceases such as obesity and diabetes.¹⁰⁰ At the same time the number of old people are peaking. They demand convenient and healthy food easily acquired and prepared. Fast-paced consumer lifestyles are influencing the food industry and ingredients industry.¹⁰¹

The food prices are currently high. Danisco put a lot of effort into sustainability as this is becoming an important issue and pressure point, not only from government's and welfare organizations, but also from investors¹⁰². The sustainability issue has also contributed to the development of the new and potentially large business segment, second generation bio-fuel.

As showed in the section above the standard of living is becoming higher in countries like Russia, India and China. This is due to the extensive growth in their economies. An increasing number of people in these countries are focusing on healthier and more nutritious food. This is related to the increased educational level in these countries.

According to Danisco the main driver of the culinary market is convenience. However, globalisation has a great impact on the kind of convenience products consumers want to buy. Ethnic food trends, as

¹⁰⁰ www.danisco.com

¹⁰¹ http://www.danisco.com/cms/resources/file/eb28430c55ae8f3/danisco_customer_brochure.pdf

¹⁰² Berlingske Tidende Business, July 27th 2008

The sale of Danisco's Sugar division

well as health trends have created new demands. As an example, Ingredients see that reduced salt content or added vitamins and minerals are demanded.¹⁰³

5.1.4 Technological

The technological capacity and organization is vital in the food and ingredients sector. Research and development is taken seriously in Danisco, and is showing in the number of patents, which is currently 7854.¹⁰⁴

A huge part of Danisco's strategy is employing talented and engaged people. Without competent people to develop new products and technologies Ingredients could potentially lose market shares. Competent people is a scarce resource, hence, Danisco give the employee relations a lot of attention.¹⁰⁵

When improving work processes, IT plays a vital role internally as well as externally. Danisco's Partnerweb is a vital platform for distribution of information on innovation to customers and external partners. Today, one-third of their customers are active users of this system. Other vital platforms include IT-based procurement and inventory management. These web-platforms are expected to become increasingly popular with their customers due to the administrative and cost-related benefits.¹⁰⁶

5.1.5 Environmental

The production needs to be visibly environmental friendly. A lot of spokes persons for ecological production have been focusing on local production to save the world from environmental hostile transports. However, studies have shown that this is not the case. For example, it has been proven that it is more environmental friendly to produce a product in New Zealand and transport it to Northern Europe, than if the product were produced in local northern European production facilities closer than 80 km to the market.¹⁰⁷ Even so, ecological products are increasingly popular.

¹⁰³ www.danisco.com/news, November 24th 2005

¹⁰⁴ Annual Report 2007/08, p.25

¹⁰⁵ Annual report 2007/08, p. 34

¹⁰⁶ Annual report 2006/07, p.21

¹⁰⁷ Børsen, May 22nd 2008

The sale of Danisco's Sugar division

The second generation bio-fuel market is already mentioned, but there is no doubt that the environmental and sustainable aspect of it is a key driver of the development. The production will ultimately use waste to produce energy and not crops that could have been used for food production.

5.1.6 Legal

The legislation on ingredients and food differs from market to market. Therefore, Ingredients focuses on being present in the markets where their products are sold.¹⁰⁸ EU and the FDA have the strictest rules and since these are Ingredients' two largest markets, there is a fundamental need for knowledge on local legislation. The EU sets a minimum standard, but often countries have their own standards as well, e.g. in Denmark is the quota for CO₂ emission much lower than set by the EU.¹⁰⁹ In China e.g. the rules are not that strict.¹¹⁰

Legislative changes may constitute a threat to Ingredients. In the longer term, a tightening of, for instance, food regulations could be an advantage to Danisco due to their strong technology platform and product range. The reason for this is that, typically, new legislation aims at better and healthier foods with a high level of technology.¹¹¹

5.2 Analysis of Sugar's business environment

5.2.1 Barriers to entry

The barriers to enter the ingredients market are generally high. First of all, the special competence is needed. Secondly, a large investment in laboratories and production facilities is needed. Thirdly, the bureaucracy and government approvals is not easily obtained, hence a strong legal know-how is needed.

Most of the products are patent protected limiting competition to copy products. The pace in the development of new patents is fast and new and an improved, patent protected product replaces the old products. This makes it difficult to access the market. The patents are valid for 20 years from the filing of the patent application¹¹².

¹⁰⁸ www.danisco.com

¹⁰⁹ Normander, B., H. Bach and H. Gudmundsson (2005) "Er Danmark et foregangsland på miljøområdet?"

¹¹⁰ Børsen, July 11th 2007

¹¹¹ Annual Report 2007/08, p. 43

¹¹² Annual Report 2007/08, p. 63

The sale of Danisco's Sugar division

Ingredients focuses on customer relations and develops products in cooperation with their customers. Large customers are increasingly demanding a complete solution which makes them more dependent on Ingredients. Hence, it is difficult for new entries to break up these relationships as the customer fits its production with Ingredients' products.¹¹³

The competitive environment differs for each segment. As an example, when Danisco acquired Rhodia in 2004, the UK Office of Fair Trading referred to that Danisco estimated that the barriers to entry in the cultures segment was not significant and that smaller producers had expansion possibilities even after the acquisition.¹¹⁴

I view the ingredients market to have high barriers to entry. This is positive for Ingredients which can concentrate on the competition already existing. The high barriers to entry are a factor that will have a positive impact on the Ingredients' returns.

5.2.2 Customer power

As mentioned earlier Ingredients focuses on developing ingredients in cooperation with their customers. The positive effect is that the customer becomes dependent on Ingredients after they fit their production after Ingredients product.

Ingredients is number one or two in all its business segments, but their products are a small part of the end product, although often it is the most important one, giving the end product the feature that becomes the selling point.¹¹⁵ Examples of this could be in the form of giving it healthy features, longer expire date or a nutritional feature. Hence, it is important for the food manufacturer to buy the ingredients from suppliers that have the best ingredients. Ingredients has, as mentioned, 7854 patents and is a market leader which automatically gives them strength against their customers.

¹¹³ www.danisco.com

¹¹⁴ http://www.offt.gov.uk/shared_offt/mergers_ea02/danisco.pdf

¹¹⁵ Investor Presentation May 2008

The sale of Danisco's Sugar division

The need for ingredients that benefits in the fight against lifestyle diseases is vital for food producers. The food producers in turn are subject to fierce competition to get their products on the shelves in the stores. They need to be able to compete on price to get their products on the shelves. Many retail stores often have their own low price labels¹¹⁶. Private labels are typically those manufactured or provided by one company for offer under another company's brand, e.g. the retail store COOP's X-tra brand. These labels are lower in price, but the trend is that more and more people shop this way.¹¹⁷

People are price sensitive and the current high food prices are pressuring many households. Of course, these products have to have certain quality standards as the independent and more expensive brands, such as Ingredients customers, but usually a lower price than a brand product is enough to trigger a purchase. The independent brands have to justify their higher price through superior content, e.g. more healthy and nutritious. Ingredients view the competition between "supermarket" brands and independent brands to not impact them negatively, but rather the customer's competitive situation opens the customer's eyes to the capabilities of the different ingredients.¹¹⁸

Ingredients assess the long term dependence on individual customers to be relatively limited in both Ingredients and Sugar. In Ingredients, the ten largest customers stand for 18 per cent of the total sales.¹¹⁹ The food producers needs to use the ingredients that fits best with the current food trends and adds value to their product. Their success factor is getting their product on the shelves. This is done by having a product with the right demanded ingredients, the lowest price and the best sales statistics. The customer depends on Ingredients' market leading products. If Ingredients does not have the right demanded ingredients the customer of course will go elsewhere.

With high prices for raw materials, Ingredients, points to a number of opportunities to cut down on expensive raw materials in food applications without compromising on the taste, texture, appearance or shelf life of the final product. This attracts and keeps customers¹²⁰.

¹¹⁶http://www.danisco.com/cms/connect/corporate/media%20relations/news/archive/2005/november/businessupdate_47_da.htm

¹¹⁷ www.danisco.com/news November 18th 2005

¹¹⁸ Børsen, June 3rd 2008

¹¹⁹ Annual report 2007/08, p. 44

¹²⁰ www.danisco.com/news 12th of July 2007

The sale of Danisco's Sugar division

5.2.2 Supplier power

Ingredients use organic raw materials such as vegetable oils, animal fats and seaweed in its production. There are many suppliers of raw material for the ingredients production and their geographical location is vital. It is important to Ingredients that the end consumer can trace the ingredient all the way back to the raw material. Therefore, they perform supplier audits to ensure that the suppliers' production meets the standards of from directives and themselves.¹²¹ Last year Ingredients experienced a supply crisis on xylose in China which caused reduced revenues.¹²²

I mentioned above as an advantage for Ingredients versus its customers, that Ingredients has products that can replace costly natural ingredients in the foods the customers are producing. However, the prices on the raw material that Ingredients use, has also risen.

5.2.3 Substitute products

Most of the products Ingredients manufactures are patent protected. As already established, many of the products are developed through a dialog with its customers and food producers. One aspect that has emerged is that enzymes have been able to replace many of the emulsifiers. This is not to a great extent though and Ingredients is a manufacturer of both and is therefore able to handle this change.¹²³

Food trends change and Ingredients always have to keep up with what the end consumers want. At the moment health, nutrition and the fight against obesity and diabetes are important. Due to sudden changes in trends Ingredients constantly has to come up with new products that fits the customers demand and outperforms the competitor. A part Ingredients' risk management strategy is to spread supplier relation both geographically and contractually.¹²⁴ There are of course competitors in the market, but since the products are fitted to each customer, the specific solutions are hard to copy. There are, however, indications that smaller ingredient producers are capture market shares with niche-products. This will be discussed further under the SWOT- analysis.

¹²¹ [www.danisco.com/ Sustainability Report 2008](http://www.danisco.com/SustainabilityReport2008)

¹²² Annual report 07/08, p. 11

¹²³ Business News for the Food Industry, 7th of January 2008

¹²⁴ Annual report 07/08, p. 44

5.2.5 Rivalry

The competition is tough in the ingredients market but Ingredients has a strong position as a market leader in many of its segments. They acknowledge that competition is growing and especially from competitors from low-cost countries.¹²⁵ However, many of the segments in the ingredients sector are consolidated.¹²⁶ One of the most important future possibilities is the production of bio-fuel, which market is valued to around 75 billion USD.¹²⁷ Ingredients does not rule out that due to their competitive market position in some production areas, they will have limited access to participate in industry consolidation.¹²⁸ This is what happened when they decided to divest Flavours. Danisco did not participate in a consolidation previously in the flavour market and became a small player.

Excess capacity and consequently price pressure due to intensified competition is a potential scenario Danisco is trying to prepare for.¹²⁹ There is also tough competition to develop an efficient production of second generation bio-fuel among Danisco, Novozymes and DSM.¹³⁰ Chr. Hansen is another competitor.¹³¹

¹²⁵ Annual Report 2007/08, p. 22

¹²⁶ [www.danisco.com/Investor Presentation May 2008](http://www.danisco.com/Investor%20Presentation%20May%202008)

¹²⁷ Annual report 2007/08, p. 28

¹²⁸ Annual report, 2007/08 p. 44

¹²⁹ Annual report, 2007/08 p. 44

¹³⁰ <http://www.secinfo.com/dsvrn.zG9.a.htm>

¹³¹ http://www.oft.gov.uk/shared_of/mergers_ea02/danisco.pdf

5.3 SWOT Ingredients

I perform the SWOT analysis based on the theories already presented in connection with the strategic analysis of Sugar.

Figure 8 SWOT Ingredients

Strengths	Weaknesses
<ul style="list-style-type: none"> - Strong technological - patents - Partnerships - Sustainability - Wide product range - Collaboration with customers - Technical support and marketing - Local presence 	<ul style="list-style-type: none"> - Have not met targets, to the same extent as competitors - Dependant on expensive raw materials - High competition
Opportunities	Threats
<ul style="list-style-type: none"> - Second generation bio-fuel - Acquisitions - Partnerships - Superior healthy and nutritious ingredients 	<ul style="list-style-type: none"> - Take-over target for capital funds - Expired patents - Increased competition from smaller producers with unique ingredients - Consolidations in the industry

5.3.1 Strengths

Ingredients has a strong technological platform together with a large effort in R&D and highly competent people. They have after years of acquisitions streamlined their business and are looking forward at huge growth potentials across all of their divisions.¹³² Ingredients has currently 7854 patents registered.

¹³² Annual Report 2007/08, p. 22

The sale of Danisco's Sugar division

Furthermore, Ingredients has entered several new strategic partnerships e.g. with DuPont in the work towards developing the production of cellulosic bio-ethanol.¹³³ The strategic partnerships are less capital consuming and minimize risk as opposed to an acquisition.

Ingredients is also acknowledged for its work for sustainability and it is a vital part of their strategy. They are listed on several prestigious sustainability indexes¹³⁴. Sustainability is important to governments, customers and investors and receives a lot of media.

With a range of 10.000 products, 13.000 customers and 17.000 delivery points Ingredients' sales channel provides leverage. The broad product portfolio fits with the saying "think globally – act locally". The large amount of products and customers shows how well Ingredients adapts to customers' needs and trends world-wide.¹³⁵

Ingredients' profound understanding of how its functional ingredients actually work is virtually unrivalled. It is supplemented with collaboration with leading chefs to create industrial recipes with no compromise to taste. Ingredients claims to provide the best technical service and marketing support as well as assistance with process optimisation.¹³⁶

5.3.2 Weaknesses

Ingredients launched the strategic plan "Unfolding the potential" in 2006 which contained restructuring and optimisation plan of Ingredients. So far the efforts have not paid off as expected and Ingredients witnessed that some of its competitors increased their revenues more¹³⁷. Ingredients still hasn't been able to unfold the potential to the full. Hence, shareholders are dissatisfied and seemingly impatient.¹³⁸

Ingredients is dependent on many different raw materials in different places around the world. This makes them vulnerable to poor harvests and a lack of input to their production. Last year they experienced a global supply crisis on xylose, as mentioned earlier, which led to customers delaying their product launches or reformulated away from the xylitol concept.

¹³³ Annual Report 2007/08, p. 5

¹³⁴ www.danisco.com/sustainability

¹³⁵ [www.danisco.com/Investor presentation May 2008](http://www.danisco.com/Investor%20presentation%20May%202008)

¹³⁶ www.danisco.com/news 18th of November 2005

¹³⁷ Børsen, December 14th 2007

¹³⁸ Børsen, June 3rd 2008

The sale of Danisco's Sugar division

5.3.3 Opportunities

There are huge opportunities for second generation biofuel production. McKinsey suggested that the bio-fuel market up until 2020 have a market value of USD 75 billion.¹³⁹ Second generation bio-fuel is more sustainable than the first generation as it is produced on agricultural waste. Potential producers estimate that production is estimated to start on full scale in 2010¹⁴⁰. There is a broad support from governments in the search for a more sustainable energy production, which do not use raw material that could have been used for food production and, hence, not increasing food prices.

5.3.4 Threats

After announcing the sale of Sugar the rest of Danisco, i.e. Ingredients have now become a target for different capital funds. The first speculation is already going in the media. After acquiring some larger companies DI has now streamlined its organisation and appears attractive. The debt will get lowered because of the sale of Sugar aswell. Analysts claim that after a divestment of Sugar Danisco will become highly interesting for international private equity funds. This is because the funds do not see a high growth potential in the highly regulated and regional sugar industry.¹⁴¹

Ingredients' focus on bio-tech products and the technological platform has top priority. They protect own interests via patents and the enforcement of them. This includes protection against other companies' patent applications, which could become a threat to Danisco.¹⁴²

Another trend is that Ingredients is experiencing competition from small ingredients producers with unique products.¹⁴³ An alternative here is for Danisco to buy them. Furthermore, the private labels constitutes a threat, since more end-consumers buys these products

5.3.5 Summary of the strategic analysis Ingredients

The PESTEL analysis showed that Ingredients is subject to many governmental regulations on health and food safety. They have themselves, as mentioned above, stated that they view the political risk as low. Therefore, I view the political environment to have a neutral impact on Ingredients.

¹³⁹ Annual Report 2007/08, p.

¹⁴⁰ www.novozymes.com

¹⁴¹ Børsen, June 3rd 2008

¹⁴² Annual report 2007/08, p. 25

¹⁴³ <http://www.ue.dk/nyhedsarkiv/7705.aspx>

The sale of Danisco's Sugar division

Ingredients is not impacted by economic cycles, but high prices on raw material have impacted on Ingredients and food. In the emerging markets there is still a considerable growth and private consumption is increasing in these regions. The current low value of the dollar is negative for Ingredients since they report in Danish kroner. In light of the factors mentioned above I find that the economical factors have a slightly negative impact on Ingredients.

The population is growing, meaning more mouths to feed. The demand for convenient, healthy and nutritious food creates opportunities for producers in possession of knowledge and the right products. It is important to keep up with fast changing trends. I view the social factors to have a positive impact on Ingredients' business. Their local presence makes them capable of picking up local trends.

Ingredients has a well developed technological platform, and is increasing its effort in R&D. They also acknowledge the need for competent people and protection of patents, old and new ones. I view them to be impacted positively by the technological factors.

Sustainability is important for governments and investors. Danisco focuses a lot on sustainability and is noted on many sustainability indices. I view the environmental factors to have a neutral impact on Ingredients.

In the analysis of Ingredients' business environment on the micro-level I find that there are possibilities for new entries in some of the segments, like cultures. Though, generally there are barriers to entry in the form of the necessity of knowledge and technological facilities. Ingredients does not view themselves to be dependent on of particular customers. They put a lot of effort into customer relationships and product development through cooperation. Ingredients has also spread its suppliers geographically and contractually to reduce risk of shortage of raw materials and suppliers have to meet sustainability standards. There are competitors on the market that can offer alternative products; however, many of the products are developed in collaboration with the customer. Patents protect Ingredients from copy cats. The ingredients industry is a business where consolidations often take place and sometimes this is missed and Ingredients could be left back as a small player. This happened with the flavour division. Currently, Ingredients is number one or two in every segment.

The sale of Danisco's Sugar division

Therefore, based on the analysis of the business environment on the macro- and micro-level and together with the results from the SWOT- analysis, I find that Ingredients has a strategy that fits with its business environment. With this strategy they are pursuing areas with great growth potentials. However, the bio-fuel area is still not a defined market and there is a risk that it will not generate the earnings that are hoped for.

6. Financial Analysis of Ingredients and Sugar

In this chapter I conduct a financial analysis of Danisco based on historical numbers from their segmented annual reports. I have used the five latest annual reports, from 2003/04 to 2007/08. A reformulation of the income statements and balance has been necessary and I have discussed the adjustments I have made below. An analysis of the two segments key ratios compared with competitors is conducted to evaluate Ingredients and Sugar's performance. The historical analysis will, combined with the strategic analysis, constitute the starting point for the budgeting in the next chapter. Both the original segment statement from Danisco and my adjusted version can be found in Appendix 1.

The financial statements have since 2004/2005 been prepared in accordance with the International Financial Reporting Standards (IFRS). Earlier years International Accounting Standards (IAS) has been followed.¹⁴⁴

6.1 Adjustments to the financial statements

From 2004/05 goodwill is not to be amortised at a given rate in the income statement. Goodwill is under IFRS 3 (Business Combinations) to be tested annually for impairment after a set of guidelines.¹⁴⁵ If the goodwill is written down as a result of found impairment, it cannot be reversed. To make the financial statements compatible I have reversed the amortisation from 2003/04 and adjusted the income statements and balance sheets for the following years as viewed in Appendix 1.

Write down of goodwill is found in the note for special items in the income statement special items are considered as non-recurring and are therefore adjusted for in the income statement.¹⁴⁶ The reclassification of the income statements and balance sheets is limited due to the limited and incomplete information in the segment reporting, but found extensive enough to use in the analysis.

Due to the limited information in the segment report, I have chosen to only adjust for the above mentioned factors. I have decided not to do an arbitrary distribution of items in the financial statement

¹⁴⁴ Annual Report, 2007/08, p. 60

¹⁴⁵ Annual Report, 2004/05, p. 31

¹⁴⁶ See Appendix 1

The sale of Danisco's Sugar division

for the group. This is because I mean it would only increase the probability for a less valid result as it increases the numbers of items I have to estimate myself.

To create a complete balance based on the limited information it was necessary to distribute equity and net interest-bearing debt. The net interest-bearing debt is distributed after the segments' share of invested capital.

To find the amount of equity I used the notion that:

$$\text{Invested Capital} = \text{Net interest-bearing debt} + \text{Equity}$$

However, combined with the adjustments made for the invested capital earlier and the equity calculation above, the sum of the segments' equity does not fit with Danisco's total equity. When looking in the annual report for 2007/08, one can see that the relationship is not fulfilled at a group level either, where invested capital amounts to 23.312 and the sum of equity and net interest-bearing debt is 22.087.¹⁴⁷ The same difference is far less the previous accounting years.

6.2 Historic financial analysis Sugar and Ingredients

I have chosen to present the historic financial analysis of Ingredients and Sugar together. This is because it is interesting to see the development for both of the segments held up against to each other in relation to the decision to sell Sugar.

6.2.1 Return on Invested Capital (ROIC)

Return on Invested Capital measures the return the invested capital. In other words how well the company is using its equity and debt financed funds to generate returns.

¹⁴⁷ Annual Report 2007/08, p. 4

The sale of Danisco's Sugar division

ROIC have been calculated as: $ROIC = \frac{NOPAT}{Invested\ Capital + Goodwill}$

where NOPAT¹⁴⁸ is the net operating profit after tax, but before interest expenses.

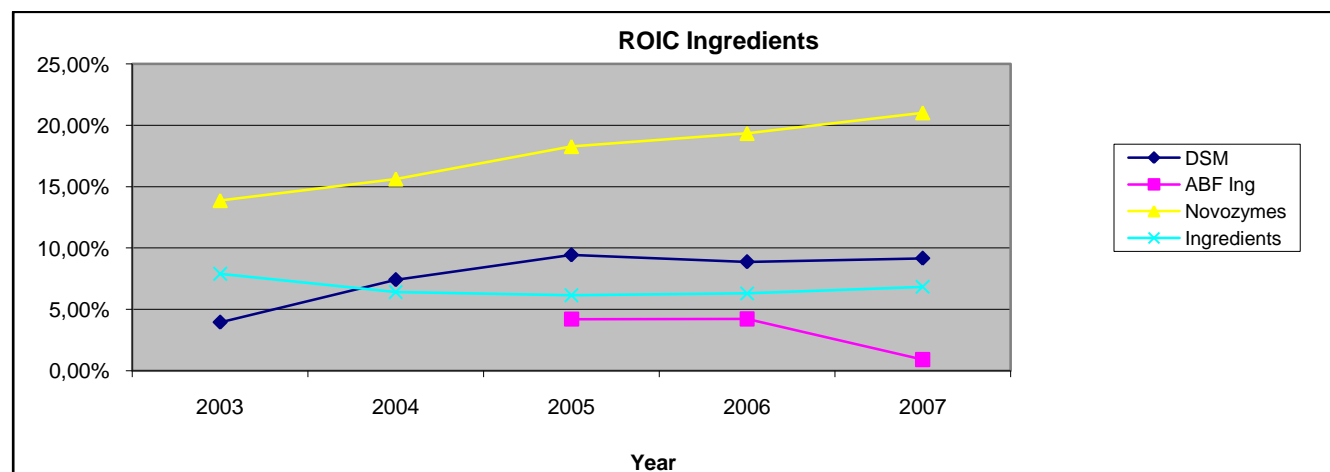
Figure 9: ROIC

Year	2003/04	2004/05	2005/06	2006/07	2007/08
Ingredients	7,90%	6,41%	6,14%	6,29%	6,84%
Sugar	8,72%	8,11%	6,14%	5,84%	6,78%

Source: Appendix 1/Ratios_budget

For Ingredients the ROIC have been decreasing from the start of the analysed period until 2006/07. ROIC decreased from the start of the period mainly due to increased invested capital from the acquisition of Rhodia Food Industries in May 2004 and the acquisition of the remaining 58% of Genencor. From 2005/06 Ingredients has been streamlining their business by divesting the Flavour division, which fell outside the major consolidation activity between competitors. This has resulted in an increased in 2007/08 from 2006/07. Another reason for the negative development of ROIC is poor development in net sales.¹⁴⁹

Figure 10: ROIC Ingredients



Source: Appendix 1/Ratios_budget

¹⁴⁸ See Appendix 1/Proforma_balance

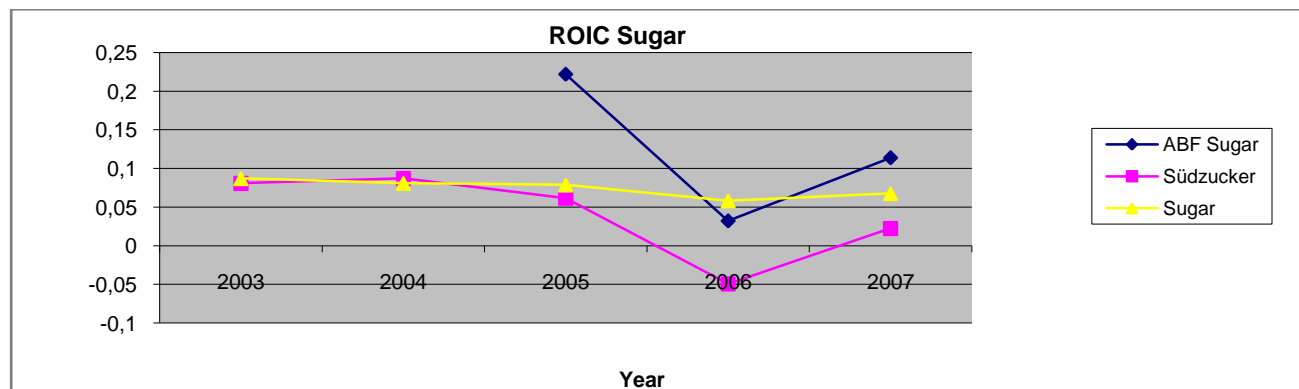
¹⁴⁹ See Appendix 1/Proforma_balance

The sale of Danisco's Sugar division

Figure 10 shows the development compared to its competitors. The development in ROIC generally is flat, with ABF Ingredients segment, the only compared company with a lower ROIC. The difference in ROIC levels can be explained by different stages of maturity of their businesses and at what stage in the product lifecycle the companies are in.¹⁵⁰ Except from Novozymes, which have experienced a superior growth, Ingredients development of the ROIC is following the same trend as the compared competitors, however at a seemingly low level. Analysts claim that Danisco have underperformed, and the development and level of ROIC is showing that this actually might be the case.¹⁵¹

Sugar has also experienced a drop in their ROIC. This is mainly due to the sugar reform which has reduced quotas, and hence, the revenues. It is not only the reduction in quotas and reimbursements, but also the uncertainty of the future development of the sugar market that has had a negative impact on the sales. The invested capital has also decreased impacted by a reduction of 50 % of the goodwill over the analysed period. In 2007/08 invested capital increased even though goodwill was written down by DKK 600 million. Even the net operating assets increased even if the revenues dropped.

Figure 11: ROIC Sugar



Source: Appendix 1/Ratio_budget

According to figure 11, Danisco is performing mediocre compared to similar businesses such as Associated British Foods Sugar segment and German Südzucker.

¹⁵⁰ Elling, J.O & Sørensen, O. (2005), "Regnskabsanalyse og værdiansættelse- en praktisk tilgang", p. 86

¹⁵¹ Børsen, December 14th 2007

The sale of Danisco's Sugar division

6.2.2 EBIT-margin

The EBIT-margin measures the return from the company's operations before tax and interests:

$$EBIT - margin = \frac{EBIT}{Net Sales}$$

where EBIT is before special items.

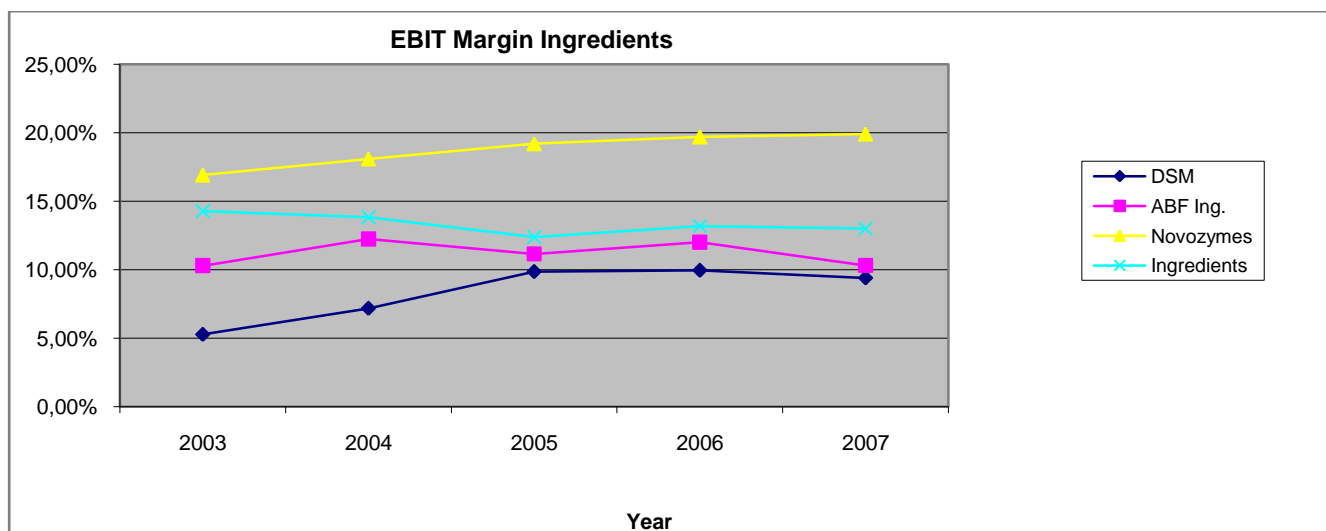
Figure 12: EBIT Margin

Year	2003/04	2004/05	2005/06	2006/07	2007/08
Ingredients	14,29%	13,84%	12,38%	13,19%	13,00%
Sugar	14,28%	12,99%	11,76%	8,62%	9,93%

Source: Appendix 1/Ratio_budget

From 2003/04 the development of the EBIT-margin has been unstable for Ingredients. Danisco adjusted its target from 15% to a minimum of 13.5% for Ingredients. The reason for this seems to be caused by the operating profit (EBIT) increasing less than the revenues. The drop in 2005/06 was mainly due to increased R&D expenses in Ingredients¹⁵². Compared to its competitors, figure 13, Ingredients has a good EBIT-margin, but as mentioned earlier, not as good as analysts and media have expected. The trend is flat, which is not optimal.

Figure 13: EBIT Margin Ingredients



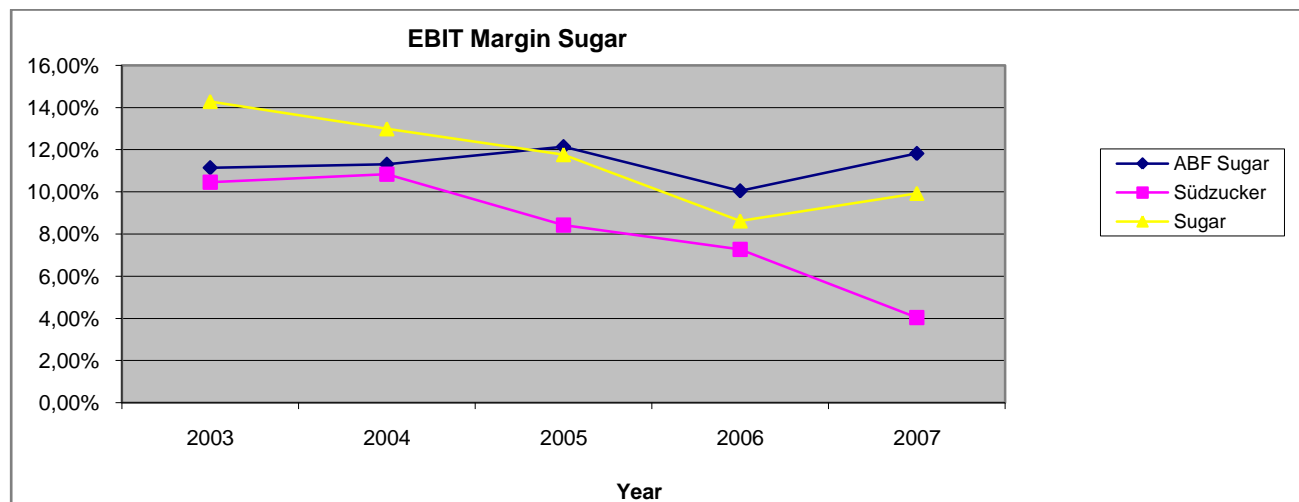
Source: Appendix 1/ Ratios budget

¹⁵² Annual Report 2005/06

The sale of Danisco's Sugar division

Sugar also experienced a drop in the EBIT- margin over the analysed period, which is attributable to the reduced revenues caused by the sugar reform. In total there has been a negative development of the EBIT-margin from 14.28 per cent in 2003/04 to 9.93 per cent in 2007/08. As the graph shows in figure 14, Sugar is performing well compared to its competitors, confirming that Sugar is one of the markets most efficient sugar producers.¹⁵³

Figure 14: EBIT Margin Sugar



Source: Appendix 1/Ratios_budget

6.2.3 Capital Turnover

Capital Turnover (CT) measures how efficient the invested capital creates revenue. The higher the CT is the more efficient the invested capital is used.

The ratio is calculated as: $CT = \frac{Net\ Sales}{Invested\ Capital}$

Table 4: Capital Turnover

Year	2003/04	2004/05	2005/06	2006/07	2007/08
Ingredients	0,81	0,66	0,69	0,66	0,73
Sugar	0,89	0,89	0,93	0,94	0,95

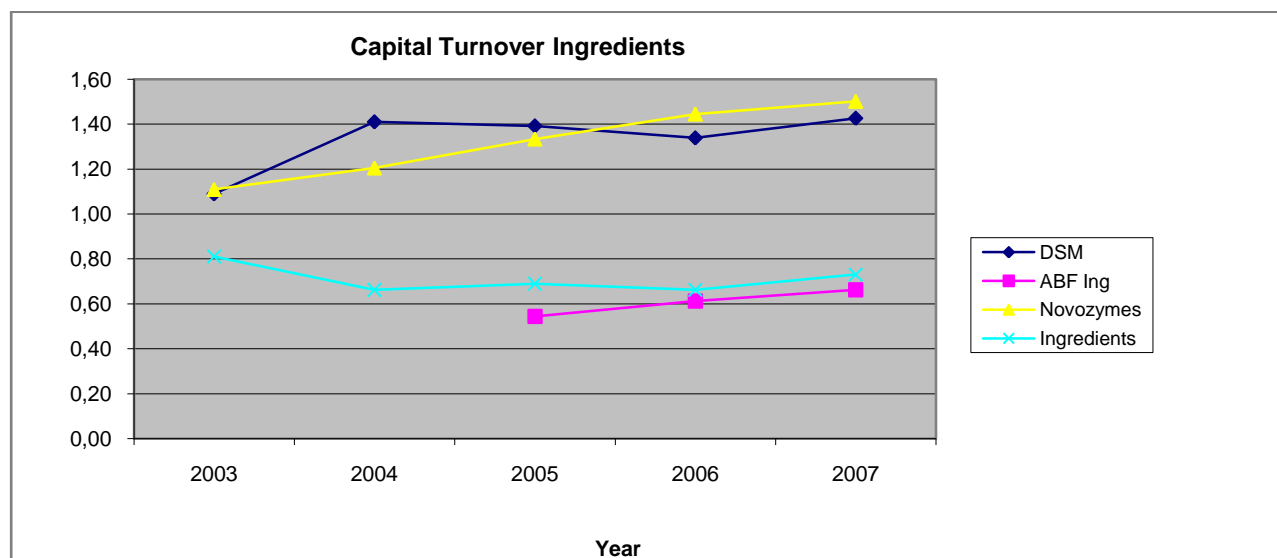
Source: Appendix 1

¹⁵³ www.danisco.com/sugar

The sale of Danisco's Sugar division

Ingredients experienced a fall in the capital turnover in 2004/05 which is connected with the acquisition of Genencor which was effective as of 30th of April 2005¹⁵⁴. The CT-ratio has been increasing since then, when disregarding 2006/07 which is adjusted for the divested Flavours division¹⁵⁵. Compared with the competition the ratio is a low. This has also been criticised, because competition, as seen in figure 15, is performing better. However, the CT is increasing indicating that invested capital is used more efficiently. The development fits well with Danisco's strategy of "Unfolding the potential"¹⁵⁶.

Figure 15: Capital Turnover Ingredients



Source: Appendix 1/Ratios_budget

Sugar has a relatively low CT, but this is characteristic for sector. The trend is that the CT is increasing despite decreasing revenues over the period, indicating that Sugar actually is increasing its efficiency. The uncertainty of the future sugar market and reductions of quotas have reduced both revenues and invested capital. Write-down of goodwill (200M DKK in 05/06 and 600 in 07/08) has also contributed the increase of CT despite the reduced revenues. Compared with Südzucker the CT is a bit lower, as viewed in figure 16. The CT-level have been fairly stable through the period.

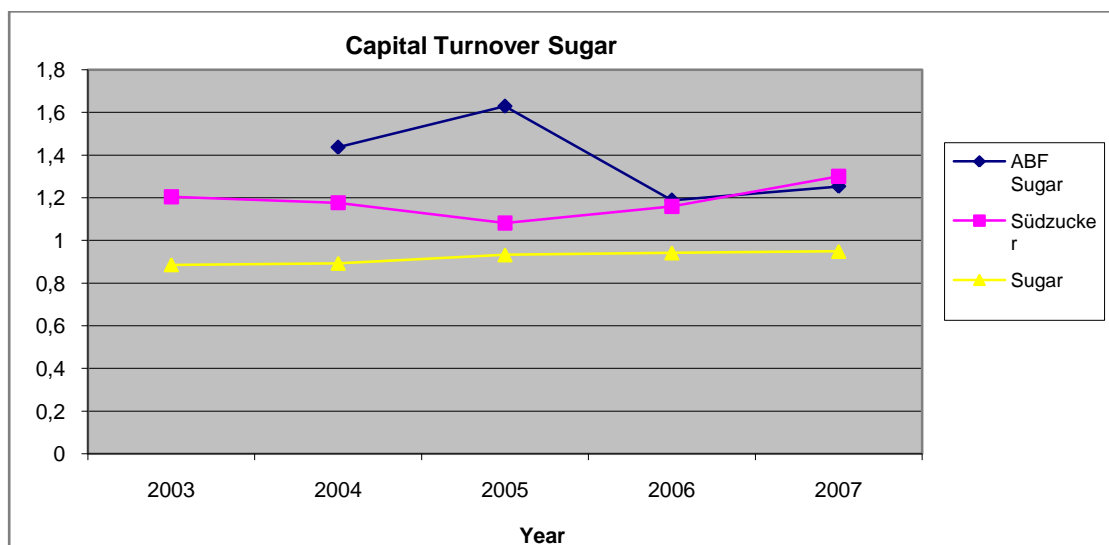
¹⁵⁴ Annual Report 2007/08, p. 51

¹⁵⁵ Annual Report 2007/08, p. 15

¹⁵⁶ Annual Report 2006/07

The sale of Danisco's Sugar division

Figure 16: Capital Turnover Sugar



Source: Appendix 1/Ratios_budget

6.2.4 FGEAR

The invested capital is financed through equity and debt and the financial gearing (FGEAR) measure the relationship between the two sources of financing. A positive gearing might increase the return of invested equity, while a negative gearing might worsen the return. Whether it is a positive or negative gearing is determined by the SPREAD, which is presented.¹⁵⁷

$$\text{Formula FGEAR: } FG\text{EAR} = \frac{\text{Average NIBD}}{\text{Average Equity}}$$

Table 5: FGEAR

Year	2003/04	2004/05	2005/06	2006/07	2007/08
Ingredients	0,72	0,84	0,97	0,97	0,85
Sugar	0,72	0,88	0,97	0,97	0,85

Source:

Appendix

1/Ratios_budget

Ingredients increased their financial gearing under over the analysed period. The increase in gearing could have been caused by the acquisitions of Rhodia and Genencor, which might have been debt financed to some extent¹⁵⁸.

¹⁵⁷ Elling, J.O & Sørensen, O. (2005), "Regnskabsanalyse og værdiansættelse- en praktisk tilgang", p.174

¹⁵⁸ www.danisco.com/investor_relations/acquisitions

The sale of Danisco's Sugar division

Sugar shows the same development as sugar, but is now lower geared than Ingredients. This is natural since Sugar is not acquiring new companies and are experiencing a lower growth.

6.2.5 SPREAD

Closely linked to FGEAR is SPREAD. SPREAD is defined as the difference between ROIC and r , where r is the interest rate on mortgages undertaken by the company.

r is calculated as: $r = \frac{\text{Net Financial Expenses}}{\text{Net Interest-bearing Debt}}$

Table 6: SPREAD

Year	2003/04	2004/05	2005/06	2006/07	2007/08
Ingredients	5,59%	5,33%	4,48%	2,11%	3,07%
Sugar	4,41%	3,27%	2,37%	2,19%	2,76%

Source: Appendix 1/Ratios_budget

A negative SPREAD means that a company has a negative financial gearing, meaning that the return on equity (ROE) is negatively impacted by the financial gearing. If SPREAD is positive, ROE increases because of the extra leverage as compared to ROIC. The link is:

$$\text{ROE} = \text{ROIC} + [\text{FGEAR} * \text{SPREAD}].$$

FGEAR in other words decides the degree of the financial gearing and together with SPREAD it shows the extra return on equity the financial gearing gives. FGEAR and SPREAD are independent value drivers that can increase the return on the owners' equity.¹⁵⁹

The trend for both Ingredients and Sugar is a decreasing SPREAD and FGEAR. This is coherent with the reduced acquisition activity and the focusing of Danisco's business.

I will return to a discussion around the optimal capital structure later, but for now state that Danisco is well off with being financially geared because of the positive SPREAD.

¹⁵⁹ Elling, J.O & Sørensen, O. (2005), "Regnskabsanalyse og værdiansættelse- en praktisk tilgang", p. 175

The sale of Danisco's Sugar division

6.3 Summary historic financial analysis

The two segments have been analysed in the same chapter to more easily see whether Danisco's performance is really lagging because of Sugar as stated in Børsen.¹⁶⁰

Ingredients have not had the growth that was targeted by themselves and external analysts. The revenues have not increased. The ROIC and EBIT- margin has been decreasing over the analysed period. There are, however, tendencies towards a more efficient use of the invested capital through an increased capital turnover ratio. Danisco have reduced their targets for the EBIT-margin. When comparing Ingredients to competitors in the same markets, the trend is similar. However, the levels of ROIC and EBIT and capital turnover are lower. The Ingredients segment is positively geared, which adds approximately 2% to the ROE.

Sugar has experienced a negative development in their revenues the past three years. This is, as mentioned frequently in the text, due to the EU sugar reform. The sugar reform has gradually reduced the quotas, but is now clearer regarding the future allowed production level. EBIT- margin and ROIC are showing a positive trend the past two years and Danisco have upgraded their expected revenues for the next year¹⁶¹.

¹⁶⁰ Børsen, March 19th 2007

¹⁶¹ www.danisco.com/news, March 4th 2008

7. Budget

In this part of the thesis I will forecast future cash flows based on a pro-forma budget.¹⁶² Danisco's own estimates for the future together with external analysts' estimates of future earnings will be used to define a growth rate. The growth rates tend to approach an average over time¹⁶³. Therefore, I have chosen a budget period of five years, which I mean is sufficient for the growth rate to approach an average.

Due to the limited information in the segment reporting I have chosen to calculate important numbers in the balance by the use of key ratios. I have then budget the key ratio which in turn is used to set up a pro-forma balance¹⁶⁴. An alternative could have been to divide every item in the Danisco group's financial statement arbitrarily. I find it error increasing to do that, since I then invent numbers that already exists on the group level. The sum of the invented segment numbers would not equal the true value in Danisco's financial statements. I will forecast revenues, EBITDA-margin, EBIT-margin, capital turnover, Invested Capital and net interest-bearing debt (NIBD).

7.1 Forecast Ingredients

7.1.1 Revenues

In the annual report for 2007/2008 Danisco targets an organic growth 5-7%. This corresponds to a targeted EBIT-margin of 13.5 per cent. The median of analysts' forecasts for the net sales over a five year period is approximately 4.0 per cent¹⁶⁵. In the annual report of 2007/08 Ingredients calculate with a net sales growth between 3 and 5 per cent the next five years. Based on analysts' forecasts and Danisco's statements, I have set the net sales growth to 4 per cent for the next five years to come. The ingredients and the food production industries are selling despite economic turmoil¹⁶⁶.

¹⁶² See Appendix 1/Proforma_balance

¹⁶³ Elling, J.O & Sørensen, O. (2005), "Regnskabsanalyse og værdiansættelse- en praktisk tilgang", p. 227

¹⁶⁴ www.danisco.com/cms/connect/corporate/investor%20relations/analysts%20and%20estimates/consensus%20estimates/analyst_consensus_en.htm

¹⁶⁵ www.danisco.com/investor_relations

¹⁶⁶ Berlingske Tidende Business

The sale of Danisco's Sugar division

7.1.2 EBITDA-margin

The EBITDA-margin has the past years have been stable around 18 %. There is nothing that indicates that Ingredients will become more inefficient, so I have decided to budget with an 18 % EBITDA-margin. The number is estimated to make the calculation of future depreciation easier. Depreciation is in my pro-forma balance sheet¹⁶⁷, which is adjusted for special items, the difference between EBITDA and EBIT. It is my opinion that this is just as optimal as other arbitrary calculations of future depreciation.

7.1.3 EBIT-margin

Danisco has targeted the EBIT-margin of Ingredients to 13.5 % after adjusting it from 15 %. The past years the EBIT-margin have been stable around 13 %. A consensus estimate of the EBIT-margin before special items for Ingredients from analysts is available on Danisco's home page confirms this level¹⁶⁸. Based on the historic development, the consensus estimates of analysts and Danisco's own statements regarding the targeted EBIT-margin, with the fact that they have not been able to reach their targets earlier in mind, I have set the growth in EBIT- margin to 13 % annually the next five years.

7.1.4 Capital Turnover and Invested Capital

The capital turnover has been increasing meaning that Ingredients is using its invested capital more efficiently to generate revenue. Their competitors however, seem to be even more efficient (see figure). Based on the historic development¹⁶⁹ and the fact that they have been streamlining their organisation, I have chosen to use a rate of 0.75 for the capital turnover.

The following relationship has been used to budget invested capital¹⁷⁰:

$$Invested\ Capital_t = Net\ Sales_{t+1} + 1 * \left(\frac{1}{Turnover_t} \right)$$

¹⁶⁷ See Appendix 1/Proforma_ratios

¹⁶⁸ www.danisco.com/cms/connect/corporate/investor%20relations/analysts%20and%20estimates/consensus%20estimates/analyst_consensus_en.htm

¹⁶⁹ See Appendix 1/Ratios_budget

¹⁷⁰ Elling, J.O & Sørensen, O. (2005), "Regnskabsanalyse og værdiansættelse- en praktisk tilgang", p.228

The sale of Danisco's Sugar division

Forecasted invested capital is forecasted to decrease gradually as the revenues continue to decline. This can be seen in the pro-forma statement in Appendix 1.

7.1.5 FGEAR

The FGEAR is forecasted as the same for Ingredients and Sugar. This is a consequence of my choices made regarding the estimation of net interest-bearing debt and equity earlier, which makes the capital structure identical for Ingredients and Sugar¹⁷¹. Based on the development in the historic financial analysis I have set FGEAR to be 0.85 over the whole budget period.

To budget the net interest-bearing debt I have used the relationship¹⁷²:

$$NIBD = \left(1 - \frac{1}{1 + FGEAR_t}\right) * Invested\ Capital_t$$

The budget net interest-bearing debt can be found in Appendix 1. It is budget to gradually increase in pace with higher costs to generate the higher revenues.

7.2 Forecast Sugar

7.2.1 Revenues

Sugar upgraded its expectations for next year's net sales based on an improved outlook for the European sugar market. The long term revenues are forecasted to be of at least DKK 6.0 billion. For the first budget year I have budgeted with growth in revenues of 4 % based Danisco's upgrade statement from March 4th 2008. They state that performance is better than expected.¹⁷³ Furthermore, I have set revenues to decline with 5 % in 2009/10 and stabilise at a rate of -2.0 per cent per year after that. The decline can be attributed to the uncertainties around the sugar reform and the increased

¹⁷¹ See page 60

¹⁷² Elling, J.O & Sørensen, O. (2005), "Regnskabsanalyse og værdiansættelse- en praktisk tilgang", p. 231

¹⁷³ www.danisco.com/news, March 4th 2008

The sale of Danisco's Sugar division

competition from non-European producers that it will contribute to. Hence, the long term revenues forecasted by me, is lower than Danisco's own targets.

7.2.2 EBITDA-margin

The EBITDA-margin for Sugar is budgeted to 14 % annually based on the historic development which can be seen in Appendix 1. This is in my opinion a conservative rate.

7.2.3 EBIT-margin

Danisco state that the EBIT-margin will be at least 10 % after the full implementation of the EU sugar reform.¹⁷⁴ The EBIT-margin in 2006/07 was reduced to 8.62 %, after a plunge in the revenues. It recovered again in 2007/08 to approximately 10 %, but due to the uncertainties I have set the EBIT-margin to 9 % for the budget period.

7.2.3 Capital Turnover and Invested Capital

Sugar claims to be one of Europe's most efficient producers of sugar.¹⁷⁵ The development of the capital turnover has, as shown in the historical analysis above, been fairly stable. However, competitors have as shown earlier in the thesis, higher values for this ratio. Based on the historic development and the fact that sugar is a mature business, I set the capital turnover to a stable 0.85 throughout the budget period.

The invested capital is calculated though the same formula as presented in the forecast for Ingredients. It is expected to increase gradually over the whole budget period; in line with the revenue growth. The full pro-forma statement can be viewed in Appendix 1.

7.2.4 FGEAR and Net interest-bearing debt

Sugar's FGEAR is identical with Ingredients'.¹⁷⁶ Net interest bearing debt is budget to decrease. This can be seen in connection with the reduced expected revenues.

¹⁷⁴ www.danisco.com/news, March 4th 2008

¹⁷⁵ www.danisco.com

¹⁷⁶ See p. 71 for the formula and Appendix 1/Proforma_statement for the calculated values

8. Valuation of Sugar & Ingredients

This chapter will estimate the enterprise value of Ingredients and Sugar. Enterprise value is here understood as the value of the equity. The theoretical framework and the model have partly been presented and argued for earlier in the thesis.¹⁷⁷

8.1 DCF Valuation Model

There are several existing models that can be used to calculate the enterprise value (EV). The different models are built on different assumptions, but should in theory give the same result.¹⁷⁸ I have chosen to use the DCF- model where the total capital value of the company is estimated and adjusted for the net interest bearing debt. The cash flows are discounted back in time and create a net present value (NVP) of the company. The calculation and estimation of the discount rate (WACC) is presented later in this chapter.

Formula¹⁷⁹:

$$EV = \frac{FCF}{1 + WACC} + \frac{FCF2}{(1 + WACC)^2} + \dots \rightarrow \infty - NIBD$$

Where

FCF = Free Cash Flow

WACC = Weighted Average Cost of Capital

TV = Terminal Value

NIBD = Net interest-bearing debt

¹⁷⁷ See page 9

¹⁷⁸ Elling, J.O & Sørensen, O. (2005), "Regnskabsanalyse og værdiansættelse- en praktisk tilgang", p. 47

¹⁷⁹ Elling, J.O & Sørensen, O. (2005), "Regnskabsanalyse og værdiansættelse- en praktisk tilgang", p. 42

The sale of Danisco's Sugar division

8.1.1 WACC

The DCF- model discounts the future free with the weighted average cost of capital (WACC).

Formula WACC¹⁸⁰:

$$WACC = rD(1 - T)\left(\frac{D}{V}\right) + rE\left(\frac{E}{V}\right)$$

Where

E = Share of equity based financing

D = Share of debt based financing

r = Interest on debt

T = tax rate

r_E = return premium on equity

r_D = return on debt

The variables constituting WACC are estimated and determined below.

8.1.2 Capital structure

When the firm changes its mix of debt and equity securities, the risk and expected returns of these securities change, however, the asset beta and the company cost of capital do not change¹⁸¹. Danisco does not allocate the net interest-bearing debt to Ingredients and Sugar in its annual report. I have allocated the reported net interest-bearing debt to the two segments by their fraction of Danisco's total of invested capital (see Appendix 1 for the development of the capital structure). This arbitrary distribution has the consequence that both Sugar and Ingredients get the same capital structure.

Immediately this is not a wrong assumption since they are members of the same group, and the fact that their mother company are not able to present a segment distribution. Nordzucker is financed with a 40 % share of equity and 60 % debt. Another competitor, Südzucker, have a 60 % equity financed share. Danisco had a capital structure of 60 % of equity and 40 % of debt 2007/08. Sugar has over the analysed period had a capital structure, based on my calculations, where the debt has been higher than

¹⁸⁰ Brealey, R.A. and S.C. Myers (2000) "Principles of Corporate Finance", p. 548

¹⁸¹ Brealey, R.A. and S.C. Myers (2000) "Principles of Corporate Finance", p. 231

The sale of Danisco's Sugar division

the share of equity. In the calculation of WACC for Sugar and Ingredients I have assumed that the capital is structured with a 60 % share of equity.

DSM, Ingredients' Dutch competitor, has over the analysed period an average equity share of 55 %. Associated British Foods have operated with a 60 % equity share and Novozymes 40 %. Therefore, I have determined that an appropriate capital structure for Ingredients. Based on this, I mean that my assumption of a capital structure with a 60 per cent share of equity is sensible.

The assumption that Ingredients and Sugar has the same capital structure is, as mentioned, a consequence of the limited segment information. It can be argued that Ingredients should have a larger share of the debt, due to the larger acquisition activity. However, after the sale of the Flavours division Danisco's net interest-bearing debt was significantly reduced. Hence, I mean my assumption would not increase the error potential for my calculations.

8.1.3 Interest cost of debt (r_D):

Danisco does not present the interest rate on their debt, which would have been the most correct value for r_D . However, they mention that the average interest rate duration was 4 years. Therefore, I have chosen to use the interest rate on a 5 year government bond plus a risk premium of 2 % for Sugar and Ingredients.

Table 7: Interest rate 5 year government bond

2004	2005	2006	2007	2008
3,35	2,86	3,74	4,19	4,16

Source: Eirik Bang Sjøberg

The assumption is that Ingredients and Sugar have the possibility to achieve equal terms for their debt financing. This is a conservative measure since the risk premium on debt usually is between 1-2 %. This being said, neither of the two segments have problems covering their interest expenses. The interest rate on debt before tax is calculated to 6.77 % for Ingredients and Sugar. I base the high risk

The sale of Danisco's Sugar division

premium on the fact that Danisco has a floating interest rate on most of their debt and the growing financial instability.¹⁸²

8.1.4 Tax rate

The tax rate T is set to 27 %. Danisco have received a reduction in their tax rate from 28 % to 25 %. However, in their own outlook statement in the annual report for 2007/08 they operate with the mentioned 27 per cent rate.¹⁸³

8.2 CAPM

To determine the required return on equity (r_E) used in the calculation of WACC, I use the Capital Asset Pricing Model (CAPM). The CAPM uses the relationship between different companies' return and market return with the assumption that investors demand a risk premium¹⁸⁴. The formula of the CAPM and the variables needed to calculate the demanded return on equity (r_E) is presented below.

Formula CAPM¹⁸⁵:

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

r_E = owners requested return on investment

β = beta

r_f = risk free rent¹⁸⁶

$r_m - r_f$ = the markets risk premium

The markets risk premium is set to 5 % based on PricewaterhouseCoopers' (PWC) annual analysis, where they interview and collect data from banks, companies and analysts.¹⁸⁷

¹⁸² Annual report 2007/08, p. 46

¹⁸³ Annual Report 2007/08, p.75

¹⁸⁴ Brealey, R.A. and S.C. Myers (2000) "Principles of Corporate Finance" p. 195

¹⁸⁵ Brealey, R.A. and S.C. Myers (2000) "Principles of Corporate Finance", p. 198

¹⁸⁶ Danmarks Statistik, www.dst.dk

¹⁸⁷ www.pwc.com/business_calculation

8.2.1 Beta (β)

The Beta is a measure used to determine a company's sensitivity to changes in the market it is operating in. A beta of 1 indicates that the company is following the changes in the market precisely. While a beta less than 1 indicates that it is influenced to a lesser extent by changes in the market. If the beta is over 1 the impact on the company will in theory be amplified, and greater than the impact on the market itself.

I could perform a regression of the Danisco stock and the market, but I would only get the Beta for Danisco in total. Therefore, I have viewed the Beta of competitors. Jyske Bank has placed Danisco in a Beta-interval between 0.8 and 1.3.¹⁸⁸ My assumption is that Ingredients is more risky than Sugar. I base this on the tougher competition in the Ingredients market, and the fact the e.g. Novozymes has a Beta of 1.26¹⁸⁹. Südzucker have a Beta of 0.95.¹⁹⁰ Hence, I have determined a conservative beta for Ingredients to be 1.2 and 0.90 for Sugar. It is important to be aware that the Beta's change over time and are different in a bull or bear market.¹⁹¹

¹⁸⁸ <http://www.jyskebank.dk/finansnyt/aktier/aktier/16092.asp>

¹⁸⁹ www.euroinvestor.dk

¹⁹⁰ www.bloomberg.com

¹⁹¹ www.danskebank.dk/Link/beta17022004

The sale of Danisco's Sugar division

8.2.2 Calculation of WACC and CAPM

After discussing and establishing all the variables I am now able to calculate the demanded return on equity and finally the WACC which future free cash flows will be discounted with in the valuation:

Ingredients:

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

$$r_E = 4,7 + 1,2(5)$$

$$r_E = 10,7 \%$$

$$WACC = r_D(1 - T)\left(\frac{D}{V}\right) + r_E\left(\frac{E}{V}\right)$$

$$WACC = 6,77(1 - 0,27)\left(\frac{40}{100}\right) + 10,7\left(\frac{60}{100}\right)$$

$$WACC = 8,40 \%$$

Sugar:

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

$$r_E = 4,7 + 0,95(5)$$

$$r_E = 9,2 \%$$

$$WACC = r_D(1 - T)\left(\frac{D}{V}\right) + r_E\left(\frac{E}{V}\right)$$

$$WACC = 6,77(1 - 0,27)\left(\frac{40}{100}\right) + 9,2\left(\frac{60}{100}\right)$$

$$WACC = 7,50 \%$$

This means that the investors expect a return of 10.7 % for Ingredients and 9.2 % and the weighted average cost of capital is calculated to 8.40 % and 7.50 %. Danisco themselves operates with a WACC of 7.5 % for both Ingredients and Sugar as their discount rate for the future cash flows. This means that I have calculated a slightly higher WACC for Ingredients and a slightly lower for Sugar. The variables have been explained above.

8.2.3 Terminal value

The enterprise value also depends on the free cash flow after the budget period, which in theory is a indefinite cash flow. This value is called the terminal value (TV) and is calculated by¹⁹²:

$$TV = \frac{FCF_{t+1}}{(WACC - g^{193})(1 + WACC)^t}$$

¹⁹² Elling, J.O & Sørensen, O. (2005), "Regnskabsanalyse og værdiansættelse- en praktisk tilgang", p.43

¹⁹³ g is the forecasted industry growth rate after the budget period.

The sale of Danisco's Sugar division

According to the model, a high estimated growth rate will increase the terminal value extensively. The terminal value is not easy to predict. I have used Danisco's assumptions regarding the future for Ingredients as well as competitors outlook for the future.

Regarding the future industry for the Ingredients segment, Danisco themselves estimates a growth between 3-5 %. The previous year's long term estimate was 2-4 %.¹⁹⁴ Therefore, I it is my opinion that a 2 % growth rate is conservative and suitable.

For Sugar, both Danisco and Nordzucker have set the future growth rate to 0 per cent. I have used a negative growth rate of -2.0 %, because of the uncertainties for the long term future, with unknown prices, production quotas and competition. This does not mean that I think Sugar will end as a business somewhere in the future.

8.3 Valuation after the DCF-model

Based on the already described DCF-model and the budget presented in the appendix the calculated enterprise value of Ingredients and Sugar are presented below:

Figure 17: Valuation Sugar (in mDKK)

Value of the free cash flow in the budget period	3.320
+ Terminal Value	6.021
÷ Market value of debt	2.833
= Enterprise Value	6.508

The results above are my calculation of Sugars value. I have calculated en enterprise value of DKK 6.508 million. I will comment my estimated value compared to the achieved sales price later.

¹⁹⁴ Annual report 2007/08, p. 75

The sale of Danisco's Sugar division

Figure 18: Valuation Ingredients (in mDKK)

Value of the free cash flow in the budget period	3.881
+ Terminal Value	14.254
÷ Market value of debt	6.712
= Enterprise Value	11.423

Danisco will after the sale of Sugar remain with the Ingredients segment which enterprise value I have estimated to DKK 11.423 million. In addition to this they will have a larger amount of capital from the settlement of the sale of sugar. The calculations are performed as presented earlier in the text. I have used the values which I also have derived in the chapters above. The detailed calculations can be seen in Appendix 1.

To give an indication of the results, total enterprise value of the Danisco group is estimated to DKK 20.736 million. This equals a stock price of DKK 367. Danisco's stock price the day before the official Sugar sales announcement, 14th of July, the stock price was DKK 280. It indicates that Danisco at that time was undervalued by the market.

8.4 Comments to the results

When looking at my results it is important to be aware of how vulnerable the valuation model is to changes in the assumptions. I have chosen a sensitivity analysis that focus on the variables which are attached with the most uncertainties, Beta and the market growth. This is because I have assumed that Ingredients and Sugar have the same capital structure and receives the same terms on their debt; hence WACC is only different when changing the beta value. I have presented the beta previously in the text¹⁹⁵. Jyske Bank classifies Danisco in the intermediate risk category, which has a beta interval between 0.8 and 1.3.

¹⁹⁵ See p. 71

The sale of Danisco's Sugar division

Table 8: Sensitivity analysis Sugar

Sensitivity analysis Sugar						
Growth -2,00%				-1,00%	0,00%	1,00%
Beta	CAPM %	WACC %	EV	EV	EV	EV
0,8	8,70	7,20	6.819	7.660	8.735	10.156
0,9	9,20	7,50	6.508	7.285	8.269	9.556
1,0	9,70	7,80	6.216	6.935	7.839	9.009
1,1	10,20	8,10	5.941	6.609	7.441	8.508
1,2	10,70	8,40	5.682	6.303	7.072	8.048
1,3	11,20	8,70	5.438	6.016	6.727	7.623

Source: Eirik Bang Sjøberg

The numbers in bold typing are the values I have calculated. When beta is high, the enterprise value is impacted negatively, due to the increased risk. As can be seen the growth rate is the factor that has the largest impact of the two factors.

Table 9: Sensitivity analysis Ingredients

Sensitivity analysis Ingredients						
Growth 2,00%				3,00%	4,00%	5,00%
Beta	CAPM %	WACC %	EV	EV	EV	EV
0,8	8,70	7,20	15.867	20.508	28.085	42.449
0,9	9,20	7,50	14.575	18.624	24.988	36.444
1,0	9,70	7,80	13.414	16.975	22.410	31.726
1,1	10,20	8,10	12.370	15.521	20.209	27.922
1,2	10,70	8,40	11.423	14.228	18.309	24.789
1,3	11,20	8,70	10.562	13.072	16.652	22.165

Source: Eirik Bang Sjøberg

From the Ingredients table we see that small changes in the variables have even greater impact. This is due to the larger potential growth for Ingredients than for Sugar, which when choosing a high growth rate increases the terminal value.

I have now determined the value of both Sugar and Ingredients. In the following section I will discuss the sale of Sugar further before I conclude.

8.5 The sale of Sugar

From Danisco's sales announcement we know that they received DKK 5.600 million in enterprise value and an additional DKK 600 million for the sale of sugar quotas. I calculated an enterprise value of DKK 6.500 million. Analysts estimated a price interval between DKK 5.5 -7.0 billion¹⁹⁶. The starting point has to be that the price is fair, because both Danisco and Nordzucker agreed upon it.

My calculated value of DKK 6.508 million is DKK 908 million above the calculated enterprise value in the sales announcement. According to analysts the sales price is in the lower end of their estimates. This should indicate that the sales price they received was based on a too low enterprise value. However, it is difficult to demand a high price when there are few interested buyers. French Tereos was also interested, but exited the negotiations¹⁹⁷. Furthermore, there are certain geographical limitations as to what companies that can buy Sugar, the production facilities and market needs to be close to the raw materials.

After the sale Danisco is left with the Ingredients segment and are now a more focused and bio-based. In addition they have received new capital from the sale of Sugar, and have funds to undertake new acquisitions within the ingredient and bio-technological segment. Danisco's investors who have not been satisfied and the sale will give them a long waited reward.¹⁹⁸

The two segments are not in any way dependent on each other, which can be seen when looking at the intra-group company sales. We see that Ingredients are practically not in need of any of Sugars' products. Sugar uses slightly more of Ingredients' products measured in intra-group sales and stands for between 1-2 % of Ingredients' sale.¹⁹⁹

With satisfied investors, refilled with new capital and free from the complicated Sugar business, the remains of Danisco is interesting as an acquisition object, primarily for capital funds.²⁰⁰

¹⁹⁶ Børsen, June 3rd 2008

¹⁹⁷ www.erhvervsbladet.dk, June 20th 2008

¹⁹⁸ Børsen, August 20th 2008

¹⁹⁹ Annual Report. 2007/08, p. 15

²⁰⁰ Børsen, June 3rd 2008

9. Conclusion

As presented in start of this thesis, the main objective with my thesis was to evaluate whether the sale of Danisco's Sugar segment was a good decision. To determine this Danisco's strategic starting point was defined as moving towards a focused firm and growing through acquisitions. Danisco was at the time up to the sales announcement pressed after weaker than expected performance. To measure how well the decision was I sat a few success criteria, stated as sub-questions to my problem statement. In this conclusion I will address each sub-question before answering the main question of the thesis.

Danisco have gone from being a large conglomerate to a more focused firm after selling Danish Distillers and the packaging and cardboard segment. By comparing the development in the stock price when Danisco were defined as a conglomerate and when it was defined a focused firm. This was done to indicate whether the focusing of Danisco during history have added value to its shareholders. I find similar stock price development during both the period as conglomerate and as a focused business, indicating that whether Danisco is a conglomerate or focused firm does not impact the shareholder value. This finding was held up against research on the subject, which is dubious, finding support both for the conglomerate strategy and the focused firm strategy.

With the same method I analysed whether the strategy of growth through acquisitions have been successful, and if it had differed from being a conglomerate or a focused firm. I used an event analysis looking at stock price development in the period after acquisitions. Danisco operates with a time frame of 2-3 years to make new acquisitions profitable. I found indications that shareholder value is deteriorated, measured in stock price, the first two- three years after an acquisition. Since, Danisco was relatively active with its acquisitions in most of the analysed period this means that a new acquisition cancelled out the added value from the previous acquisition. The findings were similar for the conglomerate period and the focus firm period. Scientific research on the subject is split.

In the event analyses above, we have to aware that there are many factors that affect the stock price. This could be macro-economic events or reaction to news. The analyses were performed under the assumption that Danisco operates within an industry that is not impacted by economic cycles. In addition I was comparing to different time periods.

The sale of Danisco's Sugar division

The historic financial analysis showed that Sugar have had negative trend in revenues and it is not anticipated to pick up. However, the Ingredients segment have not been performing well either. In the strategic analysis, I displayed increased challenges for Sugar due to the EU reform and that there might be more opportunities for Ingredients.

Furthermore, I have estimated the enterprise value of Sugar and Ingredients. The enterprise value of Sugar was calculated to DKK 6.508 million. Danisco received a price from Nordzucker corresponding to an enterprise value of DKK 5.600 million, and an additional DKK 600 million in awaiting reimbursement for sugar quotas. Therefore, I mean that Danisco received a slightly low price for its Sugar division. This has to be seen in light of the low number of interested buyers and the current uncertainties of the future sugar market. However, both Danisco and Nordzucker agreed upon the price.

The Sugar segment has been accused of slowing Danisco down, even though it is providing a solid cash flow for the Danisco group. This is mainly due to the EU sugar reform, with their cut in quotas and intervention prices. Danisco have also been pressured from displeased stockholders, which have witnessed the value of their stock decrease drastically. Furthermore, Danisco have been performing worse than its competitors. This built up a pressure towards action being taken. It could be that the sale, although having been discussed for years, was made mainly to please shareholders and create some breathing space. This could also be a contributing factor to accepting the slightly low price from Nordzucker.

After the sale of the Sugar division Danisco is left with the Ingredients segment and its divisions. The future will be based on efforts within ingredients and bio-technology which have far greater growth possibilities than the sugar market. In addition Danisco have received a nice amount of cash that can be used to further acquisitions within their industries. However, with a large amount of cash Danisco is now an interesting take-over target themselves.

Hence, based on the analysis in this thesis and the discussion above, I mean that the decision to sell Sugar was a good decision. This is despite that they received a slightly low price. Declining Nordzuckers offer would have meant that they would have had to undertake a spin-off, which is more costly, and does not bring any cash or rewards shareholders in the same magnitude. This creates

The sale of Danisco's Sugar division

breathing space for Danisco and they do not have to worry about the EU sugar reform and are now geared to make new acquisitions in the Ingredients segment, which has a greater growth potential than Sugar.

10. The results put in perspective

In my thesis I analysed the situation up to the sale of the Sugar division to evaluate whether it was a good decision at the time. It is of course difficult to determine whether the sale of Danisco was a good decision. However, a lot have happened since the decision to sell Sugar, which will set my results in a different perspective.

Firstly, a full blown world-wide financial crisis has emerged.²⁰¹ This has severely damaged a lot of financial institutions limiting the cash flow between banks, which has lead to a spread of nervousness. Interest rates increased, making financial gearing less attractive. Danisco, is according to my thesis financially geared to some extent and is not that punished by this. If Danisco have not accepted the offer from Nordzucker they might not have been able to sell Sugar at all or at a far lower price than they received. This makes the decision to sell even better seen with today's eyes.

Danisco's strategy with growth by acquisitions is also more easily executed today, where they have received cash from the sale of Sugar. Instead of lending to finance acquisitions they now have cash. This is good since the benefits of gearing have become worsened, as already mentioned. Furthermore, the potential acquisition targets might be sold to a lower price depending on how impacted they have been by the financial crisis.

After the sales announcement Danisco's stock price received a boost, the stock exchanges all over the world have taken a plunge, which also have affected the Danisco stock which currently is valued to DKK 266.²⁰² The stock price the day before the sales announcement was DKK 280. Therefore, the stock price, as a measure for shareholder value, does not show a positive development after the sale. However, this is as mentioned mostly due to the financial crisis.

In other words, the sale of Sugar seems to have been a good strategic decision in the context the decision was made. Danisco is extremely solid financially after the sale and have almost clean sheets to start their growth within ingredients and bio-technologic products.

²⁰¹ www.information.dk/emne/finanskrisen

²⁰² www.danisco.com/investor_relations/share_price

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