

# Strategic and Financial Valuation of Össur



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## **Executive summary**

The objective of this thesis was to find the fair value per share of Össur on the 5<sup>th</sup> of February 2014 as well as to estimate if the share is over- or under priced. Össur's share price has been increasing rapidly in the last years and especially in 2013 with a 42% increase in share price from beginning to end year.

A strategic analysis was made to find out what economical factors influence Össur's value. The analysis consisted of macro-, industry- and internal analysis. Those were summed up in a SWOT analysis. The results were that Össur has a very strong IP-portfolio and expansion opportunities. Few weaknesses and threats were found but the main ones that could influence the future growth were changes in insurance reimbursement plans, dependence on raw material and currency fluctuation.

The strategic analysis was then followed by a financial analysis to find the key financial drivers. Össur's sales have been growing over the last years and profit increasing. Profitability and liquidity risk analysis were also preformed. The results from them were that Össur is providing acceptable profit results for its stakeholders and is liquid enough to meet all short-term and long-term obligations. A sensitivity analysis revealed that the stock price is more sensitive to changes in WACC than it is to changes in growth rate.

The valuation of the company was done using DCF and EVA models. The results were a share price of 13.36 DKK and 13.35 DKK respectively. Compared to the value of 11.7 DKK on 5<sup>th</sup> of February 2014 that is a difference of 14.2%.

I conclude therefore that the share price of Össur is under-valued and based on that and the profitability analysis I would recommend investors to buy shares in Össur.

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# 1 Introduction

## 1.1 Motivation

In this thesis I will perform a strategic and financial valuation of Össur. During my studies there has been a lot of emphasis on analysing and implementing a good financial and strategic control on companies. Therefore I have chosen to value a company based on their financial and strategic elements, so that I could use what I have learned.

I have chosen to value the Icelandic based company Össur, which specialises in non-invasive orthopaedics, such as artificial legs as well as braces and support systems.

Össur is registered on OMX Nordic, both in the Copenhagen exchange and the Iceland exchange. In the financial crisis Össur's stock prices decreased just like most other stock prices in the world, but it recovered quite quickly and in 2013 Össur's share prices started to increase at a high rate. The share price went from 7.4 DKK in the beginning of the year to 10.5 DKK at the year end (Nasdaq OMX Nordic). That is nearly a 42% increase in the stock price over a one year period.

I would therefore like to analyse the fundamental values of Össur and try to see if there are reasons for the increase in stock price and if there is reason to believe that it will continue to grow.

## 1.2 Problem statement

The purpose of this thesis is to estimate the fair value of Össur and see if it is under- or over-valued. Then we can make a recommendation to the private investor weather to buy or sell stocks in the company. So the problem statement this thesis will seek to answer is:

*What is the fair value per share of Össur as of February 5th 2014?*

In the process of answering the problem statement, a few other questions arose:

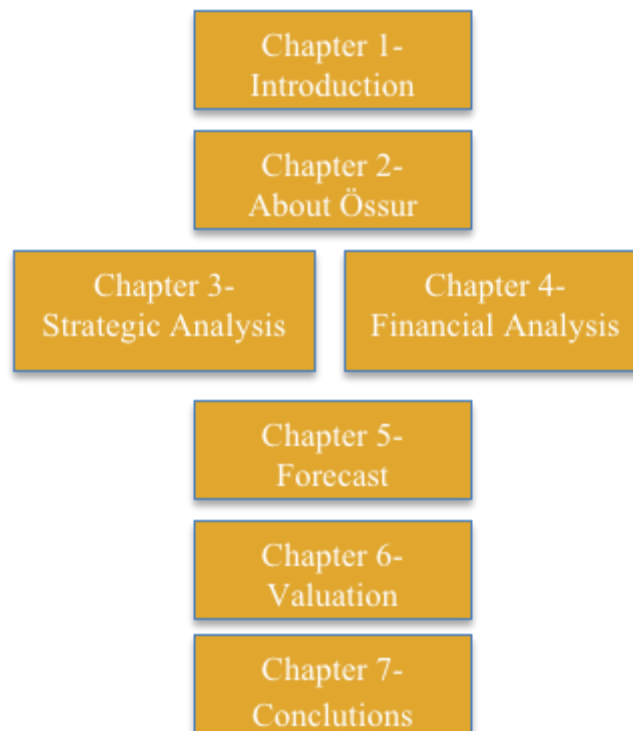
- What strategic factors in the external and internal environment influence Össur?
- How is the financial health of Össur? Has it been profitable over the last years?

- What is the expected future growth of Össur?
- How sensitive is the share price to changes in growth and risk?
- Is the share price over or under valued, and would I recommend an private investor to buy or sell?

### 1.3 Structure

In this section the structure of the thesis will be presented as well as I will introduce each chapter.

**Figure 1 Thesis structure**



*Source: Own production*

Figure 1 demonstrates the structure of the thesis. In chapter 2, I introduce the company to the readers, the historical price, products, organization and management. In chapter 3, a strategic analysis will be performed and the macro-, industry- and the internal environments will be analyzed to get a perspective of the possible competitive advantages the company could possess. In chapter 4, I do a financial analysis of Össur to find out if the company has been profitable and to get



historical trends that will be used in the forecast. Chapter 5 will focus on estimating the future growth potentials for Össur. That is done by gathering the information collected in the previous two chapters, the strategic and financial analysis, and estimate future income based on those. In chapter 6, the estimated value of the company will be calculated. I use Discounted Cash Flow model and Economic Value Added model for the valuation. I then perform a sensitivity analysis to see how sensitive the stock price is, to small changes in growth and risk. Chapter 7 then holds the conclusions for the thesis where findings will be discussed.

#### **1.4 Methodology and delimitations**

This thesis is based on the assumption of an efficient market where all information is embedded in the current price of the company and price changes do not follow any trend. So there must be some underlying value drivers in the company that drive prices (Fama, 1965).

As the thesis is built on the Theory of an Efficient Market (EMT), only secondary data will be used in the valuation process. According to the EMT there is no information that insiders know that could change the price of a company.

The valuation has a cut-off date at the 5th of February 2014. All information made public after that date will not be taken into consideration in this valuation.

Össur's share price at the cut-off date was 11.7 DKK. Össur reports its earnings in USD so the estimated value from the valuation models is in USD. Therefore, an exchange rate of DKK/USD of 5.52, which was the exchange rate at the cut-off date, will be used.

None of Össur's main competitors are listed in a stock exchange which makes all peer group analysis and industry benchmarking difficult. I have tried to find other ways to estimate values when industry or a peer-group is normally used. That does increase the uncertainty of the outcomes.

## 2 About Össur

This chapter will introduce the company to the readers, such as its history, management and products, so that less introductory information is needed when the analysis will be done in later chapters. All information in this chapter is taken from the company homepage (Össur corporate, 2014) and its annual reports.

### 2.1 History

Össur is an international company that specializes in the development, production and sales of non-invasive orthopaedics. Össur was founded in Iceland in 1971 by prosthetist, Össur Kristinsson. In the beginning Össur was a prosthetics clinic, but with innovation and strategic acquisitions it has become a global leader in the market of non-invasive orthopaedics.

In 1999 Össur was listed on the Icelandic Stock Exchange and 10 years later, in 2009, on the NASDAQ OMX Copenhagen Stock Exchange. Since 1999 Össur has grown, from having sales around 10 million USD to 436 million USD in 2013, as well as from generating a profit of around 1.5 million USD in 1999 to 56 million in 2013 (Össur, 2000). The growth of the company started with the listing on the Icelandic Stock Exchange. It gave the company access to capital for further investments and expansions.

Össur's stock price has been fluctuating a bit, but with a constant and steady growth since 2011 as can be seen in figure 2. The stock price fell dramatically between 2005 and 2008. The biggest reason for that decrease is the world financial crisis that hit in 2007/2008. Almost all stocks in all stock exchanges over the world felt the impact of the crisis and prices decreased for most public companies. Another reason for the big downward slope in the historical price in DKK is that in the financial crisis the ISK plummeted in value against other currencies and since Össur was first registered on the OMX Copenhagen in 2009 it was necessary to convert the prices in ISK to DKK for the purpose of getting the historical prices in the same currency.

After the listing on OMX Copenhagen in 2009 the stock price almost doubled in price from 5.5 DKK till 9.4 DKK in one year. Then the price decreased for two years but has been growing steadily since 2012.

Figure 2 Historical prices for Össur's stocks<sup>1</sup>



Source: <http://www.nasdaqomxnordic.com/>, <http://www.xe.com> and own production

Össur headquarters are located in Reykjavík, Iceland and Össur employees around 2100 people in three main locations that cover 18 countries around the world. Össur segments their locations down to Americas, Europe (EMEA) and Asia

### Americas

The Americas location is responsible for sales and marketing in the U.S., Latin America and Canada. In 2013, 48% of sales came from the Americas sales offices.

### EMEA

EMEA refers to Össur's operations in Europe, mid-Europe and Africa. Their EMEA offices handle all sales in those regions. 47% of sales in 2013 came from the EMEA offices.

<sup>1</sup> The figure has only the yearly closing prices from 2005 and until 2013. The last price is the price on 5th of February. Prices from 2005-2009 are converted from ISK to DKK, using historical currency exchange rate on the date.

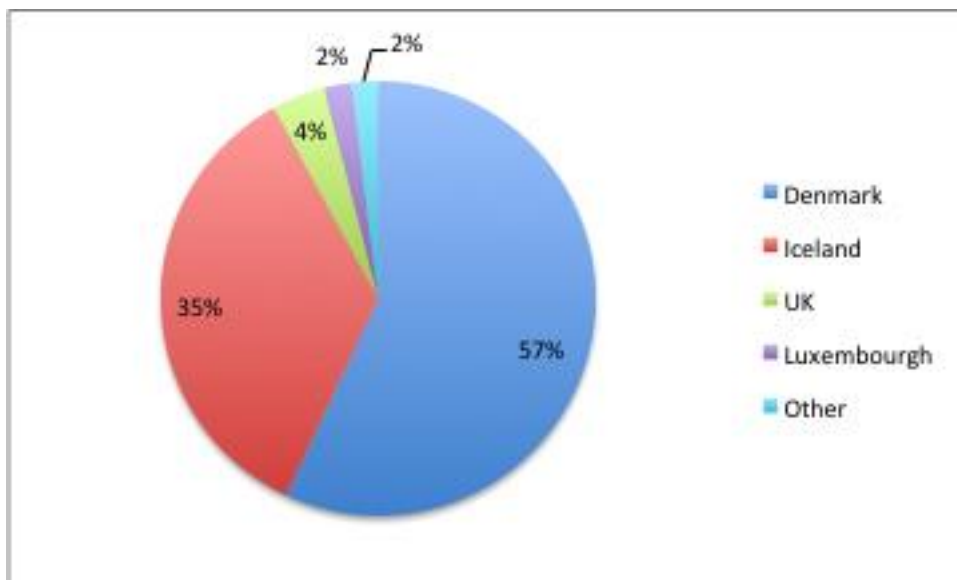
## Asia

Össur Asia deals with sales in Asia and Australia, their key markets are: Japan, Australia, China, Korea and India. The Asian area for Össur Is quite new and only 5% of sales in 2013 came from the Asia operations.

## 2.2 Ownership and management

There are four major shareholders of Össur, i.e. shareholders that hold more than 5% of shares. Williams Demant Invest is the largest one with 41.2% of shares; ATP Pension is the second largest with 6.2%, followed by Lífeyrissjóður Verslunarmanna with 6% and Gildi with 5.5%, which both are Icelandic pension funds.

**Figure 3 Share holding by country**



Source: Annual report 2013

As we can see in figure 3 the majority of shares are held in Denmark and out of those the biggest part is owned by Williams Demant Invest or 42.1% out of the 57%. Niels Jacobsen, owner of Williams Demant Invest, is the chairman of the board of directors at Össur. The board of directors consists of 4 people in addition to its chairman. The executive management at Össur consists of 7 people and none of them sit on the board of director.

## **2.3 Products**

Össur operates within three business segments; those are prosthetics, bracing and support and compression therapy. All of those business segments are in the industry of medical devices and are considered as non-invasive orthopaedics.

### **2.3.1 Prosthetics**

Prosthetics is the segment in which Össur started its operation. The growth in sales has been increasing steadily over the last years, and with acquisitions and innovations Össur has managed to obtain a market share of around 20% in the global market of around 1 billion USD.

Össur offers a wide selection of lower leg artificial limbs to amputees. Of their more basic established brands are, Flex-Foot®, Iceross®, Total Knee® and Mauch®. All of those help with the user's mobility and increase the life quality of an amputee. Össur also has products that incorporate state of the art bionic technology, such as: RHEO KNEE® 3, POWER KNEE™, PROPRIO FOOT® and SYMBIONIC® LEG. Össur's SYMBIONIC® LEG is the first complete bionic leg that is produced in the world, i.e. a leg that consists of both a bionic knee and a bionic ankle.

### **2.3.2 Bracing and support (B&S)**

Össur entered the B&S market in 2003 with the acquisition of Generation II Group. The growth in sales has been fluctuating for the B&S segment but for most years they have been over 10% of total sales. Since 2006 the B&S segment of Össur's operations has generated more than 50% of its net sale.

In 2013 Össur decided to divide its brand classification of bracing and support into two categories, osteoarthritis (OA) and injury solutions. OA products are designed to help people suffering from osteoarthritis to improve their quality of life. Their products reduce pain and improve the user's mobility. The Unloader® is Össur's key product within the OA market.

The products in the injury solution category are aimed to help people with the healing process of bone and soft tissue injuries. The most recognized products within Össur's injury solution line are CTi®, Rebound®, Miami® and Innovator®. Össur's injury solution products emphasize on helping the body heal while maintaining function and mobility at the same time.

### 2.3.3 Compression therapy

The main products in compression therapy are compression socks, tights and bandages. They are used to minimize pressure on the vascular system to improve circulation and minimize swelling. These products are mainly used by people suffering from venous ulcers and edema. Össur offers two lines of products in their compression therapy market: A standard line, which offers the customer an optimal quality/price ratio, and a premium line, where they emphasize on exclusive design and materials and better comfort than the standard line.

Össur only offers their compression therapy products in France at the moment. In 2013 their market share of the 260 million EUR French market is around 7%.

## 2.4 Strategy

Össur has a very clear corporate strategy vision; to be the leading company in non-invasive orthopaedics. Their mission, on the way of achieving their strategic goal, is to improve people's mobility. They will seek to accomplish their goals by focusing on three main factors: innovation, efficiency and growth.

- Innovation is extremely important for Össur in order to continue their growth and reach their goal of becoming the leading company in their field. Their focus is on running an efficient R&D department that will introduce new products to address unmet medical needs, develop valuable solutions for all interested parties, keep up a continuous innovation and renewal of current products with breakthrough technology, insuring a strong and productive product pipeline and growing their Intellectual Property (IP) portfolio.
- They will focus on increasing efficiency throughout their operation. Össur will do that by running efficient operations in optimal locations and hire passionate employees to be able to deliver strong profit and cash flow to their stakeholders.
- Growth is one of their pillars in strategy to achieve their end goal of becoming the leaders in the market of non-invasive orthopaedics. Össur will strive to continue growing by increasing their innovation and efficiency and by designing an effective marketing strategy to raise awareness to their products. They will also strive to meet their customers need and produce products that the market is asking for.

Össur has also used acquisitions to expand and they will continue to do so in the coming years to strengthen their sales channels and operations.

### **3 Strategic analysis**

In this chapter I will conduct a strategic analysis of Össur's external and internal environment. The reason for doing so is to be able to find the non-financial value drivers that affect the company. The strategic analysis will then be used with the financial analysis that will be conducted in chapter 4 to forecast Össur's growth potentials.

I will use a top-down approach on the strategic analysis. I start with looking at Össur's macro environment, where I will use a PESTEL analysis. Then I will look at the industry that Össur operates in, using Porter's five factor analysis. For Össur's internal environment I will use a VRIO analysis and in the end I will sum all those analysis together in a SWOT analysis.

#### **3.1 Macro analysis**

To get an insight into the economic environment that Össur is in I will do a macro analysis. The macro analysis focuses on six key environmental factors that influence a company's growth. They are: political, economical, social, technological, environmental and legal.

##### **3.1.1 Political**

###### **European Union**

Iceland is currently not a member of the European Union and has never been. The issue has been raised for many years in Iceland if the nation should apply for membership or not. In the aftermath of the financial crisis, politicians in Iceland became more invested in applying for a membership since the Icelandic currency plunged in value. One of the main attractions for many politicians about joining the EU is the possibility of taking up the Euro.

In 2009 Össur answered in a memo questions that were sent to many of the larger companies in Iceland by a committee working on behalf of the prime minister's office in Iceland. The questions were about their thoughts of applying for a membership in the EU. In the memo Össur states that that in their opinion membership in the EU would increase a safe and stable corporate environment in Iceland and would improve access to loans and improve trust in Icelandic companies (Össur, 2009).



In 2009 the Icelandic government put in a formal application for a membership. In the parliamentary elections in 2013 one of the main campaign issues for all parties was if they were with or against membership. The newly elected parliament decided to stop the negotiations in February 2014. The request has though not yet been accepted by the Icelandic parliament.

### **Taxes**

The corporate taxes in Iceland have been fluctuating over the past years. They were steady at 18% for many years but then lowered to 15% in 2008. After staying at 15% in 2009, they were raised again in 2010 to 18% and in 2011 to 20%. There have not been any announcements about future changes in the corporate tax rate but due to how unstable it has been over the recent years it is hard to predict the future years. One of the main reasons why Össur's headquarters are located in Iceland is because of the low corporate tax rate compared to other countries. At a current tax rate of 20% it is favorable for them to keep their headquarters in Iceland.

### **3.1.2 Economical**

#### **Currency fluctuation**

Össur is affected by currency fluctuation just as all other international companies that have their revenues and expenses in many different currencies. Össur suffers most from exchange rate difference between the USD and EUR since most of their debt is in those currencies and their revenues mostly stem from those as well (Össur, 2006-2014). Although they don't have debt or a lot of revenues coming from ISK, the ISK should also be considered a factor here, since they have a lot of expenses in ISK including salaries and general administration expenses and taxes.

#### **Raw materials**

In their products Össur uses raw materials, such as silicone, carbon and metals. Össur is therefore affected by the prices and availability of those. The prices of those commodities fluctuate as well as exchange rate difference between currencies.

There is also the question of the availability of materials. Össur is not a huge company on the international scale and should there ever arise a situation where the raw materials that they use are scarce and hard to come by there could be a risk that Össur's suppliers would deliver to a larger client instead of Össur.

### **3rd party payer**

Most of Össur's sales are made through a 3rd party, usually a public or a private insurance company (Össur, 2006-2014). That means that normal economical factors such as income and prosperity level, do not affect the company as much as normal consumer product companies. The user of the product does not 100% choose by himself which product to buy or how often it is renewed. Insurance companies normally try to minimize their cost and are calling for longer lasting products.

### **Interest rate risk**

Össur is exposed to interest rate risk since it is partly financed with debt. Össur manages its interest rate risk by holding an appropriate mix between floating and fixed interest rate borrowing and interest rate swap contracts (Össur, 2006-2014). The continuing unstable economic environment all over the world makes it impossible to predict the development of interest rates. If the interest rates increase Össur will pay more interest on its floating rate loans and the interest expenses will increase.

### **3.1.3 Social**

The social environment in the world has been changing rapidly over the last decade. In the western world, which is Össur's main market, health issues due to prosperity have increased. More people are suffering from diabetes, vascular diseases and arthritis. Those diseases all affect sales in health equipment, especially in braces but also in prosthetics.

An aging population also affects Össur since with age, people's health and mobility usually deteriorates. The older a person gets the more brittle bones it usually has and brittle bones are more easily breakable. Broken bones in elderly people also take longer time to heal and usually need more support, in the form of braces, for a longer period of time than bones in a younger person.

### **3.1.4 Technological**

Both the prosthetic market and B&S market are very technologically advanced markets so it is of extreme importance for Össur to stay well a head in new innovations. Össur views new technology and their R&D innovation to be the cornerstone of their future growth. In order for Össur to secure continuous organic growth and profitability they have set up 6 points for their R&D department to focus on (Össur, 2006-2014):

- Introducing new product groups to address unmet medical needs.
- Developing valuable solutions for users, clinicians and other healthcare stakeholders based on proven medical necessities.
- Innovating within current product groups by exploring the feasibility of breakthrough technologies.
- Providing a strong and continuous product pipeline.
- Strategically growing the IP portfolio.
- Creating strategic technology alliances.

These points all fit well with Össur's complete strategy to focus on the needs of the market with new products and improve current products.

### **3.1.5 Environmental**

Going green could be the saying of the last decade. In the last years people's environmental awareness has increased greatly resulting in increasing demand that the products they purchase have been made with the smallest environmental impact possible. In accordance with that many companies have been incorporating more environmentally friendly methods into their production. Companies have also started to have easier access to their environmental policies and use that in their marketing. Many governments have also implemented a pollution tax on companies.

Össur is no exemption of this evolution, and have since 2008 monitored various aspects of corporate social responsibility (CSR) that are connected to their operation. They have, since 2012, published a CSR progress report along with their annual report. Össur's environmental policy was first developed in 2012 and Össur's goals are (Össur, 2014):

- Commitment to work in accordance with the relevant laws, regulations and other requirements
- Striving to preserve the environment and prevent pollution
- Emphasize on continuous improvements focusing on environmental impact

- Recognizing that its operations impacts the environment in a number of ways

In order to achieve those goals Össur implemented the ISO14001 environmental management system. The key focus areas within the ISO14001 are to avoid waste in operation, prevent pollution by avoiding, reducing or controlling pollution or waste, taking environmental issues into account when selecting materials and suppliers and continuous improvements via annual environmental objectives. (Össur, 2006-2014)

As for all corporations Össur could be adversely affected by natural disasters such as floods, earthquakes and hurricanes. They have therefore worked on risk ranking program to reduce the level of risk and have insurances for possible loss in sales due to decreased outputs from their manufacturing facilities in an event of a disaster. Össur has manufacturing facilities in many different strategic locations around the world so it is not likely that production would halt entirely in case of a natural disaster.

### **3.1.6 Legal**

#### **Intellectual property rights**

Össur, as an innovative company, puts a lot of effort in its intellectual property (IP). A big part of Össur's growth comes from technological advances from R&D and for the company to be able to protect those rights is of extreme importance. Össur has a very extensive IP portfolio that in the end of 2013 consisted of 937 granted patents and designs and 466 registered trademarks. In addition to that there are 374 patent and design application pending and 38 pending trademark registrations (Össur, 2006-2014). Össur is very proactive in protecting its IP rights and invests a lot of resources in protecting their investment in R&D and market position.

#### **Health and safety laws**

Össur operates and produces products for the health care industry. This industry is very well monitored and the products are set to exceptionally high standards and regulations before going into circulation. In the United States it is the Food and Drug Administration that oversees that all regulations about are followed. Other countries that Össur operates in have a corresponding authority. (Össur, 2006-2014)

For Össur to work in such restraint legal environment can be difficult and costly. Össur needs to make sure that their products live up to the regulations set upon them. If they don't, they could either be denied launch of a new product, which would be costly, that the product needed to be redesigned or material changed or whatever the fault was needs to be corrected. Recall of a product by the FDA can also lead to fines to the company.

### **Monetary policies (capital control in Iceland)**

In November 2008 after the financial crisis hit Iceland and ISK fell extremely in value against other currencies, the government decided to put on restrictions about import/export of capital from the country (Alþingi Íslands, 2008). That was done mainly to try to keep foreign investors, that own quite a lot of capital in Iceland, from moving it from the country and therefor increase the downfall of the ISK.

Össur has an exemption of the capital control regulation and that is the only reason why Össur can still operate in Iceland with those controls in order. Many international companies in Iceland have openly spoken about the capital control having impacts on their operation and if they will not be removed soon that the companies might consider relocating their headquarters to one of their other locations. Össur is no exemption of that and on the annual general meeting in March 2014 Niels Jackobsen (2014), chairman of the board of directors harshly criticized the government in Iceland and the corporate environment they have created. Jackobsen commented that even though Össur has exemptions for the capital control they are making the environment very bad for companies and he is very worried about the legal instability and uncertainty that lies over Iceland at the moment.

### **Competition law (mergers and acquisitions)**

One of Össur's goals is maintaining a leading position in their market. One of their strategies to achieve that is by consolidating with competitors in the market. That option depends on competition laws in place that try to keep up fair market competition and minimize the risk of monopoly. If the market becomes too consolidated, Össur's possibilities in mergers and acquisitions are greatly diminished because of the threat that they wouldn't be allowed because of competition law. That is, if that would result in the consolidated company to have too big of a market share and become thought of as monopolizing the market.

## **3.2 Industry analysis**

After analyzing the macro environment of Össur I now need to look at the environment surrounding the industry that Össur operates in. The analysis I have chosen is Porter's five factor analysis. Porter's five factor analysis assumes that there are mainly five competitive factors that influence the growth potential for a company in the industry. Those factors are; threat of new entrants, industry competitors, bargaining power of buyers, bargaining power of suppliers and threat of substitutes (Porter, 1980).

### **3.2.1 Threat of new entrants**

New entrants to an industry can have great impact on the existing players. With more competition prices can be reduced and cost increased, resulting in a lower profitability. Porter (1980) describes 6 major sources of barriers of entry, they are:

#### **3.2.1.1 *Economies of scale***

Economies of scale refer to the decreasing unit cost for each product with increased production volume (Porter, 1980). In the industry that Össur is in that is not a big factor. The products that Össur produces are based more on advanced technology and innovation than cost advantage. Economies of scale do therefore not impose a big entry barrier for new competitors.

#### **3.2.1.2 *Product differentiation***

Product differentiation is not a big factor in the industry that Össur operates in due to the way the user picks the product. The users of the products that they manufacture rarely pick the product themselves, they are recommended products from a third party, usually a doctor or an orthotics specialist. So brand awareness is not a big factor. Since product differentiation is not big in the industry, it does not create a big entry barrier.

#### **3.2.1.3 *Capital requirement***

Capital requirements are high for the medical device industry so this creates a large entry barrier. The initial R&D expense for new players is large and development often takes years before a product can be placed on the market. This is mainly because of strict regulations and patents that are in place. This also makes it difficult for a scientist in one company to divert and start his own company from scratch since the ownership and patents are registered to the company that the scientist worked for.

#### **3.2.1.4      *Switching costs***

Össur operates in three sub industries inside the medical device industry, prosthetics, bracing and support (B&S) and compression therapy. The switching cost is very different between the sub industries. Due to the complex technology and individualization of prosthetics, the switching cost is quite high in the prosthetics market. They are usually also quite expensive and paid by a third party so it is not easy for the user to switch after having initially invested in one. The B&S and compression therapy markets are more easily interchangeable and not as user specific. The B&S market has much lower switching cost than the prosthetics market, but since the user usually gets the cost reimbursed from a third party, such as an insurance company, it results in difficulties in switching producers after an initial investment. So even if the products aren't that user specific as prosthetics most insurance company will not reimburse another product to the user if the first product is still viable and most users of the products will not go out and invest in one themselves if they have one. So in that case, the switching cost could be thought of as quite high in that sub industry as well. The compression therapy market is the smallest of Össur's market segments and in 2013 only 4% of sale came from compression therapy. That is also the market that is least reimbursed from a third party and is least individualized, so the entry barrier due to the switching cost is quite low. But since 96% of sales in 2013 arouse from markets that I consider having high entry barrier for switching cost, we will consider the entry barrier for new entrants high for this category.

#### **3.2.1.5      *Access to distribution channels***

In this industry, the distribution channels are very important. Companies that work in medical supplies need to be in good contact with doctors and other specialist so that they will know and recommend the product. A lot of the distribution channels are based on many years work of building a sturdy relationship of trust and reliability. So for new entrants, this is a great entry barrier.

#### **3.2.1.6      *Government policy***

There are a lot of regulations in the industry regarding testing, manufacturing and quality controlling of products. According to Porter (1980), that can cause substantial lead time that not only raise capital cost for the new entrant but also gives the current players time to respond to the new entrants with changing their strategy to make the entry even harder.

### **3.2.1.7 *Summary of threat of new entrants***

Overall, the threat of new entrants in the industry is not high since there are a lot of big entry barriers. It is though not impossible for new players to enter the market but it is highly unlikely. So the biggest competitions are the current competition that might increase their economics of scope with acquisitions or merging with other competitors.

### **3.2.2 Industry competitors**

Like stated earlier, Össur operates in three different market segments within the non-invasive orthopaedics market. That means that there are three different industry competitors to look at here. More than half of their sales in 2013 came from the B&S market segment. Össur is the second largest player in the market with a market share of 7-9%. That gives the inclination that there is not one great market leader in the segment. In their annual report from 2011 it is noted that there are 70 niche players in the market and at that time Össur also held a 7-9% market share. So given that there haven't been dramatic changes in that market, it is apparent that there is not one dominant market leader.

In the prosthetics market Össur is also the second largest player with around 20% market share. That tells us that that the prosthetics market has fewer and bigger players than the B&S market segment. There has also been a lot of consolidation in the prosthetics market and that is the strategy that Össur has been following and plans to continue with. As previously stated, around 4% of total sales in 2013 stem from the compression therapy market and those products are only sold in France, not globally like other of Össur's products. Due to that, this is a minor factor for the company as a whole at the moment and this business segment will not be given a high priority in the valuation.

### **3.2.3 Bargaining power of buyer**

Porter (1980) argues that a buyer group is powerful and has a lot of bargain power if certain circumstances in the industry are true. Those are: concentrated buyers, low switching cost, price sensitive buyers, undifferentiated products, low income buyers, threat of backward integration, quality of the product is unimportant and fully informed buyers.

In the prosthetics industry the users are rarely the buyers of the product or the payers of the product. So the actual users of the finished product do not have a lot of bargaining power in this market. The doctors that recommend the product and the insurance companies that pay for it are the ones that



could influence the price. So it is necessary to interpret Porter's (1980) factors both from the buyers and the payers.

The industry does not have a concentrated buyer that buys most of the products. As stated earlier I consider the switching cost high in the industry. Price sensitivity is not large in the industry, although it is always a factor and most people would normally buy the cheaper product of two if the quality was the same. Other factor to consider there is that the buyers of the product are rarely the payers for the product. So the buyers usually are not choosing their products 100% of their own but pointed in direction of a certain product from a doctor or another medical adviser. The products are also used to improve life quality for the buyers so in that case price sensitivity is not a factor. The products are quite undifferentiated in the sense that for many of the products there is never a pure substitute product. Quality of products is a great factor here and quality of the products is probably one of the most important factors in the productions. The payers of the product, the insurance companies, have started to demand increased longevity in the products. The buyers, or the users, in this market as in most others are not fully informed on the product cost, as it is very hard for buyers to understand and know everything about the raw material cost, salary cost and other factors that build up to the end price of the technologically complex product.

That is why I conclude, that bargaining power of buyers is not high in the industry, and although price sensitivity always exists in markets it is not of great importance here.

### **3.2.4 Bargaining power of suppliers**

Suppliers can exert bargaining power over participants in an industry by threatening to raise price or reduce the quality of purchased goods and services (Porter, 1980). In the industry of medical supplies this is a big threat since they are under strict regulatory supervision and their products have to stand up to certain quality control. Össur is therefore vulnerable to the bargaining power of suppliers since they solely rely on raw material from their suppliers and are unable to produce it themselves. Össur's products require silicone and carbon, metals and other raw materials. Such raw materials may not always be available on favorable terms, or at all.

### **3.2.5 Threat of substitutes**

Össur's products are made for example for people that have lost limbs, need support or braces and people with vasculatory diseases. When looking into substitutes it is therefore not enough to look

only at Össur's competitors in the industry but also at the causes of why people need to use their products. The greatest portions of Össur's customers, of prosthetics, are people that have lost their limb due to diabetes or vascular diseases. With that in mind, Össur's substitute product could be thought of as medicine for diabetes, increased health awareness for type 2 diabetes and vasculatory surgeries. With better medicine for diabetes, necessary amputations due to the disease could be reduced. Same goes for health awareness regarding type 2 diabetes, since it is an acquired disease and usually stems from bad health conditions and obesity. Increased health awareness in the world could lead to less people with type 2 diabetes and from that less amputees because of the disease. Many vasculatory diseases can also lead to amputation so vasculatory surgeries are here considered a substitute product.

All previously mentioned substitutes are substitutes in the prosthetics market. In the B&S market the substitutes are mostly traditional such as braces from other producers, but pain medication could also be considered a substitute as B&S products are mostly used to help people recover from an injury.

So with advances in surgical technology and more health awareness, threat from substitute product is relatively high for Össur.

### **3.3 Internal analysis**

Now that I have analyzed Össur's macro environment and the industry, it is necessary to take a look at the company itself. For the internal analysis I will use the VRIO framework. The VRIO framework takes a look at the company's resources to analyze how they can be useful in achieving competitive advantage. It assumes that if a company's resources are: valuable, rare and/or inimitable and the company takes advantage of them, the firm can achieve sustainable competitive advantage.

#### **Value**

As stated earlier, many of Össur's products are extremely personalized and have innovative technological features. Össur emphasizes the use of high end materials in their products. The company does not gain advantage of economies of scale and its customers are not price sensitive. This means that Össur does have a price premium on its products.

Össur has an effective R&D department that has, with a steady growth, introduced new products to the market and improved on existing products. Össur's R&D and intellectual properties makes it possible for them to increase their market shares.

### **Rarity**

Össur's resources are extremely rare, since Össur's main value creator is their innovation and technology. A good and innovative research department in a company depends on their employees, without them there is no innovation. So it can be said that Össur's resources are extremely rare since there is no one person like another.

### **Imitability**

Many of Össur's products are patented so they cannot be copied by competitors due to intellectual property rights laws. Össur also utilizes new advances in material utilization and technology and that is not something that is easily imitable by a competitor without inside knowledge.

### **Organization**

Össur does use its resources well. They realize that their employees are one of their most valuable resources and emphasize on a working environment where their employees can achieve their full potentials.

Össur has recently separated their product range in their B&S segment to two groups. They did that when they realized that their products weren't recognized enough in the market (Össur, 2006-2014). So they have separated them into groups with specific purpose for each and hopefully brand recognition will improve as a result. That tells me that Össur is good in spotting problems and implement a strategy to eliminate them.

Figure 4 VRIO analysis for Össur

Valuable	Rare	Hard to imitate	Supported by organization	Possible result
NO				Competitive disadvantage
YES	NO			Competitive equality
YES	YES	NO		Short-term competitive advantage
YES	YES	YES	NO	Unused competitive advantage
<b>YES</b>	<b>YES</b>	<b>YES</b>	<b>YES</b>	<b>Sustainable competitive advantage</b>

Source: (Barney, 1991)

As we can see in the summary of the VRIO analysis in figure 4, Össur's resources and organization do give them the possibility of obtaining sustainable competitive advantage.

### 3.4 SWOT

Figure 5 shows the SWOT analysis of Össur. The SWOT analysis combines all the factors found in the macro-, industry- and internal analysis and helps with determining the company's opportunities, threats, strengths and weaknesses.

From the SWOT analysis we can see that Össur's main strengths are contributed from their innovation and intellectual properties. Össur also holds a strong position being a market leader in both of their biggest market segments. Össur's main threat is the reimbursement aspect of their operation. That a third party pays for the product for the user. If the reimbursements plans change it could have adverse affects on Össur's sales and then profitability. As all international companies Össur is also threatened by currency fluctuations.

The greatest weakness for Össur is the capital control in Iceland. Those laws threaten the company's credibility towards its stakeholders because of the economic situation it is located in. Another threat that Össur faces is their dependence on raw materials. If there would be a shortage of the raw materials Össur uses in their productions they would not be able to continue production and keep up sales.

Össur's main opportunities lie in growing through acquisitions, and mainly in the B&S segment, since the orthopaedics segment is already quite consolidated.

**Figure 5 SWOT analysis**

Opportunities	Threats
<ul style="list-style-type: none"> <li>• Growth opportunities through acquisitions</li> <li>• Increasing longevity</li> <li>• Increase in diabetes</li> </ul>	<ul style="list-style-type: none"> <li>• Changes in reimbursement plans</li> <li>• Currency fluctuation</li> <li>• Innovations in surgical advances</li> </ul>
Strengths	Weaknesses
<ul style="list-style-type: none"> <li>• Strong IP portfolio</li> <li>• Innovative R&amp;D</li> <li>• Good profitability</li> <li>• Market leader</li> <li>• Diversified market segments</li> </ul>	<ul style="list-style-type: none"> <li>• Dependence on raw materials</li> <li>• Capital control in Iceland</li> </ul>

*Source: Own creation*

## **4 Financial analysis**

In this chapter I will conduct a financial analysis of Össur. The purpose of the financial analysis is to try to find the company's key value drivers. These drivers will then be used in chapter 5 to forecast the future growth of the company.

### **4.1 Accounting policy**

Össur's consolidated financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS) as adopted by the EU and additional Danish disclosure requirements for Consolidated Financial Statements for listed companies (Össur, 2006-2014)

Össur has throughout the whole valuation period used the IFRS standards for their consolidated financial statements and the management of the company does not believe that the changes made on the IFRS standards have a material effect on the amounts reported in the financial statements. Therefore, I do not find it necessary to adjust the financial statements to maintain compatibility throughout the valuation period.

All of Össur's financial statements during the valuation period have been audited by Deloitte EHF. In their opinion the consolidated financial statements give a true and fair view of Össur's financial performance and are in accordance with IFRS as adopted by the European Union and additional Danish disclosure requirements for listed companies (Össur, 2006-2014).

### **4.2 Reformulation of the financial statements**

To be able to conduct the financial analysis it is necessary to reformulate the financial statements. This will allow us to separate operation activities from financial activities because the company's operations are the primary driving force behind value creation (Petersen & Plenborg, 2012). It is the company's operations that make it unique from its competitors. It is much easier for rivals to copy the financial activities of a company than its operational activities. That is the reason why, when valuing a company the operational activities are the one that create the most unique value for it. The reformulated statements can be seen in appendix 1.

When looking at Össur's financial statements, there are few items that need special attention and need sound judgment and reasoning for why they are classified the way they are in the valuation. These items are: cash and cash equivalent, research and development cost and operating lease.

#### **4.2.1 Cash and cash equivalent**

Cash and cash equivalent is one of the items that need special attention. Companies normally use a certain amount of working cash, or operating cash, to be able to pay bills. But companies usually also have other cash equivalents that are interest bearing but are categorized with cash and cash equivalent because they have less than three months maturity. Össur, like any other company, has cash and cash equivalent and have I used the recommendation of Penman (2013) and put an amount that equals 0.5% of net sales into working cash with assets, and the rest of cash and cash equivalent are categorized as financial activities.

#### **4.2.2 Research and development cost**

One of the biggest issues in valuation is which costs should be expensed and which should be capitalized and recognized as assets and be depreciated accordingly. One of those costs is R&D expenses. According to the IFRS standards research costs should be expensed as acquired but the development cost can be capitalized (Petersen & Plenborg, 2012).

Össur is an innovative company and relies a lot on R&D to continue their growth. Össur does not separate their research and development costs in their financial statements and expenses all R&D costs as they are acquired. According to Petersen & Plenborg (2012), an analyst that is valuating a company can capitalize the entire R&D cost if they see it necessary. I have decided not to capitalize any of the R&D cost and expense it like Össur has done in their financial statements. The reason for this is that it can lead to many problems, like determining the useful life of the asset and impairment losses. This way, I will also not risk overestimating the assets of the company.

#### **4.2.3 Operating lease**

The operating lease is the third and last item in Össur's financial statements that I consider need special attention. When a company borrows money to buy an asset, the asset and debt are recognized accordingly in the balance sheet. In the case of an operating lease, there are only recognized lease expenses. Which decreases the capital for the company since the asset is not recognized in the balance sheet. (Koller, Goedhart, & Wessels, 2010)

Össur, as most companies, does not recognize its operating lease as an asset and therefore I must capitalize the operating lease. I use the method suggested by Koller, Goedhart & Wessels (2010) to find the value of the operating lease from the lease expenses that are stated in the financial statements. The assets value is expressed as:

$$Asset\ value_{t-1} = \frac{Rental\ expense_t}{k_d + \frac{1}{asset\ life}}$$

where:

*Asset value<sub>t-1</sub>* = the value of the asset at time t-1

*Rental expense* = The rental expense at time t

*k<sub>d</sub>* = cost of operating lease

*Asset life* = the lifetime of the asset

The rental expenses are normally stated in a footnote in the financial statements of a company, and that is where I get them from Össur. The cost of operating lease is the cost of debt of the operating lease; it does not equal the cost of the rest of the debt for the company since operating lease is a more secure debt as it has underlying assets. In chapter 6.1.5 I calculate the cost of debt for the operating lease and it comes to 2.46%. The only thing left to do, to be able to calculate the value of the operating lease, is finding the lifetime of the asset. Koller, Goedhart & Wessels (2010) recommend using a 10.9 years as the lifetime of the asset and that is what I will do.

The asset is then depreciated accordingly with a straight line method. Table 1 shows my calculations for the value of the operating lease.

**Table 1 Value of operating lease**

	2005	2006	2007	2008	2009	2010	2011	2012	2013
Lease expenses (USD'000)	4,505	5,739	7,645	7,641	7,807	8,533	10,933	11,700	14,286
Depreciation (USD'000)	0	4,427	4,722	4,990	5,248	5,550	6,043	6,562	7,271
Capitalized operating lease (USD'000)	48,250	51,468	54,387	57,205	60,490	65,873	71,530	79,253	87,890

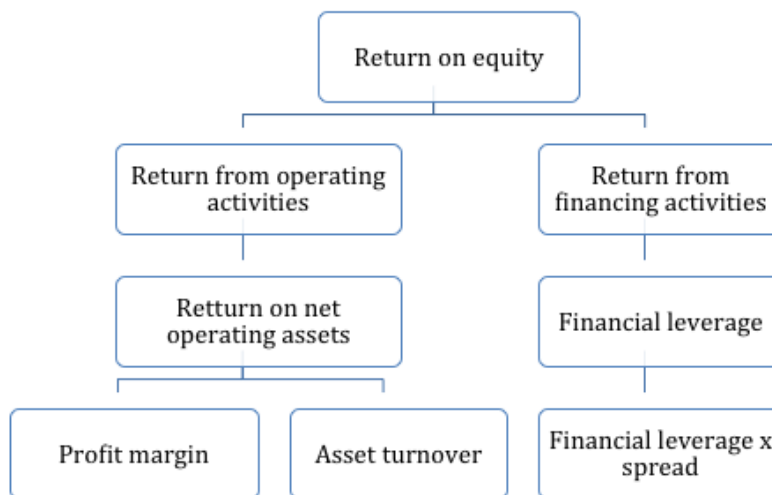
Source: Own creation, based on calculation from annual reports.



### 4.3 Profitability analysis

A profitability analysis will be conducted in this section of thesis. The analysis is based on the analytical income statement and balance sheet. Profitability is an important factor in the future survival of a company. Potential investors like the sound of good profitability and good profitability insures satisfactory return to shareholders. The historical profitability is also very important when determining future expectations for a company and its growth. It is therefore very important to figure out what the drivers for a company's profitability are. The relationship between Return on Equity (ROE) and its drivers can be seen in figure 6.

**Figure 6 Analysis of profitability**



Source: Penman (2013, p366), own creation

#### 4.3.1 Return on invested capital (ROIC)

Return on invested capital (ROIC) is the overall profitability measure of a company. It expresses the return on capital invested in operation activities. ROIC ratio is very important when valuating a firm because higher rate of return normally leads to a higher value for the company. That usually leads to cheaper financing for the company since it is more attractive for banks and other loan agencies to lend to companies with a high ROIC ratio (Petersen & Plenborg, 2012).

ROIC is calculated as the net operating profit after tax, divided by invested capital as shown below and the results are shown in table 2.

$$\text{Return on invested capital (ROIC)} = \frac{\text{Net operating profit after tax (NOPAT)}}{\text{Invested capital}}$$

**Table 2 Historical ROIC**

Return on invested capital (ROIC)	2005	2006	2007	2008	2009	2010	2011	2012	2013
NOPAT USD'000	15,456	14,877	13,495	26,639	34,871	42,512	43,522	42,091	44,322
Invested Capital USD'000	357,615	530,714	537,265	515,409	509,221	519,066	522,993	546,530	610,526
<b>ROIC</b>	4.32%	2.80%	2.51%	5.17%	6.85%	8.19%	8.32%	7.70%	7.26%
Invested Capital, excl. Goodwill USD'000	125,481	214,121	194,906	193,028	174,377	179,913	189,509	197,595	213,925
<b>ROIC, excl. goodwill</b>	12.32%	6.95%	6.92%	13.80%	20.00%	23.63%	22.97%	21.30%	20.72%

Source: Own creation from calculation taken from annual reports

After calculating ROIC it is important to evaluate whether the ratio is at a satisfactory level or not. That can be done in two ways. Either with an estimation of the required rate of return (WACC), or a comparison with competitors (benchmarking) (Petersen & Plenborg, 2012). I have decided to compare it to WACC. I calculate WACC at 6.1% in chapter 6.1 and I do assume that WACC stays constant for the whole period.

**Figure 7 Relationship between ROIC and WACC**



Source: Own creation made from calculations from annual reports

As can be seen in figure 7 since 2009 ROIC has been higher than WACC and when we exclude goodwill in the calculations we see that the ROIC has always surpassed WACC. The ROIC excluding goodwill is not distorted by the price premium that Össur has paid for acquired

companies. Excluding goodwill from ROIC gives me the operating performance for Össur. It is therefore very clear that Össur has been able to generate a satisfactory return for its investors. It has though been declining for the last years. By decomposing the elements of ROIC I can figure out why.

#### 4.3.1.1 Decomposition of ROIC

ROIC measures the company's return on capital invested in the operation, but it does not tell us from where profitability stems from. Weather it comes from better revenue and expense relationship or if it comes from improved capital utilization. Therefore we need to look at the elements that build the ratio; the profit margin (PM) and the turnover rate (Petersen & Plenborg, 2012).

$$ROIC = Profit\ margin\ (PM) \times Turnover\ rate\ of\ invested\ capital$$

The profit margin describes the revenue and expense relationship for the company. It is attractive to have a high profit margin since it shows that the company has a good control over their expenses compared to their revenues. The PM is expressed as:

$$Profit\ margin\ (PM) = \frac{NOPAT}{Net\ revenues}$$

A company's turnover rate expresses their ability to utilize invested capital. The turnover rate is expressed as:

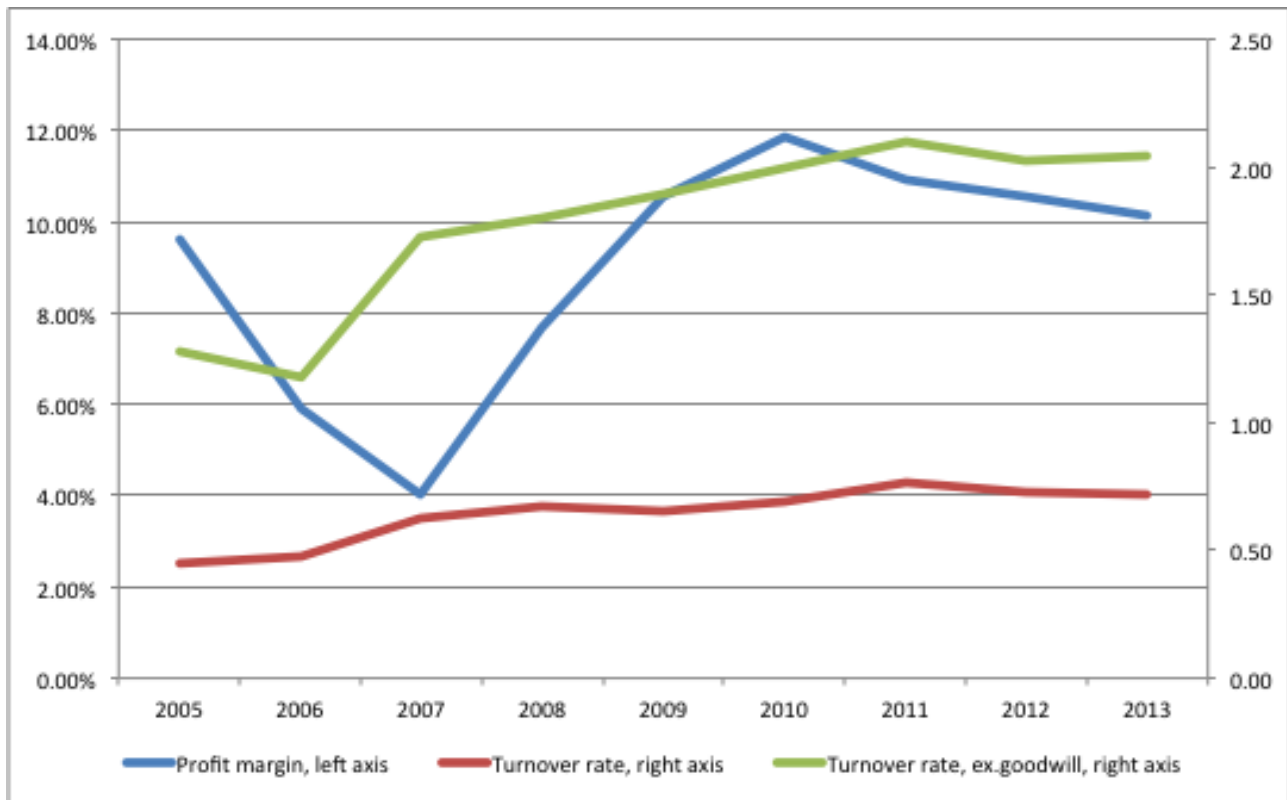
$$Turnover\ rate\ of\ invested\ capital = \frac{Net\ revenues}{Invested\ capital}$$

In table 3 the historical trend in turnover rate and the PM can be seen. The turnover rate has been calculated both including and excluding goodwill.

**Table 3 Historical turnover rates and PM**

Net revenues USD'000	160,729	252,133	335,609	346,835	330,580	358,538	398,325	399,437	436,274
Invested Capital USD'000	357,615	530,714	537,265	515,409	509,221	519,066	522,993	546,530	610,526
Invested Capital ex. goodw. USD'000	125,481	214,121	194,906	193,028	174,377	179,913	189,509	197,595	213,925
<b>Turnover rate</b>	0.45	0.48	0.62	0.67	0.65	0.69	0.76	0.73	0.71
<b>Turnover rate ex. Goodwill</b>	1.28	1.18	1.72	1.80	1.90	1.99	2.10	2.02	2.04
NOPAT USD'000	15,456	14,877	13,495	26,639	34,871	42,512	43,522	42,091	44,322
Net revenues	160,729	252,133	335,609	346,835	330,580	358,538	398,325	399,437	436,274
<b>PM</b>	9.62%	5.90%	4.02%	7.68%	10.55%	11.86%	10.93%	10.54%	10.16%

Source: Own creation based on annual reports

**Figure 8 Trend in Profit margin and asset turnover**

Source: Own creation from calculations made from annual reports

As can be seen in figure 8 the profit margin increased in the years 2007-2010 and has been decreasing slightly ever since. That tells me that in the last three years net operating profit has been increasing less than net revenues.

I have calculated the turnover rate, both including and excluding goodwill. They both show similar trend, steady increase. The turnover rate is substantially higher excluding goodwill the turnover rate is more trending upwards then downwards. This tells me that for Össur to turn the downward trend of ROIC for the last years they need to focus on better expense control.

#### 4.3.2 Decomposition of financial activities

In previous sections of this chapter I have analyzed the operating profitability of the firm to figure out what drives the profitability of operation. In this section I will analyze the impact of the financing activities on the profitability and the impact of financial leverage (FLEV).

Return on equity (ROE) measures the profitability of the firm taking both operating and financial leverage into account. The factors that affect the trend of a company's ROE are:

- Operating profitability
- Net borrowing interest rate after tax
- Financial leverage

That can be seen in the following expression of ROE:

$$ROE = ROIC + (ROIC - NBC) \times \frac{NIBD}{BVE}$$

Where:

*ROIC = Return on invested capital*

*NBC = Net borrowing cost*

*NIBD = Net interest bearing debt*

*BVE = Book value of equity*

Net borrowing cost is expressed in the following way:

$$NBC = \frac{\text{Net financial expences after tax}}{NIBD}$$

The financial leverage of the company is expressed in the following way:

$$FLEV = \frac{\text{Net financial expences after tax}}{\text{Book value of equity}}$$

Now we can see that that the first part of the equation for ROE gives is the operating profitability, the second part is the net borrowing interest rate and the last part is the financial leverage.

In table 4 I have listed all the components of ROE including goodwill and in table 5 all the components are listed but now without goodwill.

**Table 4 Components of ROE incl. goodwill**

	2005	2006	2007	2008	2009	2010	2011	2012	2013
<b>ROIC</b>	4.32%	2.80%	2.51%	5.17%	6.85%	8.19%	8.32%	7.70%	7.26%
<b>NBC</b>	2.30%	9.96%	10.03%	5.74%	4.65%	2.70%	2.45%	0.92%	0.34%
<b>Spread (ROIC-NBC)</b>	2.03%	-7.16%	-7.52%	-0.57%	2.20%	5.49%	5.87%	6.78%	6.92%
<b>FLEV</b>	1.02	1.96	0.93	0.84	0.44	0.32	0.24	0.15	0.17
<b>ROE= ROIC+(FLEV*spread)</b>	6.40%	-11.26%	-4.48%	4.69%	7.81%	9.94%	9.72%	8.69%	8.41%

Source: Own creation from calculations made from annual reports

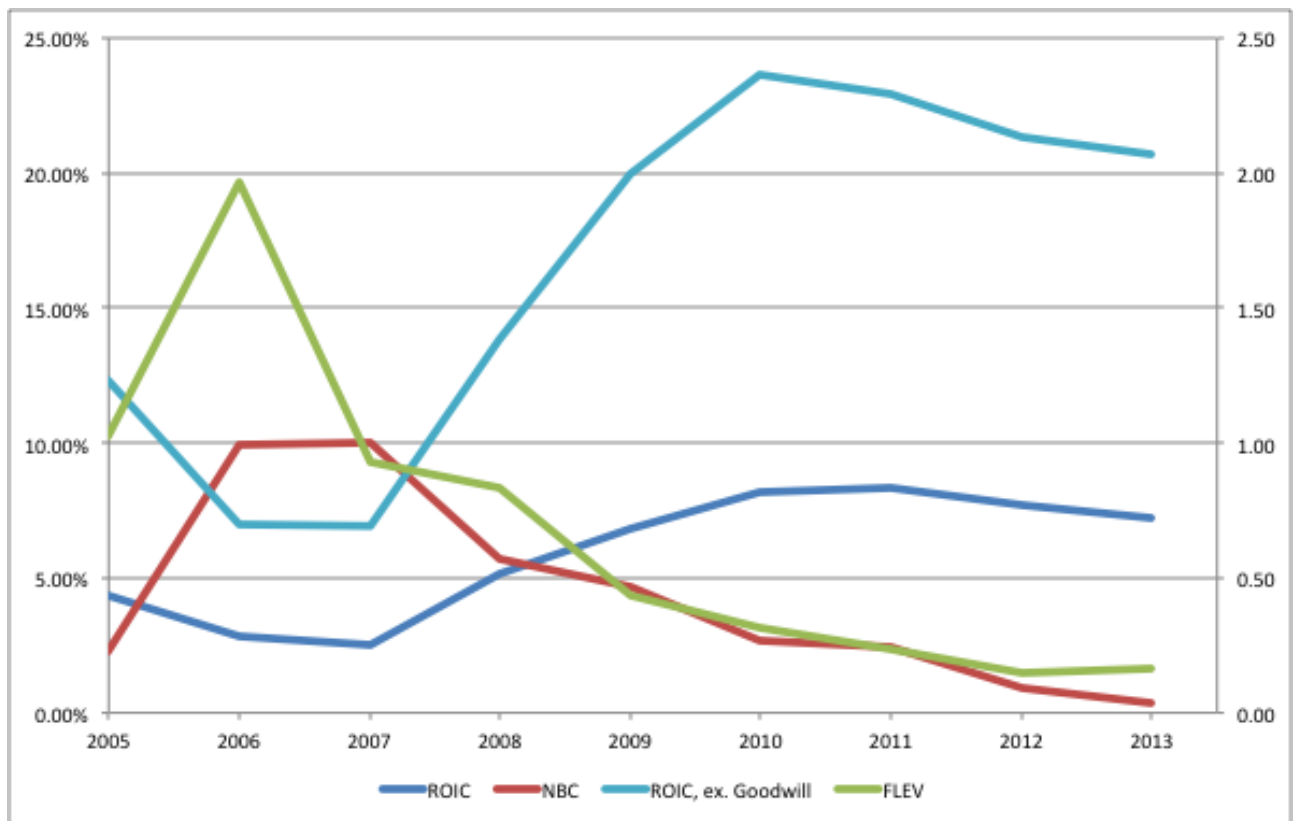
**Table 5 Components in ROE, excl. goodwill**

	2005	2006	2007	2008	2009	2010	2011	2012	2013
<b>ROIC, ex. Goodwill</b>	12.32%	6.95%	6.92%	13.80%	20.00%	23.63%	22.97%	21.30%	20.72%
<b>NBC</b>	2.30%	9.96%	10.03%	5.74%	4.65%	2.70%	2.45%	0.92%	0.34%
<b>Spread, ex. Goodwill</b>	10.02%	-3.01%	-3.11%	8.07%	15.35%	20.93%	20.52%	20.38%	20.38%
<b>FLEV</b>	1.02	1.96	0.93	0.84	0.44	0.32	0.24	0.15	0.17
<b>ROE, ex. Goodwill</b>	22.58%	1.03%	4.03%	20.54%	26.71%	30.31%	27.84%	24.28%	24.11%

Source: Own creation from calculations made from annual reports

As we can see in figure 9 goodwill has the same influence on ROE as it does on ROIC. The return on equity excluding goodwill is substantially higher and that tells me that Össur is delivering good returns to its shareholders. Both financial leverage and net borrowing cost have been decreasing since 2007. From 2008 net borrowing cost has been below ROIC excluding goodwill and from 2009 below ROIC including goodwill.

**Figure 9 Relationship between the inputs in ROE**



Source: Own creation from calculations made from annual reports

## 4.4 Liquidity risk analysis

In this sub-chapter I will take a look at the liquidity of Össur. Liquidity is extremely important for all companies, without enough liquidity companies cannot pay their bills and meet their financial obligation which can in worst cases lead to bankruptcy. A company could also miss out on profitable investments because of lack of liquidity (Petersen & Plenborg, 2012).

I will analyze both short-term and long-term liquidity ratios for Össur. The short-term liquidity ratios tells us how able Össur is to pay their short term debt obligations. The short-term liquidity ratio that will be analyzed is current ratio. I will also analyze long-term liquidity ratios for Össur, they tell me how capable Össur is to meet their long-term debts obligations. The long-term liquidity ratios that will be analyzed are; financial leverage and interest coverage ratio.

### 4.4.1 Current ratio

The idea underlying current ratio is that the higher the ratio is the likelier it is that sale of current assets can cover the liability of current debt (Petersen & Plenborg, 2012). The current ratio is expressed as:

$$\text{Current ratio} = \frac{\text{Current assets}}{\text{Current liabilities}}$$

In table 6 we can see the trend in Össur's current ratio. It increased consistently until 2011 when it decreased slightly. Following that slight decrease it increased again and then decreased in 2013.

**Table 6 Current ratio**

	2005	2006	2007	2008	2009	2010	2011	2012	2013
Current assets	61,199	111,255	115,655	114,623	97,632	109,932	121,908	118,336	152,002
Current liabilities	56,580	85,964	81,648	74,688	62,791	67,029	77,457	72,344	102,642
<b>Current ratio</b>	<b>1.08</b>	<b>1.29</b>	<b>1.42</b>	<b>1.53</b>	<b>1.55</b>	<b>1.64</b>	<b>1.57</b>	<b>1.64</b>	<b>1.48</b>

Source: Own creation from calculations in annual reports

#### 4.4.2 Financial leverage (FLEV)

Financial leverage (FLEV) is a measure of the long-term liquidity risk. A high financial leverage indicates a high liquidity risk (Petersen & Plenborg, 2012). The financial leverage of accompany can be expressed as:

$$FLEV = \frac{\text{Total liabilities}}{\text{Equity}}$$

In table 7 we can see the historical trend in Össur's FLEV ratio. Össur's FLEV has been decreasing since 2006, except for a increase of 0.02 between 2012 and 2013.

**Table 7 Financial leverage**

	2005	2006	2007	2008	2009	2010	2011	2012	2013
Total liabilities	156,536	317,607	232,595	208,556	136,508	109,635	86,731	59,542	74,598
Equity	152,829	161,639	250,282	249,648	312,223	343,558	364,733	407,734	448,037
<b>Financial leverage (FLEV)</b>	<b>1.02</b>	<b>1.96</b>	<b>0.93</b>	<b>0.84</b>	<b>0.44</b>	<b>0.32</b>	<b>0.24</b>	<b>0.15</b>	<b>0.17</b>

Source: Own creation from calculations in annual reports

#### 4.4.3 Interest coverage ratio

Another method to measure the long-term liquidity risk is the interest coverage ratio. The ratio measures how many times operating profit covers net financial expenses, the higher the ratio, the lower the risk (Petersen & Plenborg, 2012). The interest coverage ratio can be expressed as:

$$\text{Interest coverage ratio} = \frac{\text{Operating profit (EBIT)}}{\text{Net financial expenses}}$$

In table 8 the historical trend in Össur's interest coverage ratio has been calculated. We can see that the interest coverage ratio has been increasing since 2006 and have spiked in the last two years.

**Table 8 Interest coverage ratio**

	2005	2006	2007	2008	2009	2010	2011	2012	2013
EBIT	16,783	13,366	19,667	39,042	45,047	57,109	58,280	56,477	60,855
Net financial expenses	-4,280	-20,602	-31,663	-17,725	-18,003	-12,543	-12,673	-6,354	-3,721
<b>Interest coverage ratio</b>	<b>3.92</b>	<b>0.65</b>	<b>0.62</b>	<b>2.20</b>	<b>2.50</b>	<b>4.55</b>	<b>4.60</b>	<b>8.89</b>	<b>16.35</b>

Source: Own creation from calculations in annual reports



## 4.5 Summary of financial analysis

In this chapter I have analyzed Össur's financial performances over the past nine years. The analysis was based on the DuPont model for profitability.

The first thing we see from the profitability analysis is that ROIC has been declining for the last four years. When we compare ROIC against WACC, the ROIC is still higher and ROIC excluding goodwill exceeds WACC by far. This tells us that profitability from operation is very good for Össur.

I then decomposed ROIC to find out from where Össur's profitability stem. The profit margin has been fluctuating for the last years but it is currently slightly over 10%. Even with fluctuations, the profit margin has been decreasing for the last 4 years while turnover rate has been increasing. This tells me that Össur needs to focus on expense control to increase its ROIC.

The return on equity has been increasing for the company in the last years and net borrowing cost and financial leverage has been decreasing. The liquidity analysis revealed that Össur is quite liquid and is well capable to meet both short term and long term debt obligations.

## 5 Forecast

In order to do a valuation of Össur I need to forecast the future growth of the company. In the forecast I estimate the future cash flow for Össur to in the valuation. The forecast will be done on information gathered from the strategic and financial analysis performed in chapters 3 and 4.

For the valuation models that I will use, all future cash flows need to be estimated. But since that is quite impossible, the forecast period can be separated to two periods, the explicit forecast and the terminal period. When choosing a forecast horizon it is good to keep in mind if the company being valued is a high growth company or a stable growth company. With high growth companies it is recommended to have the explicit forecast longer since the company will probably take longer time to achieve its sustainable growth than a company with a lower growth rate.

I have chosen an explicit forecast of 5 years since a longer explicit period could result in more estimation errors (Petersen & Plenborg, 2012). The explicit period is 2014-2018 and 2019 the terminal period where I assume that Össur has reached its sustainable growth rate.

A complete list of the reformulated financial statements with the predicted growth rates can be seen in appendix 2

### 5.1 Net revenue

Össur operates in three different business segments and in three differently located markets. I have decided to predict revenue growth from the business segments instead of the locations. The reason for that is that I find that Össur puts more emphasizes on the business segments and growth according to them than in the markets location. In table 9 the historical growth can be seen by segments.

**Table 9 net revenue growth by business segments**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	Average
<b>Revenue USD'000</b>	160,729	252,133	335,609	346,835	330,580	358,538	398,325	399,437	436,274	
<b>Prosthetics USD'000</b>	103,655	115,754	131,722	142,943	148,513	159,849	170,425	171,895	182,578	
<b>growth</b>	-	11.67%	13.79%	8.52%	3.90%	7.63%	6.62%	0.86%	6.21%	7.40%
<b>% of revenue</b>	64.49%	45.91%	39.25%	41.21%	44.92%	44.58%	42.79%	43.03%	41.85%	45%
<b>Bracing and support USD'000</b>	56,168	135,036	179,839	178,755	161,732	179,410	208,142	208,255	233,872	
<b>growth</b>	-	140%	33%	-1%	-10%	11%	16%	0%	12.30%	25%
<b>% of revenue</b>	35%	54%	54%	52%	49%	50%	52%	52%	54%	50%
<b>Compression therapy USD'000</b>	-	-	19,107	20,082	18,159	17,543	18,652	18,440	18,892	
<b>growth</b>	-	-	-	5.10%	-9.58%	-3.39%	6.32%	-1.14%	2.45%	0%
<b>% of revenue</b>	0.00%	0.00%	5.69%	5.79%	5.49%	4.89%	4.68%	4.62%	4.33%	5%
<b>Other products USD'000</b>	906	1,343	4,941	5,055	2,176	1,736	1,106	847	932	
<b>growth</b>	-	48.23%	267.91%	2.31%	-56.95%	-20.22%	-36.29%	-23.42%	10.04%	24%
<b>% of revenue</b>	0.56%	0.53%	1.47%	1.46%	0.66%	0.48%	0.28%	0.21%	0.21%	1%

Source: Own creation based on calculations from annual reports

The prosthetics segment has been growing quite steadily in the last six years at a growth rate around 7% and an average of 7.4% for the last 8 years. Prosthetics have been decreasing as a percentage of revenue for the last five years. As stated earlier the prosthetics market is quite consolidated so growing with acquisitions is not that feasible in this business segment. There are though opportunities for growth if Össur expands into the Asian market, which for now counts for little of Össur's revenue. With all that in mind I estimate a 6% steady growth rate in the explicit forecast.

Bracing & support sales have been growing at a pace of above 10% the last years, excluding 2012 where growth was 0%. Average growth for the period is 25%. But since growth in this segment has been fluctuating quite a lot I do not believe that the average growth rate is an appropriate growth rate for the forecast. As stated before there are opportunities for Össur to grow more in this segment with acquisition since this market is not yet as consolidated as the prosthetics market. Therefore I estimate a growth rate of 12% in the first year of the explicit forecast and decreasing by 1% each year after that until it reaches 7% in the terminal period.

The compression therapy market has been steady at around 5% of net sales since Össur entered that market in 2007. The market for compression therapy is isolated in France and at this time Össur has no plans on expanding in that market. I keep the growth rate for that market at 2.5% as it was between 2012 and 2013.

Other products will get the growth rate of 0% since I do not believe that Össur will start expanding into other business segments.

## **5.2 Cost of goods sold**

Cost of goods sold has been fluctuating around 40% of net revenue for the whole period with an average of 39.46%. The biggest risk in increase of cost of goods sold is raw material price increase or currency exchange difference. Össur does hedge against both of those. Össur has implemented a cost reduction strategy (Össur, 2006-2014).

Even though Össur is trying to reduce their cost and are hedged against some material price fluctuation, I keep the cost of goods sold steady at 39.46% of net revenues for the whole forecasting period.

## **5.3 Sustainable growth rate**

The growth in the terminal period is the sustainable growth rate. That is when the company is thought to have reached a steady growth and will grow at that rate in the future.

When choosing an appropriate growth rate it is important that it does not exceed the growth rate of the economy that the company operates in (Damodaran, 2014). I will use the suggestion of Damodaran (2014) of a sustainable growth rate equal to risk-free interest rate.

## 6 Valuation

In this chapter I will perform a valuation of Össur to find the fair value of the share price. There are numerous valuation models to choose from when conducting a valuation of a company. The two of the most popular valuation approaches are present value and relative valuation. I have chosen to use the present value approach. In the present value models the valuation is based on the value of future income streams or cash flows (Petersen & Plenborg, 2012). There are many present value approach models to choose between, I have chosen to use the Economic Value Added model (EVA) and the Discounted Cash Flow model (DCF).

I chose to use these two models because they are both based on future cash flow stream and the value of the company should be the same using both approaches. So using both of the models is a good check to see if the valuation has been done correctly.

Both of those model use weighted average cost of capital as a discount factor to find the present value of the future payments.

### 6.1 Weighted average cost of capital (WACC)

One of the most important elements of EVA and DCF valuation of a firm is the weighted average cost of capital (WACC). It is used to discount the future payments to the firm to its current value. It is very important to include all of the stakeholders of the company to the WACC that we use in the valuation. In Össur's case those are owners and debt holders, so we should be careful to include a cost of capital for both of them in our WACC. The formula for the WACC I will use is:

$$WACC = \frac{NIBD}{NIBD+MVE+OL} \times r_d \times (1 - t) + \frac{MVE}{NIBD+MVE+OL} \times r_e + \frac{OL}{NIBD+MVE+OL} \times r_{OL} \times (1 - t)$$

Where:

*NIBD = market value of net interest bearing debt*

*MVE = marked value of equity*

*OL = Book value of operating lease*

$r_d = \text{required rate of return on debt}$

$r_e = \text{required rate of return on equity}$

$r_{ol} = \text{required rate of return on operating lease}$

$t = \text{corporate tax rate}$

In the following sub-chapters I will discuss the inputs in the WACC formula but for Össur, this results in:

$$WACC = 0.19 \times 0.02456 \times 0.8 + 0.59 \times 0.0892 + 0.22 \times 0.02456 \times 0.8 = 0.061$$

### 6.1.1 Capital structure

The first thing to look at, of the inputs that we have in WACC, is the capital structure of the firm. Some companies have a definite and a clear vision of their ideal capital structure and that would then be the capital structure to use in the valuation, if the analyst assumes that the company manages to hold their capital structure. This is not the case with Össur.

Össur does not have a clear view of an ideal capital structure so I have to figure out what capital structure to use in the valuation. The first step in that is looking at the historical capital structure. I will use the book value of net interest bearing debt and the market value of equity to get the most realistic capital structure.

To be able to find the market value of Össur we divide outstanding shares at year end with the closing price of the share at year end. Since Össur has only been registered in the Copenhagen stock exchange since 2009 it was necessary to use historical currency rates (XE.COM INC) to convert the ISK price at year end to DKK. The share price was then again converted from DKK to USD so I would get the market value in USD and it would be comparable with the book value of debt.

The operating lease has been added to Össur's equity when calculating the capital structure since I have capitalized the operating lease in the valuation itself.

Össur's capital structure has not been stable for the last years. Do to many acquisitions in 2006 the debt level spiked over 50% but for the last years it has been decreasing and the debt level has been around 20% for the last 6 years excluding 2012 when it dropped to nearly 12%. In the valuation I

will use a debt level of 18% since I do believe that Össur will manage their debt level well in the future but I do not believe that they will decrease. In table 10 the historical capital structure for Össur can be seen.

**Table 10: Historical capital structure**

	2005	2006	2007	2008	2009	2010	2011	2012	2013
<b>Closing rate (USD)</b>	1.79	1.58	1.57	0.82	1.11	1.69	1.49	1.33	1.94
<b>Shares outstanding('000)</b>	384,940	384,940	423,000	423,000	453,732	453,732	453,750	453,750	453,750
<b>Market value of equity (USD'000)</b>	215,526	243,515	268,800	517,583	409,619	268,489	304,198	340,089	234,021
<b>Capitalized operating lease(USD'000)</b>	48,250	51,468	54,387	57,205	60,490	65,873	71,530	79,253	87,890
<b>Net interest bearing debt</b>	156,536	317,607	232,595	208,556	136,508	109,635	86,731	59,542	74,598
<b>D/(D+E+OL)</b>	37.24%	51.85%	41.85%	26.62%	22.50%	24.69%	18.75%	12.43%	18.81%
<b>E/(D+E+OL)</b>	51.28%	39.75%	48.36%	66.07%	67.53%	60.47%	65.78%	71.02%	59.02%
<b>OL/(D+E+OL)</b>	11.48%	8.40%	9.79%	7.30%	9.97%	14.84%	15.47%	16.55%	22.17%

Source: Own creation based on Össur's annual reports and XE.com

### 6.1.2 Corporate tax rate

The current corporate tax rate in Iceland is 20%. I will use that tax rate in the WACC calculation as well as in all other calculations in the valuation.

### 6.1.3 Required rate of return on equity ( $r_e$ )

The most common way of finding out the required rate of return on equity is using the Capital Asset Pricing Model (CAPM). The idea underlying the CAPM is, that with a well diversified portfolio all unsystematic risk will be diversified away resulting in the only risk the investors are exposed to, is the systematic risk that cannot be diversified away (Petersen & Plenborg, 2012). Although the CAPM is a very theoretical model and has been under a lot of scrutiny, i.e. that it only works in a perfect world; I will still use it in this valuation since most analysts still use it because of the lack of a better alternative. In the CAPM the required rate of return on equity is defined as:

$$r_e = r_f + \beta_e \times (r_m - r_f)$$

where:

$r_e$  = required rate of return on equity

$r_f$  = risk-free interest rate

$\beta_e$  = systematic risk on equity (levered beta)

$r_m - r_f$  = market risk premium

In the below subchapters I will discuss and calculate the outcome for all the variables in the CAPM for Össur. Based on those, the required rate of return to investors is:

$$r_e = 0.0267 + 1.25 * 0.05 = 0.0892$$

### **6.1.3.1 Risk-free interest rate ( $r_f$ )**

Risk-free interest rates are the rates that investors can expect without accepting any risk. The usual equivalent of that are government bond since they are considered risk-free investments. I will use the rate of a 10-year US treasury bond as the equivalent of the risk-free rate. The reason for why I am using the US Treasury bond instead of another one is that most of Össur's income and expenses are in US dollars. The next common currency in Össur's operations is the EURO but there are a lot of bonds with very variable rates to choose from within the EU so I exclude that option and use the US Treasury bond. On February 5<sup>th</sup> the yield of the 10-year US government bond is 2.67%

### **6.1.3.2 Systematic risk on equity (levered beta)**

The systematic risk, beta, measures the sensitivity of the stock price to the market. In essence the higher the systematic risk, the higher the rate of return on equity (Petersen & Plenborg, 2012). That can be interpreted in the following way:

$\beta_e = 0$ , Risk-free investment

$\beta_e < 1$ , Less risky than the market portfolio

$\beta_e = 1$ , Equal risk to the market portfolio

$\beta_e > 1$ , More risky than the market portfolio



Beta cannot be observed on the market and usually historical returns are used to find the beta since all value relevant information are reflected in the returns. That is done by finding the covariance of the company's historical returns and the market portfolios historical returns. (Petersen & Plenborg, 2012).

Most of Össur's biggest competitors are privately held companies so there are no historical return to find on them so that gives me an issue with creating the market portfolio to compare against Össur's historical returns. Therefore I have decided to use Damodaran's (2014) bottom up beta calculation to find the beta for the company.

Damodaran (2014) expresses the following formula to find the beta for a company:

$$\beta_e = \beta_u + (1 + (1 - \text{tax rate})(D/E))$$

Where:

$\beta_u$  = Industry beta

D/E = Debt to equity ratio

For Össur, the debt to equity ratio is  $(0.19 + 0.22)/0.59 = 0.695$  and the tax rate is 0.2. The problem is finding the industry beta. As I said before, few of Össur's main competitors are public and do not have a listed beta calculation that can be used to find the beta for the industry. That is why I have decided to use the industry betas calculated by Damodaran (2012). I use the beta for healthcare products since I find that that industry best fits with Össur. The D/E level in the healthcare product industry is very close to the D/E level of Össur. The unlevered beta for that industry according to Damodaran (2012) is 1.00. That gives me a beta for Össur at 1.25.

The beta is quite high and tells me that it is riskier to invest in Össur's share then in the market portfolio. But as I have said before a lot of assumptions are made in the beta estimation and it could easily give us an unrealistic value of Össur.

### **6.1.3.3 Market risk premium ( $r_m - r_f$ )**

The market risk premium is the difference between the return on the market and the risk-free rates. There are two main ways used to determine the market risk premium; ex-post approach and ex-ante approach. Both of those methods are extremely time consuming and have severe estimation

problems. That is why most analyst use published, estimated market risk premiums (Petersen & Plenborg, 2012).

According to Petersen & Plenborg (2012), the average market risk premium is 5.3% in European countries and in the US it is 6.3%. Damodaran (2014) calculates the risk-premium for many countries and updated risk-premium, as of the 5<sup>th</sup> of January 2014 are the following: 4.96% for the US, 5.12% for Denmark, 5.9% in France and 5.15% in Germany. Taking that into consideration, I have decided to use a market risk premium of 5% in this valuation.

#### **6.1.4 The required rate of return on debt ( $r_d$ )**

The required rate of return is the interest rate on the company's debt. The cost of debt can be expressed as:

$$r_d = (r_f + r_s) \times (1 - \text{tax rate})$$

The only component in this equation I have not already addressed is:

$$r_s = \text{Credit spread (risk premium on debt)}$$

The credit spread is a measurement on how risky the debt is to the debt holder. The lower the credit spread the safer the debt is to the debt holder. The required rate of return on debt is always lower for a company than the required rate of return on equity. The reason for that is if a company should default on their obligations and go bankrupt, the debt is paid first and then the shareholders from what can be retrieved from the estate.

Many credit rating companies like Moody's and Standard and Poor's give out a credit rating for listed companies. But there is no listed credit rating for Össur, since Össur is not a big company on an international scale.

I will use the Damodaran's (2014) suggestion to rate unlisted companies by using the interest coverage ratio. The interest coverage ratio of Össur is at 16.5 at the moment and a market cap under five billion USD. From that, I get a credit rating of Aaa/AAA. That gives me a credit spread of 0.4%. That tells me that it is very safe for debt holders to lend to Össur. The cost of debt will then be:

$$r_d = (0.0267 + 0.004) \times (1 - 0.2) = 0.02456$$

### 6.1.5 Required rate of return on operating lease

It is also necessary to find a separate required rate of return for operating lease than for debt. The reason for that is operating lease tends to be more secure than other debt, since it has a fixed underlying asset. That means that the credit spread of the operating lease is lower than that of the debt. The credit spread I have figured out for Össur is the safest one there is so there is only one option for the credit spread of the operating lease. That is giving it a rating of Aaa/AAA and a spread of 0.4% which gives me the same cost of debt for the operating lease as all other debt in the company.

## 6.2 DCF

The DCF model is the most widely used of all the present value approaches and is based on the future value of free cash flow to the company (Petersen & Plenborg, 2012).

When using both an explicit forecast and a terminal period, a two-stage DCF model has to be used. The first part of the model gives us the present value of the explicit period and the second part gives the present value of the terminal period. The two-stage DCF model can be seen below:

$$EV_0 = \sum_{t=1}^n \frac{FCFF_t}{(1 + WACC)^t} + \frac{FCFF_{n+1}}{(WACC - g)} \times \frac{1}{(1 + WACC)^n}$$

Where:

$EV_0$  = Enterprise value at the time of valuation

$FCFF_t$  = Free cash flow to the firm at time  $t$

WACC = Weighted average cost of capital

$g$  = Growth in the terminal period

$n$  = length of the explicit forecast

In table 11 my calculations for the value of Össur with the DCF model can be seen. In appendix for is a free cash flow calculation of the forecast. I get a market value of just below 1.1 billion USD and a share price of 13.36 DKK. The share price is slightly above the closing price on February 5<sup>th</sup> which was 11.7 DKK. That is a difference of around 14.2%.

Table 11 Discounted cash flow model

Discounted cash flow model	2014E	2015E	2016E	2017E	2018E	2019E
Free cash flow to firm (FCFF) USD'000	34,852	34,163	37,928	41,957	46,214	50,653
WACC	6.10%	6.10%	6.10%	6.10%	6.10%	6.10%
Discount factor	0.942507069	0.888319575	0.83724748	0.78911167	0.74374332	0.70098334
Present value of FCFF	32,848	30,347	31,755	33,109	34,371	
Value of FCFF in forecast horizon USD'000	162,431					
Value of FCFF in terminal period USD'000	1,098,334					
Estimated enterprise value USD'000	1,260,765					
Net interest bearing debt USD'000	-74,598					
Capitalized operating lease USD'000	-87,890					
Estimated market value of equity USD'000	1,098,276					
shares outstanding '000	453,750					
Share price USD	2.42					
DKK/USD at 5.02.2014	5.52					
Share price DKK	13.36					

Source: own production based on calculations from annual reports

### 6.3 EVA

The EVA model is based on the initial invested capital and the present value of operating profit after tax. The EVA model like the DCF can be a two stage model where the first part expresses the value in the explicit horizon and the second part gives the value in the terminal period. EVA is expressed as:

$$EV_0 = IC_0 + \sum_{t=1}^n \frac{EVA_t}{(1+WACC)^t} + \frac{EVA_{n+1}}{(WACC-g)} \times \frac{1}{(1+WACC)^n}$$

where:

$EV_0$  = Enterprise value at the time of valuation

$IC_0$  = Invested Capital at the time of valuation

$EVA_t = NOAPT_t - WACC \times IC_{t-1}$

$WACC = \text{Weighted average cost of capital}$

$g = \text{Growth in the terminal period}$

$n = \text{length of the explicit forecast}$

In table 12 my calculation of the value of Össur can be seen when calculated using the EVA model. The estimated value of the company is very close to the value from using the DCF model or just under 1.1 billion USD and the EVA model gives me a share price of 13.35 DKK.

**Table 12 Economic value added model (EVA)**

EVA	2014E	2015E	2016E	2017E	2018E	2019E
NOPAT	55,555	60,332	65,223	70,167	75,099	79,951
Invested capital, beginning of period USD'000	610,526	656,557	713,011	770,805	829,235	887,526
WACC	6.10%	6.10%	6.10%	6.10%	6.10%	6.10%
Cost of capital	37,242	40,050	43,494	47,019	50,583	54,139
EVA	18,313	20,283	21,729	23,148	24,516	25,812
Discount factor	0.943	0.888	0.837	0.789	0.744	
Present value of EVA	17,261	18,017	18,193	18,266	18,234	
Invested capital, beginning of period USD'000	610,526					
Present value of EVA in forecast horizon USD'000	89,970					
Present value of EVA in terminal period USD'000	559,692					
Estimated enterprise value USD'000	1,260,188					
Net interest bearing debt USD'000	-74,598					
Capitalized operatin lease USD'000	-87,890					
Estimated market value of equity USD'000	1,097,699					
shares outstanding '000	453,750					
Share price USD	2.42					
DKK/USD at 5.02.2014	5.52					
Share price DKK	13.35					

Source: Own production based on calculations in annual reports

The valuations should, in theory, return the same equity value but due to many uncertainties and assumptions in the forecast I believe that a difference below 1% is acceptable. I therefore conclude that Össur's shares are undervalued.

## 6.4 Sensitivity analysis

Since a lot of assumptions are made in a forecast for a valuation, it is important to do a sensitivity analysis. The sensitivity analysis shows us how sensitive the calculated stock price is to small

changes in some key value drivers. In the sensitivity analysis I have carried out for Össur's shares I use the DCF model and the value drivers and change are growth and WACC.

As can be seen in table 13, an increase of 0.13% in growth, while WACC is held constant, increases the price per share by 4%. Also, a 0.2% increase in WACC, while the growth is held at 2.67%, decreases the share price by 6.3%. As can be seen from the table, Össur's share price is more sensitive towards changes in WACC than it is to growth.

**Table 13 Sensitivity analysis**

DKK	WACC					
		5.90%	6.00%	6.10%	6.20%	6.30%
Growth	2.50%	13.62	13.16	12.73	12.32	11.94
	2.60%	14.03	13.55	13.09	12.66	12.26
	2.67%	14.33	13.83	13.35	12.92	12.50
	2.70%	14.47	13.96	13.48	13.03	12.60
	2.80%	14.94	14.40	13.89	13.41	12.96

Source: Own production based on DCF valuation

## 6.5 Multiples

A multiples analysis is based on a company's peer group. It relies on the assumption that the compared companies are truly identical in all aspects (Petersen & Plenborg, 2012).

When doing a multiples analysis the main competitors are normally used as the peer group. Össur's main competitors are all privately held so a multiples analysis with them is impossible. I could conduct a multiples analysis of other companies in the healthcare industry but I believe that the results would be bias and irrelevant. So a multiples analysis will not be done in this thesis.

## 7 Conclusions

The purpose of this thesis was to find the fair value price per share for Össur on February 5<sup>th</sup>, 2014. As well as to find out if the share price is over or under valued and give recommendations on if a private investor should buy or sell stocks from Össur.

In order to get answers to the problem statement, I started with performing a strategic valuation of Össur. The aim of that was to find the non financial value drivers that affect Össur's growth potential in the future.

Össur's biggest weakness is most likely the current economical and political environment in Iceland. Capital controls that were set in the aftermath of the financial crisis inhibit Össur's growth potential. Even though Össur is exempt from the capital control regulations itself, investors are hesitant and loan agencies are reserved about lending to companies in an unstable environment. That itself creates an unstable and inhospitable corporate environment in Iceland.

The main threats for Össur in the future are possible changes in reimbursement plans. Most of Össur's customers get reimburse from insurance companies. A change in reimbursement plans could therefore have adverse affects on Össur's sales. Insurance companies have been demanding products with more longevity and that decreases sales in renewed products.

Össur stands extremely strong against its competitors with a good IP portfolio and steady innovation in research and development. That creates organic growth for the company. Being one of the market leaders is also extremely valuable for Össur and puts them in a strong position against their competitors.

The biggest opportunity for Össur in the coming years is expanding in the B&S segment. With the second largest market share of only 7% - 9% gives the idea that expansion with strategic acquisition could help to increase Össur's market share in that segment and hopefully become the biggest there.

Following the strategic analysis, I conducted a profitability analysis on the company as well. The profitability analysis showed us that ROIC including goodwill has grown from 4.32% in 2005 to 7.26% in 2013, and has been fluctuating between 7% - 8% during the last four years. When we look

at ROIC excluding goodwill see that it has grown from 12.32% in 2005 to 20.72% in 2013. This tells us that Össur has an extremely good operation performance. Comparing ROIC to WACC at 6.1% we see that since 2009 Össur has been able to generate growth above required return to investors. When we only look at the operating performance it is clear that that exceeds the required return through the whole period.

Decomposition of ROIC revealed that the decrease in ROIC is due to lack of control in the revenue expense relationship. For Össur to turn the downward trend of ROIC upward they therefore have to keep stricter expense controls. The liquidity risk analysis revealed that Össur is well capable in meeting both their short-term and long-term debt obligations.

From information gathered from those analysis, a forecast for the future growth potential for Össur was made. The revenue growth forecast was made using the historical growth from the segments that Össur operates in along with certain assumptions. The growth rates for prosthetics and compression therapy were kept constant though the whole period at 6% and 2.5% respectively. The B&S market starts with quite a high growth rate of 12% in the forecast and decreases by 1% each year until it reaches 7% in the terminal period. I deemed the risk-free rate an appropriate sustainable growth rate.

The valuation of the company was then based on two valuation models, DCF and EVA. The results were 13.35 DKK and 13.36 DKK. Össur's share price was 11.7 DKK on February 5<sup>th</sup>, 2014. The fair share price I have calculated is 13.36 DKK. Therefore I conclude that Össur's share price is undervalued and would recommend investors to buy.



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## 9 Appendixes

### Appendix 1 Reformulated financial statements

#### Reformulated income statement

USD'000	2005	2006	2007	2008	2009	2010	2011	2012	2013
Net sales	160,729	252,133	335,609	346,835	330,580	358,538	398,325	399,437	436,274
Cost of good sold	-66,338	-102,756	-146,754	-132,632	-128,765	-135,916	-152,255	-151,485	-166,336
<b>Gross profit</b>	94,391	149,377	188,855	214,203	201,815	222,622	246,070	247,952	269,938
sales and marketing expences	-38,103	-67,620	-85,152	-97,812	-92,567	-105,635	-119,313	-120,924	-139,080
General and administrative expences	-24,806	-36,165	-56,132	-48,936	-42,424	-38,598	-49,806	-48,223	-49,477
Other operating income	870	530	1,033	1,033	496	387	303	102	363
reasearch and development expences	-12,408	-17,925	-19,887	-20,930	-19,080	-19,731	-19,654	-22,131	-21,537
lease expences	4,505	5,739	7,645	7,641	7,807	8,533	10,933	11,700	14,286
<b>Operating profit before special items</b>	24,449	33,936	36,362	55,199	56,047	67,578	68,533	68,476	74,493
Special items, lease depreciation	0	-4,427	-4,722	-4,990	-5,248	-5,550	-6,043	-6,562	-7,271
Special items, pension	0	0	0	0	4,500	4,600	5,100	5,100	5,800
<b>EBITDA</b>	24,449	29,509	31,640	50,209	55,299	66,628	67,590	67,014	73,022
Depreciation, amortisation and impairment loss	-7,666	-16,143	-11,973	-11,167	-10,252	-9,519	-9,310	-10,537	-12,167
<b>EBIT</b>	16,783	13,366	19,667	39,042	45,047	57,109	58,280	56,477	60,855
Tax of operation	-1,327	714	-7,022	-13,152	-10,963	-15,597	-15,966	-15,698	-16,533
<b>NOPAT</b>	15,456	14,080	12,645	25,890	34,084	41,513	42,313	40,778	44,322
Financial income	0	243	10,590	864	254	320	224	153	217
Financial expences	-4,280	-20,845	-42,253	-18,303	-15,587	-15,959	-10,845	-6,788	-4,619
Net exchange rate difference	0	0	0	-286	-2,670	3,096	-2,052	281	681
<b>Net financial expences</b>	-4,280	-20,602	-31,663	-17,725	-18,003	-12,543	-12,673	-6,354	-3,721
Tax on net financial expences/tax shield	-770	-3,708	-5,699	-2,659	-2,700	-2,258	-2,535	-1,271	-744
Tax on operating lease depri./tax shield	0	-797	-850	-748	-787	-999	-1,209	-1,312	-1,454
<b>After tax net financial income/(expences)</b>	-2,699	-15,861	-24,588	-13,920	-14,132	-8,749	-7,952	-2,743	-120
<b>Corporate profit after tax</b>	12,757	-1,780	-11,943	11,970	19,953	32,764	34,362	38,035	44,202

## Tax calculation

USD'000	2005	2006	2007	2008	2009	2010	2011	2012	2013
Corporate tax rate	18%	18%	18%	15%	15%	18%	20%	20%	20%
Reported taxes	-557	5,219	-473	-9,745	-7,475	-12,340	-12,223	-13,115	-14,335
net financial items	-4,280	-20,602	-31,663	-17,725	-18,003	-12,543	-12,673	-6,354	-3,721
Tax shield	-770	-3,708	-5,699	-2,659	-2,700	-2,258	-2,535	-1,271	-744
Operating lease depreciation	0	-4,427	-4,722	-4,990	-5,248	-5,550	-6,043	-6,562	-7,271
Tax shield operating lease	0	-797	-850	-748	-787	-999	-1,209	-1,312	-1,454
Net financial items, after tax	-3,510	-20,523	-29,836	-19,307	-19,763	-14,836	-14,973	-10,333	-8,794
Operating taxes	-1,327	714	-7,022	-13,152	-10,963	-15,597	-15,966	-15,698	-16,533

## Reformulated balance sheet

USD'000	2005	2006	2007	2008	2009	2010	2011	2012	2013
<b>Non-current assets</b>									
Working cash (0,5% of sale)	804	1,261	1,678	1,734	1,653	1,793	1,992	1,997	2181.37
Property, plant and equipment	22,130	37,074	35,970	32,927	32,286	32,089	36,239	35,489	40,360
Goodwill	232,134	316,593	342,359	322,381	334,844	339,153	333,484	348,935	396,601
Other operating intangible assets	26,136	35,542	7,260	4,820	2,740	1,084	3,347	8,298	11,974
Deferred tax assets	23,542	63,485	61,603	56,407	42,367	36,171	31,951	26,565	22,159
Capitalized operating lease	48,250	51,468	54,387	57,205	60,490	65,873	71,530	79,253	87,890
<b>Total non-current assets</b>	<b>352,996</b>	<b>505,423</b>	<b>503,258</b>	<b>475,474</b>	<b>474,380</b>	<b>476,163</b>	<b>478,542</b>	<b>500,538</b>	<b>561,166</b>
<b>Current assets</b>									
Inventories	25,529	47,376	54,277	55,818	43,526	46,261	52,171	56,757	66,825
Accounts receivable	28,314	49,147	47,405	43,821	43,693	52,322	52,549	52,666	71,239
Other receivables	7,356	14,732	10,706	9,828	10,413	11,349	17,188	8,913	13,938
tax assets	0	0	3,267	5,156	0	0	0	0	0
Total current assets	61,199	111,255	115,655	114,623	97,632	109,932	121,908	118,336	152,002
<b>Total assets</b>	<b>414,195</b>	<b>616,678</b>	<b>618,913</b>	<b>590,097</b>	<b>572,012</b>	<b>586,095</b>	<b>600,450</b>	<b>618,874</b>	<b>713,168</b>
<b>Current liabilities</b>									
accounts payable	8,844	22,132	15,249	13,593	13,353	15,462	20,305	17,120	21,070
Tax liabilities	917	2,301	3,566	1,434	2,452	3,339	3,915	767	6,342
Deferred tax liabilities	27,832	33,204	28,826	25,870	11,024	13,691	16,010	17,687	21,117
Accrued salaries and related expenses	0	0	0	0	14,760	16,006	18,192	16,894	25,951
Other current liabilities	13,508	17,375	27,084	26,132	18,516	15,949	15,401	15,114	23,671
Provisions	5,479	10,952	6,923	7,659	2,686	2,582	3,634	4,762	4,491
Total current liabilities	56,580	85,964	81,648	74,688	62,791	67,029	77,457	72,344	102,642
<b>Invested capital ( net operating assets)</b>	<b>357,615</b>	<b>530,714</b>	<b>537,265</b>	<b>515,409</b>	<b>509,221</b>	<b>519,066</b>	<b>522,993</b>	<b>546,530</b>	<b>610,526</b>
<b>Net working capital</b>	<b>4,619</b>	<b>25,291</b>	<b>34,007</b>	<b>39,935</b>	<b>34,841</b>	<b>42,903</b>	<b>44,451</b>	<b>45,992</b>	<b>49,360</b>
<b>Total equity</b>	<b>152,829</b>	<b>161,639</b>	<b>250,282</b>	<b>249,648</b>	<b>312,223</b>	<b>343,558</b>	<b>364,733</b>	<b>407,734</b>	<b>448,037</b>
Capitalized operatin lease	48,250	51,468	54,387	57,205	60,490	65,873	71,530	79,253	87,890
<b>Adjusted total equity</b>	<b>201,079</b>	<b>213,107</b>	<b>304,669</b>	<b>306,853</b>	<b>372,713</b>	<b>409,431</b>	<b>436,263</b>	<b>486,987</b>	<b>535,927</b>
<b>Financial liabilities</b>									
Interest rate swap contract	0	0	0	0	0	3,200	0	0	0
Borrowings	187,529	201,334	207,417	183,117	210,282	158,378	110,113	83,742	129,556
Borrowings	11,048	163,815	91,578	82,070	27,182	28,837	20,956	20,354	19,998
Financial liabilities	0	0	0	9,474	9,995	1,358	2,216	2,151	1,264
Provisions	0	0	3,118	3,575	5,744	4,718	4,493	4,838	4,751
Deferred tax liabilities	0	0	1,778	1,206	0	0	0	0	0
<b>Interest bearing debt</b>	<b>198,577</b>	<b>365,149</b>	<b>303,891</b>	<b>279,442</b>	<b>253,203</b>	<b>196,491</b>	<b>137,778</b>	<b>111,085</b>	<b>155,569</b>
<b>Financial assets</b>									
Other intangible assets	20,558	34,417	54,537	40,355	32,642	28,891	26,574	24,838	35,897
Investments held for trading	0	0	0	0	2,308	1,199	0	0	0
Financial assets	0	0	713	203	0	0	0	0	0
Bank balance and cash	20,110	10,917	14,211	29,172	78,178	52,606	17,664	19,881	39,588
Other financial assets	1,373	2,208	1,835	1,156	3,567	4,160	6,809	6,824	5,486
<b>Interest-bearing assets</b>	<b>42,041</b>	<b>47,542</b>	<b>71,296</b>	<b>70,886</b>	<b>116,695</b>	<b>86,856</b>	<b>51,047</b>	<b>51,543</b>	<b>80,971</b>
<b>Net-interest-bearing debt</b>	<b>156,536</b>	<b>317,607</b>	<b>232,595</b>	<b>208,556</b>	<b>136,508</b>	<b>109,635</b>	<b>86,731</b>	<b>59,542</b>	<b>74,598</b>
Invested capital	357,615	530,714	537,265	515,409	509,221	519,066	522,993	546,530	610,526

**Appendix 2 Historical and forecasted growth rates in financial statements**

**Historical and forecasted growth rates in income statements**

USD'000	2005	2006	2007	2008	2009	2010	2011	2012	2013	Average	2014E	2015E	2016E	2017E	2018E	2019E
Net sales		56.87%	33.11%	3.34%	-4.69%	8.46%	11.10%	0.28%	9.22%	16.81%	9.05%	8.60%	8.11%	7.58%	7.03%	6.46%
Cost of good sold (% of net sales)	41.27%	40.75%	43.73%	38.24%	38.95%	37.91%	38.22%	37.92%	38.13%	39.46%	39.46%	39.46%	39.46%	39.46%	39.46%	39.46%
sales and marketing expences (% of net sales)	23.71%	26.82%	25.37%	28.20%	28.00%	29.46%	29.95%	30.27%	31.88%	28.19%	28.00%	28.00%	28.00%	28.00%	28.00%	28.00%
General and administrative expences (% of net sales)	15.43%	14.34%	16.73%	14.11%	12.83%	10.77%	12.50%	12.07%	11.34%	13.35%	13.00%	13.00%	13.00%	13.00%	13.00%	13.00%
Other operating income % of net sales	0.54%	0.21%	0.31%	0.30%	0.15%	0.11%	0.08%	0.03%	0.08%	0.20%	0.20%	0.20%	0.20%	0.20%	0.20%	0.20%
reasearch and development expences % of net sales	7.72%	7.11%	5.93%	6.03%	5.77%	5.50%	4.93%	5.54%	4.94%	5.94%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
lease expences (% of net revenues)	2.80%	2.28%	2.28%	2.20%	2.36%	2.38%	2.74%	2.93%	3.27%	2.58%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
Special items, lease depriciation (% of capitalized operating lease)	0.00%	8.60%	8.68%	8.72%	8.68%	8.42%	8.45%	8.28%	8.27%	8.51%	8.50%	8.50%	8.50%	8.50%	8.50%	8.50%
Special items, pension (% of net sales)	0.00%	0.00%	0.00%	0.00%	1.36%	1.28%	1.28%	1.28%	1.33%	1.31%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%
Depriciation, amortisation and impairment loss(% of PPE & other intangible assets amort	15.88%	22.23%	27.70%	29.58%	29.27%	28.70%	23.52%	24.06%	23.25%	24.91%	23.50%	23.50%	23.50%	23.50%	23.50%	23.50%
EBIT																
Tax of operation	18%	18%	18%	15%	15%	18%	20%	20%	20%	18.00%	2.65%	2.65%	2.65%	2.65%	2.65%	2.65%
Net financial expences (% of net sales)	2.66%	8.17%	9.43%	5.11%	5.45%	3.50%	3.18%	1.59%	0.85%	4.44%	4.44%	4.44%	4.44%	4.44%	4.44%	4.44%



Strategic and Financial Valuation of Össur

**Historical and forecasted growth rates in balance sheet**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	Average	2014E	2015E	2016E	2017E	2018E	2019E
Working cash (0,5% of sale)	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Property, plant and equipment (% of net sales )	13.8%	14.7%	10.7%	9.5%	9.8%	8.9%	9.1%	8.9%	9.3%	10.5%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
Goodwill (% of net sales )	144.4%	125.6%	102.0%	92.9%	101.3%	94.6%	83.7%	87.4%	90.9%	102.5%	90.0%	90.0%	90.0%	90.0%	90.0%	90.0%
Other operating intangible assets (% of net sales )	16.3%	14.1%	2.2%	1.4%	0.8%	0.3%	0.8%	2.1%	2.7%	4.5%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Deferred tax assets (% of net sales )	14.6%	25.2%	18.4%	16.3%	12.8%	10.1%	8.0%	6.7%	5.1%	13.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Capitalized operating lease (% of net sales )	30.0%	20.4%	16.2%	16.5%	18.3%	18.4%	18.0%	19.8%	20.1%	19.7%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%
Inventories (% of net sales )	15.9%	18.8%	16.2%	16.1%	13.2%	12.9%	13.1%	14.2%	15.3%	15.1%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%
Accounts receivable (% of net sales )	17.6%	19.5%	14.1%	12.6%	13.2%	14.6%	13.2%	13.2%	16.3%	14.9%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%
Other receivables (% of net sales )	4.6%	5.8%	3.2%	2.8%	3.1%	3.2%	4.3%	2.2%	3.2%	3.6%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
tax assets (% of net sales )	0.0%	0.0%	1.0%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
accounts payable (% of net sales )	5.5%	8.8%	4.5%	3.9%	4.0%	4.3%	5.1%	4.3%	4.8%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Tax liabilities (% of net sales )	0.6%	0.9%	1.1%	0.4%	0.7%	0.9%	1.0%	0.2%	1.5%	0.8%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Deferred tax liabilities (% of net sales )	17.3%	13.2%	8.6%	7.5%	3.3%	3.8%	4.0%	4.4%	4.8%	7.4%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Accrued salaries and related expenses (% of net sales )	0.0%	0.0%	0.0%	0.0%	4.5%	4.5%	4.6%	4.2%	5.9%	4.7%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Other current liabilities (% of net sales )	8.4%	6.9%	8.1%	7.5%	5.6%	4.4%	3.9%	3.8%	5.4%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
Provisions (% of net sales )	3.4%	4.3%	2.1%	2.2%	0.8%	0.7%	0.9%	1.2%	1.0%	1.9%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Capitalized operatin lease (% of net sales )	30.0%	20.4%	16.2%	16.5%	18.3%	18.4%	18.0%	19.8%	20.1%	19.7%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%
Interest rate swap contract (% of net sales )	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Borrowings (% of net sales )	116.7%	79.9%	61.8%	52.8%	63.6%	44.2%	27.6%	21.0%	29.7%	55.2%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%
Borrowings (% of net sales )	6.9%	65.0%	27.3%	23.7%	8.2%	8.0%	5.3%	5.1%	4.6%	17.1%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Financial liabilities (% of net sales )	0.0%	0.0%	0.0%	2.7%	3.0%	0.4%	0.6%	0.5%	0.3%	0.8%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Provisions (% of net sales )	0.0%	0.0%	0.9%	1.0%	1.7%	1.3%	1.1%	1.2%	1.1%	0.9%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Deferred tax liabilities (% of net sales )	0.0%	0.0%	0.5%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other intangible assets (% of net sales )	12.8%	13.7%	16.3%	11.6%	9.9%	8.1%	6.7%	6.2%	8.2%	10.4%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%
Investments held for trading (% of net sales )	0.0%	0.0%	0.0%	0.0%	0.7%	0.3%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Financial assets (% of net sales )	0.0%	0.0%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Bank balance and cash (% of net sales )	12.5%	4.3%	4.2%	8.4%	23.6%	14.7%	4.4%	5.0%	9.1%	9.6%	9.6%	9.6%	9.6%	9.6%	9.6%	9.6%
Other financial assets (% of net sales )	0.9%	0.9%	0.5%	0.3%	1.1%	1.2%	1.7%	1.7%	1.3%	1.1%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%

**Appendix 3 Financial statements in the explicit forecast**
**Income statement in the explicit**

USD'000	2014E	2015E	2016E	2017E	2018E	2019E
Net sales	475,766	516,675	558,555	600,895	643,135	684,684
Cost of good sold	-187,732	-203,875	-220,400	-237,107	-253,774	-270,169
<b>Gross profit</b>	<b>288,033</b>	<b>312,800</b>	<b>338,155</b>	<b>363,788</b>	<b>389,360</b>	<b>414,515</b>
sales and marketing expences	-133,214	-144,669	-156,395	-168,250	-180,078	-191,711
General and administrative expences	-61,850	-67,168	-72,612	-78,116	-83,608	-89,009
Other operating income	951	1,033	1,117	1,202	1,286	1,369
reasearch and development expences	-23,788	-25,834	-27,928	-30,045	-32,157	-34,234
Operation lease expences	16,652	18,084	19,549	21,031	22,510	23,964
<b>Operating profit before special items</b>	<b>86,784</b>	<b>94,247</b>	<b>101,886</b>	<b>109,609</b>	<b>117,314</b>	<b>124,893</b>
Special items, lease depriciation	-8,088	-8,783	-9,495	-10,215	-10,933	-11,640
Special items, pension	6,185	6,717	7,261	7,812	8,361	8,901
<b>EBITDA</b>	<b>84,881</b>	<b>92,180</b>	<b>99,652</b>	<b>107,206</b>	<b>114,742</b>	<b>122,155</b>
Depriciation, amortisation and impairment loss	-12,299	-13,356	-14,439	-15,533	-16,625	-17,699
<b>EBIT</b>	<b>72,583</b>	<b>78,824</b>	<b>85,213</b>	<b>91,673</b>	<b>98,117</b>	<b>104,455</b>
<b>Tax of operation</b>	<b>-17,027</b>	<b>-18,492</b>	<b>-19,990</b>	<b>-21,506</b>	<b>-23,017</b>	<b>-24,504</b>
<b>NOPAT</b>	<b>55,555</b>	<b>60,332</b>	<b>65,223</b>	<b>70,167</b>	<b>75,099</b>	<b>79,951</b>
Financial income						
Financial expenses						
Net exchange rate difference						
<b>Net financial expenses</b>	<b>-21,118</b>	<b>-22,934</b>	<b>-24,793</b>	<b>-26,672</b>	<b>-28,547</b>	<b>-30,391</b>
Tax on net financial expences/tax shield	-4,224	-4,587	-4,959	-5,334	-5,709	-6,078
Tax on operating lease expences/tax shield	-1,618	-1,757	-1,899	-2,043	-2,187	-2,328
<b>Net financial income/(expenses)</b>	<b>-15,277</b>	<b>-16,590</b>	<b>-17,935</b>	<b>-19,295</b>	<b>-20,651</b>	<b>-21,985</b>
<b>Corporate profit after tax</b>	<b>40,279</b>	<b>43,742</b>	<b>47,288</b>	<b>50,872</b>	<b>54,448</b>	<b>57,966</b>

**Balance sheet in the explicit forecast**

USD'000	2014E	2015E	2016E	2017E	2018E	2019E
Working cash (0,5% of sale)	2,379	2,583	2,793	3,004	3,216	3,423
Property, plant and equipment	42,819	46,501	50,270	54,081	57,882	61,622
Goodwill	428,189	465,007	502,699	540,805	578,821	616,215
Other operating intangible assets	9,515	10,333	11,171	12,018	12,863	13,694
Deferred tax assets	23,788	25,834	27,928	30,045	32,157	34,234
Capitalized operating lease	95,153	103,335	111,711	120,179	128,627	136,937
<b>Total non-current assets</b>	<b>601,844</b>	<b>653,594</b>	<b>706,572</b>	<b>760,132</b>	<b>813,565</b>	<b>866,125</b>
<b>Current assets</b>						
Inventories	71,365	77,501	83,783	90,134	96,470	102,703
Accounts receivable	71,365	77,501	83,783	90,134	96,470	102,703
Other receivables	16,652	18,084	19,549	21,031	22,510	23,964
tax assets	-	-	-	-	-	-
<b>Total current assets</b>	<b>159,381</b>	<b>173,086</b>	<b>187,116</b>	<b>201,300</b>	<b>215,450</b>	<b>229,369</b>
<b>Total assets</b>	<b>761,225</b>	<b>826,680</b>	<b>893,687</b>	<b>961,431</b>	<b>1,029,015</b>	<b>1,095,494</b>
<b>Current liabilities</b>						
accounts payable	23,788	25,834	27,928	30,045	32,157	34,234
Tax liabilities	4,758	5,167	5,586	6,009	6,431	6,847
Deferred tax liabilities	19,031	20,667	22,342	24,036	25,725	27,387
Accrued salaries and related expenses	23,788	25,834	27,928	30,045	32,157	34,234
Other current liabilities	28,546	31,000	33,513	36,054	38,588	41,081
Provisions	4,758	5,167	5,586	6,009	6,431	6,847
<b>Total current liabilities</b>	<b>104,668</b>	<b>113,668</b>	<b>122,882</b>	<b>132,197</b>	<b>141,490</b>	<b>150,630</b>
<b>Invested capital ( net operating assets)</b>	<b>656,557</b>	<b>713,011</b>	<b>770,805</b>	<b>829,235</b>	<b>887,526</b>	<b>944,864</b>
<b>Net working capital</b>	<b>54,713</b>	<b>59,418</b>	<b>64,234</b>	<b>69,103</b>	<b>73,960</b>	<b>78,739</b>
<b>Total equity</b>	<b>478,564</b>	<b>519,714</b>	<b>561,840</b>	<b>604,429</b>	<b>646,918</b>	<b>688,711</b>
Capitalized operatin lease	95,153	103,335	111,711	120,179	128,627	136,937
<b>Adjusted total equity</b>	<b>573,717</b>	<b>623,049</b>	<b>673,551</b>	<b>724,608</b>	<b>775,545</b>	<b>825,648</b>
Interest rate swap contract	-	-	-	-	-	-
Borrowings	142,730	155,002	167,566	180,268	192,940	205,405
Borrowings	23,788	25,834	27,928	30,045	32,157	34,234
Financial liabilities	2,379	2,583	2,793	3,004	3,216	3,423
Provisions	4,758	5,167	5,586	6,009	6,431	6,847
Deferred tax liabilities	-	-	-	-	-	-
<b>Interest bearing debt</b>	<b>173,654</b>	<b>188,586</b>	<b>203,872</b>	<b>219,327</b>	<b>234,744</b>	<b>249,910</b>
<b>Financial assets</b>						
Other intangible assets	40,440	43,917	47,477	51,076	54,666	58,198
Investments held for trading	-	-	-	-	-	-
<b>Financial assets</b>						
Bank balance and cash	45,618	49,540	53,556	57,615	61,665	65,649
Other financial assets	4,758	5,167	5,586	6,009	6,431	6,847
<b>Interest-bearing assets</b>	<b>90,815</b>	<b>98,624</b>	<b>106,618</b>	<b>114,700</b>	<b>122,763</b>	<b>130,694</b>
<b>Net-interest-bearing debt</b>	<b>82,839</b>	<b>89,962</b>	<b>97,254</b>	<b>104,626</b>	<b>111,981</b>	<b>119,215</b>
<b>Invested capital</b>	<b>656,557</b>	<b>713,011</b>	<b>770,805</b>	<b>829,235</b>	<b>887,526</b>	<b>944,864</b>

**Tax calculations**

USD'000	2014E	2015E	2016E	2017E	2018E	2019
<b>Corporate tax rate</b>	20%	20%	20%	20%	20%	20%
<b>Reported taxes</b>	-14,517	-15,765	-17,043	-18,335	-19,623	-20,891
<b>net financial items</b>	-21,118	-22,934	-24,793	-26,672	-28,547	-30,391
<b>Tax shield</b>	-4,224	-4,587	-4,959	-5,334	-5,709	-6,078
<b>Operating lease depreciation</b>	-8,088	-8,783	-9,495	-10,215	-10,933	-11,640
<b>Tax shield operating lease</b>	-1,618	-1,757	-1,899	-2,043	-2,187	-2,328
<b>Net financial items, after tax</b>	-23,365	-25,374	-27,430	-29,510	-31,584	-33,625
<b>Operating taxes</b>	-20,358	-22,108	-23,900	-25,712	-27,519	-29,297



**Appendix 4 Free Cash flow**

USD'000	2014E	2015E	2016E	2017E	2018E	2019E
<b>NOPAT</b>	55,555	60,332	65,223	70,167	75,099	79,951
Depriciation, amortisation and impairment loss	12,299	13,356	14,439	15,533	16,625	17,699
Change in net working capital	-5,353	-4,705	-4,816	-4,869	-4,858	-4,778
CAPEX	-27,649	-34,821	-36,917	-38,874	-40,653	-42,219
<b>FCFF</b>	34,852	34,163	37,928	41,957	46,214	50,653