

Strategic and Financial Valuation of

ICELANDAIR
GROUP



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Preface

First of all, I want to thank my mother, Hjördís Vilhjálmsdóttir teacher in Grundarfjörður, for showing me endless support and interest in this thesis. I also want to thank my brother, Jón Pétur Pétursson, and my best friend, Magnús Már Þorvarðarson, for being there for me in the writing process. I furthermore, want to express my gratitude to Mr. Jóhannes Gíslason for proofreading this thesis and my academic advisor, Mr. Baran Siyahhan, for his instructions and assistance.

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1 Introduction

Icelandair was the only Icelandic international airline for decades. The history of Icelandair is intertwined with the history of the nation. It was a great adventure when an isolated nation in the North-Atlantic got a decent connection with the rest of the world and foreign tourist traffic became a reality. There has always been a special bond between the airline and Icelanders. Icelandair became a part of the holding company Icelandair Group that focused on investment activities until the financial crisis in 2008. It was a tragedy to see the company fail on bad investments and almost crash-land like an airplane following the world recession. When its creditors, the newly nationalized banks, started rescue operations in 2009, the share price had plunged from ISK 31.1 to ISK 4 in two years (Nasdaq OMX, 2011). The financial restructuring of Icelandair Group was a very hot issue in Icelandic society and a large part of the nation had an opinion on how much the shares in their “favorite airline” were worth. This debate was still ongoing in the media in relation to the latest share offering in December 2010. The creditors had recently converted debt to equity at the price of ISK 5 per share. The shares were offered to existing shareholders, employees and the public at the price of ISK 2.5 per share (Icelandair Group hf., 2010).

At that time I was finishing an elective on Corporate Valuation and considering topics for my thesis. Out of my curiosity I wanted to know if the share offering was a good deal or if the national banks were being too generous in the debt to equity swap. I decided to perform my own valuation of Icelandair Group as my thesis. In that way I make use of all the aspects in my study in the Finance & International Business programme. I have to use my knowledge in business strategy, corporate finance, accounting and econometric methods. There are few businesses more international than the airline business and the external environment is challenging to analyze. As an international student I am a frequent flyer and can easily relate to the business. Icelandair Group is a publicly traded company so I have sufficient access to its financial information. The Group is a perfect example of a company deviating from its core business and running into trouble. It is an interesting task to break away the effects of the bad investments to find out whether the restructured Icelandair Group is a sustainable business or not.

The fair value of a company often differs from its book value like illustrated in figure 1.1. I will look at the valuation from the investor point of view. My mission as an

investor is to evaluate how capable Icelandair Group is in maximizing my capital inputs and eventually returning cash in the form of dividends or capital gain. I have to identify and predict whether the reported profit is due to fiction in the accounting or if the profit can be realized.

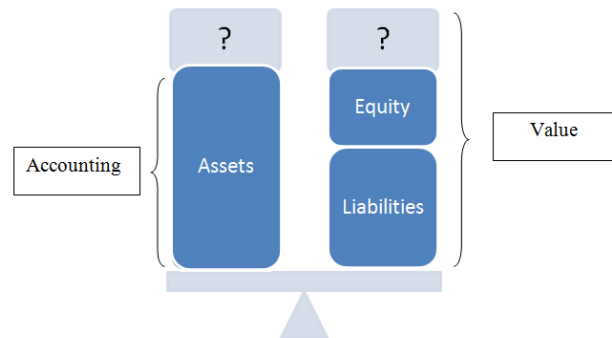


Figure 1.1: Book value vs fair value of companies
Source: Own creation.

The key findings of this thesis are that Icelandair Group has competitive advantages in a price premium on its home market and capital efficiency on the transatlantic route. The fair value was estimated ISK 4.98 per share. That is the result of applying the enterprise DCF model and the discounted economic profit model. The estimated fair value is 5.5% higher than the market price on 10th of May which was ISK 4.71 per share. Valuation with multiples resulted in a share price of ISK 3.44 and ISK 6.52 per share.

1.1 Problem Statement

- What is the estimated fair value per share of Icelandair Group hf¹ on May 10th 2011?

1.2 Structure of the thesis

Figure 1.2 presents the structure of the thesis.

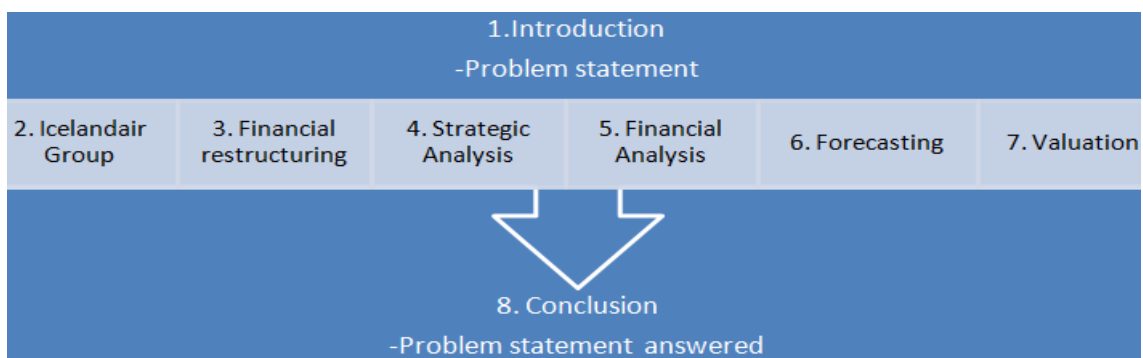


Figure 1.2: Thesis structure
Source: Own creation.

¹ Hf is short for Hlutafélag which means Public Limited Company.

In order to reach a sensible fair value I will answer supporting research questions in each chapter that eventually help me summarizing the main findings.

In chapter 2 I introduce Icelandair Group to the reader and subsequently answer the following questions that are meant to give a glimpse on its current situation and explain why there became a need for change:

Icelandair Group

- Which events in history have influenced the Group's current strategic and financial position the most?
- How is the Group composited?
- What is the basis of the business model?
- What is the future strategy?

In chapter 3 I cover the overhaul of the Group in its financial restructuring and by answering the subsequent research questions I will show how its financial position has improved:

Financial restructuring

- What were the reasons for the financial restructuring?
- How was the financial position before?
- What were the main procedures in the restructuring process?
- How is the financial position after the restructuring process?

In chapter 4 I discuss and evaluate the Groups main external threats. The answers to the following research questions describe how the business strategy can be applied in defense for the company's survival in the industry:

Strategic analysis

- Which external macroeconomic factors influence Icelandair Group?
- What is the strength of the competitive factors in the airline and tourism industry?
- Has Icelandair Group any competitive advantages?

In chapter 5 I reveal the accounting numbers to discover the actual operating performance of Icelandair Group. A company's value is driven by its ability to earn a healthy return on invested capital and by its ability to grow (Tim Koller, 2010). The

following research questions support the analysis of the key value drivers. Knowledge of their historical pattern gives an indication of how they might develop in the future.

Financial analysis

- How were the financial statements reformulated?
- What is the historical organic revenue growth?
- What is the historical growth in ROIC?
- How does Icelandair Groups operating margin compare to its competitors?

In chapter 6 I describe the forecast process. As most of the individual line items in the financial statements forecasts are based on the forecasted revenue growth, it is extremely important to identify the Groups proper revenue drivers. The answers to the subsequent research questions are used in the preparation for the forecast:

Forecasting

- How long explicit forecast period is appropriate?
- What are the main forecast drivers?

In chapter 7 I discount the forecasted free cash flow to get the estimated share price. To finish the calculations, a suitable valuation model for this job is required. The following research questions assist in the search for the right models. Furthermore they are meant to explain how the model inputs are estimated and how sensitive the share price is to variation in the inputs:

Valuation

- Which valuation models are appropriate?
- How is the required return (WACC) calculated?
- How does the fair value change with different valuation inputs?

I will answer the research questions in the summaries at the end of each chapter and give a final conclusion of them in chapter 8. The research questions help me keeping a clear focus on the path toward the fair value of Icelandair Group hf.

1.3 Methodology and models

I am going to evaluate how the macro-economic and industry factors form Icelandair Groups strategy and how the Group exploits its strategy in its operating activities to provide a return for the group of interest. The return serves as a feedback for the

management to see whether the strategy is functioning or if there is need for re-designing. Although the return is satisfying the strategy can be played out by new changes in the external business environment. My approach is to link these factors and base my estimated fair value on the process presented in figure 1.3.

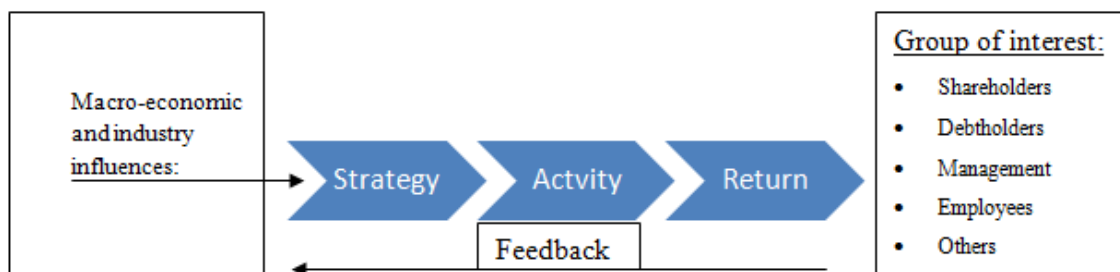


Figure 1.3: The valuation process: Strategy-Activity-Return
Source: Own creation².

The accounting captures the profit from operations. The accounting is not a useful tool to evaluate the business from shareholders point of view because of manipulating. I prefer to base my estimates on tangent cash from operations that is not subject to accounting tricks nor fiction. I will also uncover the effects of non-recurring events and effects that are not in the control of the management, like currency fluctuations. Then I can evaluate how good Icelandair Groups core operations are in turning inputs into cash.

In the strategic analysis I apply the PESTEL framework (Johnson, Scholes, & Whittington, 2006) to investigate how the strategy is affected by influences in the macro-environment. To account for the competitive forces in the industry, I use the Porter's five forces model (Porter, 1980). The results of such analyses could be used to form a company strategy in order to hedge against known threats and capitalize on possible opportunities. In the valuation part I apply the following models: the CAPM, the Enterprise DCF, the Discounted Economic Profit and valuation with Multiples (Tim Koller, 2010). The models will be further introduced in the relevant chapters.

1.4 Data collection

I only use publicly available information in this thesis. My primary sources about Icelandair Group are its annual reports and a prospectus published in relation with the share offering at the end of 2010. Other information I collected from news reports, journal articles and web sites. I use the Bloomberg terminal and the Orbis financial database to collect information about the peers. I rely mostly on qualitative information

² Based on my own notes from Dr Mahbub Zamans' lectures in International Financial Accounting II the 6th-7th May 2010.

from Porter's (1980) theories in the strategic part. In the financial part of the thesis the quantitative information from Koller et.al (2010) is my central guideline.

1.5 Delimitation

Valuation is not an objective exercise and any preconceptions and biases that an analyst brings to the process will find its way into the value (Damodaran, 2002). As an Icelandair valuing the nation's airline I will do my best in avoiding biases by keeping a neutral but critical focus. To prevent repetition, I often just refer to the airline industry instead of the airline and tourism industry, as the two are closely related. Due to the scope of this thesis I do not make assumptions about uncertain economical factors like interest rates and currency fluctuations. Furthermore, I focus primarily on Icelandair Group and its business. Therefore I will neither describe the competitors that I mention precisely nor the peer group³.

The CEO Björgólfur Jóhannsson mentioned in his speech at the presentation of first quarter results 2011, the Groups current aircraft fleet is expected to be sufficient for up to 10 years of future operations. Based on this statement, I will not predict about the renewal of the aircraft fleet as that would change the estimates significantly. The operating leases are capitalized according to the current repayment schedule (Icelandair, 2011).

Lastly, I expect the reader to have a basic understanding in the field of business strategy and corporate finance. As a result, the background and history of theories applied will not be explained in detail.

2 Icelandair Group

In this chapter⁴ I will give the reader an overview of the company in order to display how it has reached its current position. I start off by presenting the key milestones in the history of Icelandair Group. Although the Group in its current form was founded in 2006, the roots of the company reach over 70 years back. It all started with the two founding airlines, Flugfélag Íslands and Loftleiðir.

Following I will explain the most important elements of the business model and the business sectors.

³ Financial Information about the peer group can be found in Appendices 10.15 and 10.16.

⁴ This chapter is based on Icelandair Groups annual reports and Prospecus published in relation to the share offering at year end 2010.

Finally I give the reader insight into the subsidiaries and an introduction of their operations. I will also briefly talk about the businesses that are currently being divested to see what kind of operations the Group is moving away from.

2.1 The history

The history of Icelandair Group began already back in 1937, when its forerunner Flugfélag Akureyrar was established. The company started domestic flight with a single seaplane which was a very daring step as previous attempts by Icelanders to launch commercial flights had failed. When the company moved its headquarters from the north coast to the capital, Reykjavík, in 1943 the name was changed to Flugfélag Íslands which later became internationally known as Icelandair. In 1944, three young pioneering pilots returning from flight training in Canada founded another domestic airline called Loftleiðir or Icelandic Airlines.

In 1945 Flugfélag Íslands started air transportation to Scotland and Denmark and two years later Loftleiðir followed and started international operations. Loftleiðir took a ground-breaking step in 1953 by offering low-fare flights the shortest way across the North-Atlantic and introduced Iceland as a stop-over destination. This shook up the competition on the transatlantic route and many people are quite familiar with Loftleiðir as the airline that made flights to the other side of the ocean affordable.

Flugfélag Íslands acquired Iceland's first jet in 1967 a Boeing 727-100C which was specially suited for the airline. The two companies merged in 1973 after government intervention in the market. In 1979 the new company took up the Icelandic domestic name Flugleiðir and the international trade name Icelandair (Icelandair Group hf., 2010).

The next important steps in the company's history were the listing on the Icelandic stock exchange in 1992 and when Icelandair completed the total renewal of the international aircraft fleet in 1993 following a breakthrough agreement with the Boeing Company. The development of the tourist services made a big jump in 1996. Icelandair acquired one of Iceland's largest travel agency and followed up with a substantial marketing campaign to promote the country.

Flugfélag Norðulands merged with Icelandairs domestic flight operations and became Air Iceland, a wholly-owned subsidiary in 1997. In 1998 Icelandair Hotels became a distinct subsidiary and so did Icelandair Cargo in 2000. Both of these had been part of the Icelandair's operations before (Icelandair, 2011). The Icelandic Ground

Services (IGS) were founded in 2001 and the wet lease⁵ and charter subsidiary Loftleiðir-Icelandic a year later.

In the next couple of years the aviation company deviated from their core operations and went through fundamental changes in terms of structure and ownership. In January 2003, Icelandair became a holding company with 11 subsidiaries within the travel and tourist industry which acquired an 8.4% holding in EasyJet in 2004. The name was changed to FL Group in 2005 and the focus was shifted to investment activities. FL Group's airline and tourist service were operated through two subsidiaries, Icelandair Group and FL Travel Group.

The history of the group in its current form began in October 2006. Three core investors founded Icelandair Group Holding hf⁶ which on the same day acquired all the shares in Icelandair Group. The parent company was listed on the Main Market of NASDAQ OMX Iceland in December 2006. The only asset of Icelandair Group Holding hf was the shares in Icelandair Group and the companies merged as of 1 November 2006 under the latter name. In February 2007 the shareholders of Icelandair Group Holding hf agreed to delist that company and Icelandair Group was listed instead.

It is safe to say that the new company stuck to the new investment strategy. In the years 2006-2008 the operations were wildly expanded abroad and mainly financed with new borrowings. Among acquisitions were the Latvian charter airline Latcharter, later known as Smart Lynx. Airline Services Estonia was acquired which is an Estonian accountancy firm and also Travel Service, the largest privately owned airline in the Czech Republic. Furthermore a Franchise Agreement was made with Hilton Hotels Corporation for the 252 room 4-star Nordica Hotel in Reykjavík.

After Iceland was hit hard by the financial crisis in 2008 the shareholder structure of the Group changed significantly. Two of the three largest banks in Iceland and their resolution committees acquired large stakes in Icelandair Group through enforcement of a pledge of shares held by shareholders. At the end of 2009 Íslandsbanki hf held 47% and Landsbanki Íslands held 23.8% of the shares (Icelandair Group, 2010). Due to the circumstances, the Financial Supervisory Authority granted Íslandsbanki an exemption from having to make a mandatory offer for the remaining share capital. It was decided

⁵ The leasing of an aircraft including crew, maintenance and insurance, usually for a very short period of time.

⁶ Hf is short for Hlutafélag which means Public Limited Company.

that these shares should be sold in an open and a transparent sales procedure. Icelandair Group had to go through financial restructuring and the business model simplified (Icelandair Group, 2009).

2.2 The business model

Icelandair Group has shifted its focus to the core operations and has redefined itself as an operating Group in aviation and tourism. Its two main business areas are The Route Network and The Tourism services. The subsidiaries are placed accordingly into the two categories like presented in figure 2.1.



Figure 2.1: The Subsidiaries
Source: Own creation & Icelandair Group Prospectus (2010).

Figure 2.2 shows that Icelandair has contributed over 50% of the Groups revenues since 2007 (Icelandair Group hf., 2010).

The route network is based on Icelandair's well-established international route networks and provides business to the tourism sector. The key emphasis in the business model is the *Hub and Spoke* concept which relies on Iceland's geographical position on the flight route between northern Europe and North America.

By using the Keflavík International Airport as a hub, the company can focus on serving customers from three

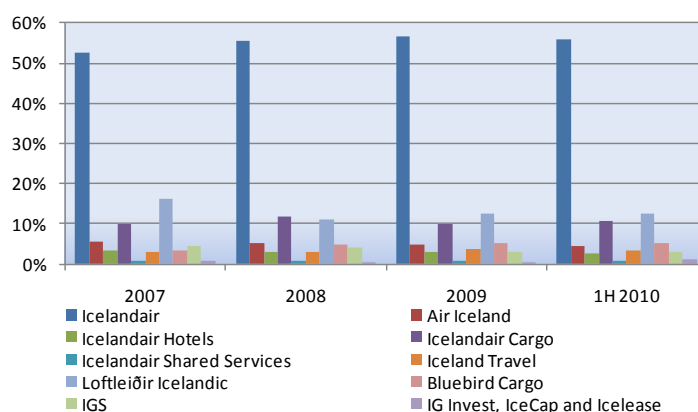


Figure 2.2: Revenue contribution by subsidiaries 2007-1H 2010
Source: Own creation & Icelandair Group Prospectus 2010.

market segments, i.e. passengers visiting Iceland, passengers departing from Iceland and passengers travelling across the Atlantic via Iceland. The tourism service then offers support to the route network with a wide range service to leisure travelers in Iceland.

2.2.1 The Route Network

There are 3 subsidiaries that are part of the Route Network and all of them are 100% owned by the Group. These are Icelandair, Icelandair Cargo and Icelandair Ground Service. There were four subsidiaries in the Route Network in 2010, until Bluebird Cargo was divested at the year end.

Icelandair ehf⁷



Icelandair is the national flag carrier of Iceland with over 70 years experience in the aviation business. It is one of the longest serving airline names in the world and has been a member of the International Air Transport Association (IATA) since 1950, a member of the Association of European Airlines⁸ since 1957 and a member of the Flight Safety Foundation⁹ since 1966 (Icelandair, 2011).

Icelandair is the Groups main cash cow and the center of its operations. The airline provided 59% of the total income in 2010 (Icelandair, 2011). The company has used its long experience and know-how to build up a solid network. The network has successfully been expanded steadily by linking the three markets, “TO”, “FROM” and “VIA”, using the same aircraft and the same route network which is based on a 24 hour rotation displayed in figure 2.2. Aircrafts departing Iceland for Europe in the early morning, return in the late afternoon and then take off to Canada and the USA in the early evening. The aircrafts land back in Iceland again early next morning and continue on another route. The isolated geographical position of Iceland is used in this strategy as a business opportunity instead of an obstacle.

⁷ Ehf is short for Eignarhaldsfélag which means private limited company.

⁸ AEA.

⁹ FSF.

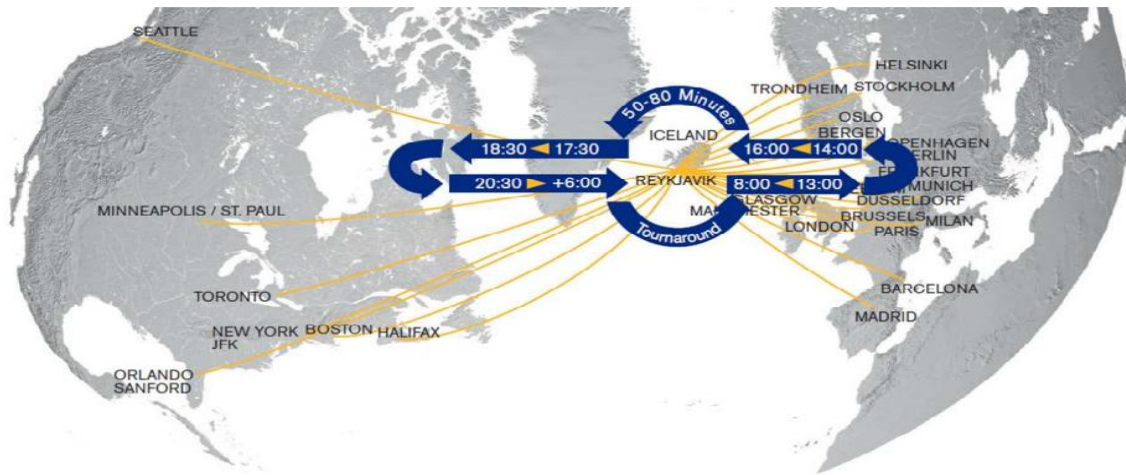


Figure 2.3: Icelandair's route network
Source: Icelandair Group Prospectus (2010).

The “TO” market and the “VIA” market made up 38% each of the total passengers in 2010 and passengers on the “FROM” market 24%. Icelandair carried 1.5 million passengers in 2010 and 5 cities will be added to the summer schedule 2011. Total of 24 European cities will be directly connected to 8 North American cities through the hub in Iceland. Icelandair operates 14 aircrafts this summer, 2 aircrafts more than the year before. The company owns 7 Boeing 757-200 aircrafts and 1 Boeing 757-300 aircraft (Icelandair, 2011).

Icelandair Cargo



Icelandair Cargo is the largest air freight service provider in Iceland. The business is based on the scheduled flights between Iceland, Europe and North America. Up to 25 of Icelandair’s passenger network destinations are serviced with its own cargo fleet as well as selling cargo space on Icelandair’s passenger aircrafts. The company’s business is supported by trucking networks in Europe and in the USA. It is important for the company to offer customers a quick global service as 90% of the Icelandic exports consist of fresh seafood and the exports account for almost 38% of its income (Icelandair Group, 2010). Icelandair Cargo has also for many years carried express freight for TNT, DHL and FedEx to and from Iceland. The company owns 5 Boeing 757-200 aircrafts and leases 1 Boeing 757-300 aircraft

Icelandair Ground Services



The purpose of the company is to offer airlines and passengers at the Keflavík International airport a comprehensive airport and ground handling service. This includes service for airlines like overall aircraft handling at airports, passenger check-in, baggage management and meal preparation. At the Leifur Eiriksson Air Terminal in Keflavík the company also runs a restaurant division and a cutting edge cargo centre.

2.2.2 The Tourism Services

There are 5 companies in the Tourism Services defined as subsidiaries in 100% ownership of the Group. These are Air Iceland, Loftleiðir-Icelandic, Icelandair Hotels, Iceland Travel and Icelandair Shared Service. In addition to those, Icelandair Group owns 50% stake in IG Invest.

Air Iceland



Air Iceland is a dynamic domestic airline that offers flight to seven major towns in Iceland as well as connecting flights to some of the smaller ones. Air Iceland also offers routes from Iceland to three year-round destinations in Greenland and two additional summer destinations. The airline can thereby offer a strong connection point for passengers on the route between Greenland and Denmark. Air Iceland sells flights to the Faroe Islands all year round. The flights are operated by the Faroese airline Atlantic Airways. The airline has therefore established a good position in servicing the West Nordic countries. Air Iceland has a dominant position on the domestic air transport market where the demand is picking up again after a stagnating period. Air Iceland owns 6 Fokker F-50 aircrafts and 2 Dash 8-100 aircrafts out of which one got damaged in a landing in Greenland in March 2011 (Mbl.is, 2011).

Loftleiðir-Icelandic



Loftleiðir-Icelandic is a capacity solution company for the international passenger airlines and tour operator industries. Wet leases have been among the main pillars of the operations throughout the years. Today Loftleiðir-Icelandic carries out AM¹⁰, ACMI¹¹ and full charter contracts in Europe, Africa, the Middle East, North and South America.

¹⁰ Aircraft and maintenance.

Operating in regions where the aviation infrastructure is considered underdeveloped offers a higher return for greater risk. Furthermore the company has increased its brokering activities with third-party leases and aircraft brokering. Loftleiðir-Icelandic leases 5 Boeing-757 aircrafts and 5-Boeing 767 aircrafts.

Icelandair Hotels



Icelandair Hotel is the market leader and is currently fully operating the Hilton Reykjavík Nordica Hotel, 2 Icelandair Hotels and 10 Edda Hotels. Edda hotel is a summer hotel chain widely spread around the country but serves as student housing at boarding schools during the winter. Additional 5 Icelandair Hotels and 3 Edda Hotels are franchised, allowing them to use the Icelandair Hotels trademark. The company rents all the hotel facilities. Icelandair Hotels cooperates closely with Icelandair and another subsidiary, Iceland Travel (Icelandair Group hf., 2010).

Iceland Travel



Iceland Travel is among the largest tour operators in Iceland. It produces, markets, distributes and sells package tours to incoming tourists, both groups and individuals. The company cooperates with almost all the licensed vendors operating in the domestic tourist industry for example car rentals, hotels and professional guides. The company runs the VITA brand, which offers variety of leisure tours to Icelanders travelling abroad, taking advantage of opportunities that stem from the company's partnership with Icelandair. With intense marketing campaigns, Iceland Travel has gained significant revenue growth from the cruise ship market which grows larger year by year in Iceland (Icelandair Group hf., 2010).

IG Invest



Icelease and IG invest, operate as aircraft trading arrangement companies, buying, selling and leasing aircrafts. IG Invest was founded as a holding company for the assets of Icelease. The

¹¹ Aircraft, crew, maintenance and insurance.

trading portfolio today consists of six passenger aircraft and four future deliveries of Boeing 787 Dreamliner passenger aircraft with an additional three purchase options. Icelease prefers having less than 50% stake in each investment and therefore operates with equity partners.

Icelandair Shared Services



The subsidiary Icelandair Shared Services serves as a support department for the companies within the Group.

The company handles finance service such as accounting, collection, payments, payroll, tax reporting and preparation of financial statements.

2.2.3 Discontinued Businesses

Bluebird Cargo

Bluebird Cargo provided the Icelandic market with a reliable and fast access to the world-wide air cargo networks through business relations with companies like Cargolux Airlines, UPS Air Cargo, LTU and Luxair.

SmartLynx

SmartLynx is a charter and wet lease airline based in Riga, Latvia. The main assignments are air charter services for tour operators in the domestic market in Latvia. Also, wet lease¹² projects in Europe and South America and dry lease¹³ projects.

Travel Service

Travel Service is the largest private air carrier in the Czech Republic and one of the fastest growing charter carriers in Central Europe. The operations include charter flight, scheduled low cost flight under the Smart Wings brand, ACMI leases and private flights.

3.2 Summary

There are many steppingstones in Icelandair Groups history that have guided the company to its current position. The most significant is when the Group became a holding company and shifted the focus to investing activities in 2005. Icelandair Groups

¹² The leasing of an aircraft including crew, maintenance and insurance, usually for a very short period of time.

¹³ Leasing of an aircraft without insurance, crew, ground staff, supporting equipment, maintenance, etc.

is an operating company today with a clear future focus on the route network business with 3 subsidiaries and tourist services offered by 6 subsidiaries. Icelandair's *Hub and Spoke* concept is the center of the business model.

3 Financial restructuring

In the preceding chapter, I described how Icelandair Group went from being a successful airline with a simple business concept to become a holding company that lost sight of the core activities.

In this chapter I will cover the background of the financial restructuring that the Group went through after the financial crisis in 2008.

Next I am going to show the financial position of the Group before and after the rescue operations by digging into the capital structure.

3.1 Background of the financial restructuring

Icelandair Group was left in bad shape after the years when investments, acquisitions and expansion abroad were among the main strategies of the company. The Group was overleveraged and the balance sheet was not sustainable. It was clear even before the financial turbulence in Iceland that something had to be done to lighten the extremely high debt burden which had piled up during the investment period.

If it had not been for the major cost-cutting measures in the first half of 2008, the company would likely not have survived the downturn in 2008 and early 2009. More than 500 employees were let go, capacity was reduced, followed by renegotiations with suppliers. Orders for four new Airbus 330 cargo aircraft were cancelled, which reduced the Groups commitments by USD 450 millions (Icelandair, 2010).

The operational environment for Icelandair Group got very difficult when the Icelandic banking system collapsed in 2008 and the recession hit the world. Domestic demand decreased significantly because the inflation rate went from 5.8% at the start of 2008 to 18.6% at the start of 2009. The Krona depreciated 127% from July 2007 to December 2008 (Central Bank of Iceland, 2011). Most of the Groups borrowings were denominated in foreign currency. Strain was put on cash flow after the termination of the Groups banking service and the international money market demanded increased cash collateral to replace bank guarantees. Refinancing became difficult for the Group and the liquidity dried up almost all together. Although the daily operations in 2009 went well and according to the plan, the financial expenses were a drain on the Groups cash flow. The balance sheet had to be restructured (Icelandair Group hf., 2010).

3.2 The implementation

The financial restructuring had to be done in such a way that it maximized the benefits of the shareholders. In this case the largest stakeholders were two state owned banks, Íslandsbanki hf and Landsbanki Íslands that were the Groups biggest lenders. The two banks and their resolution committees acquired 70.8% holding (Icelandair, 2011).

There are number of procedures available to improve a company's financial position but given the Group's history, owner structure and capital structure, there were in my opinion not that many suitable options. If the Icelandair Group had been liquidated there would not have been any recovery. The debt ratio was 83.6% at the end of 2009. The management would not have gotten high returns for the assets if they would have been sold on a fire sale. In my opinion, this option was also not acceptable because of how much the Icelandair and its history mean for the nation. It should be kept in mind that the banks had just been nationalized. There are three restructuring strategies that firms use according to Hitt et al. (2005). These are leveraged buyouts, downsizing, and downscoping. The company had already gone through downscoping in 2008-2009.

Executing a leveraged buyout at the time would have been difficult. Foreigners avoided investments opportunities in a country with capital restrictions. There were no large individual investors on Iceland likely to invest significantly in the company after the company had changed the strategy completely and invested precious capital and management effort on assets that failed. The share price had dropped 87% from 31.07 Kroner¹⁴ per share the 10th of July 2007 to 4.00 Kroner per share on the 20th of May 2009 like described in figure 3.1. (Nasdaq OMX, 2011).



Figure 3.1: Icelandair Groups share price and turnover 2006-2011
Source: Own creation & Nasdaq OMX (2011).

¹⁴ The currency in Iceland is “Króna” or Krona in English. The symbol ISK stands for Icelandic Kroner.

The third practice available to management, downscoping, means that non-core assets are separated and sold off and the proceeds can be used to lower the debt. This is the most rational way in my opinion. Firstly, this is a desirable way for both the management and the claimants to obtain an improved equity ratio. Secondly, the management can put their capital and effort into the core operations that are likely to contribute to the company's viability. Thirdly, the banks that swap debt to equity, can participate in a possible upside in the company. Fourthly, as a consequence this makes the company a more appealing investment vehicle, which possibly attracts new equity investors.

This is the method that the management of Icelandair Group decided on. Finding new investors to the domestic equity market which in the year 2008 returned -90% was a tricky task (Nasdaq OMX, 2011). The government was prohibited from spending large amounts of money on new projects due to the conditions of the International Monetary Fund¹⁵ rescue package. At the same time the Icelandic pensions funds were not allowed to make any new foreign investments and the schemes were among few organizations in the country that had cash on hand (Financial Times Mandate, 2009)

In June 2010 the Enterprise Investment Fund (EIF) an investment company owned by 16 Icelandic pension funds and The Pension Fund of Commerce (PCF) entered into a binding agreement with Icelandair Group on investing in the Group for a total of ISK 4 billion. EIF undertook to contribute approximately ISK 3 billion and PFC ISK 1 billion but the agreement was made with three conditions:

- Positive results of Icelandair Groups due diligence.
- That EIF would get an exemption from an obligatory take-over of Group from the Financial Supervisory Authority (FME).
- That Icelandair Group should raise a minimum another ISK 1 billion in market value through the sale of New Shares to other investors.

Icelandair Group announced on 12th of August 2010 that these conditions were met.

The management had a new business strategy and the pension funds on board. After a work with the main creditors, the financial restructuring were concluded based on the 3 components presented in figure 3.2.

¹⁵ IMF.

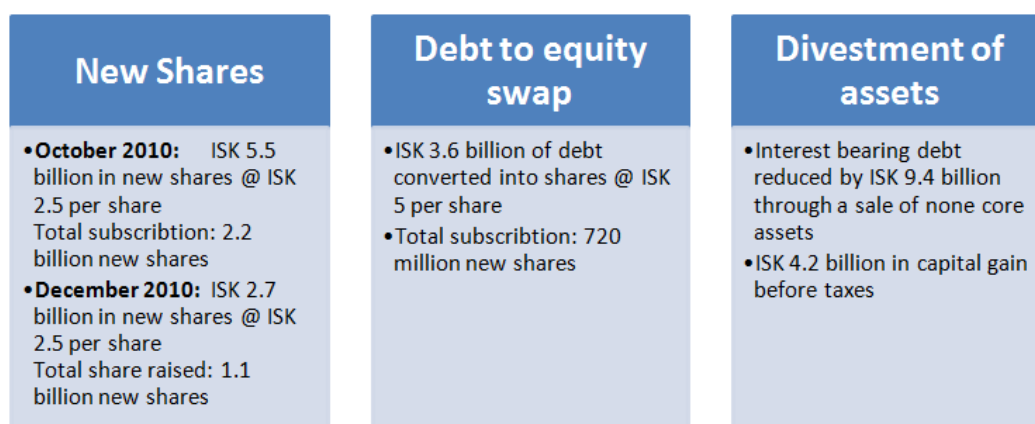


Figure 3.2: The 3 components of the financial restructuring
Source: Own creation & Icelandair Groups Presentation of Q4 and 12M results (2011).

All the newly issued shares were issued for cash consideration for approximately ISK 8.2 billion in market value. The largest shareholders after the restructuring can be seen in figure 3.3. Landsbanki Íslands, the other main creditor of the Group, sold the remaining 6% of its share in February 2011. The two largest shareholders, THE EIF and Íslandsbanki, made an agreement with the Group to not sell the shares that the companies owned prior to the share offering in December 2010, until November 2010 (Viðskiptablaðið, 2011).

The sale of Bluebird Cargo was finalized following the approval of the Icelandic Competition Authority on the 10th of February 2010. The plan was to sell all the three businesses that were categorized as discontinued business to companies owned by the banks.

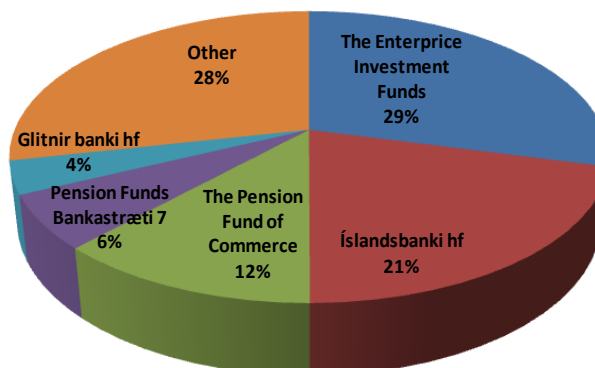


Figure 3.3: Ownership structure
Source: Own creation & Icelandair Group Annual Report 2010.

The lenders and shareholders of SmartLynx and Travel Service did not approve the sale of the two companies but Icelandair Group will continue the sales process. There are no cash contribution related to these divestments, all the proceeds will be used to pay down debt.

3.3 The capital structure

Assets

By examining the balance sheet which can be seen in figure 3.4 and by comparing the results from 2009 to 2010 I will show the improvement between years. I will show the changes as cash flow effects for the company.

Non-core assets for the amount of ISK 7.6 billion were sold to creditors with a gain of ISK 4.2 billion. After tax and translation difference the sale had ISK 1.3 billion positive impact on the Groups equity. Total assets decreased from ISK 89.1 billion to ISK 84.2 billion. The current assets increased by ISK 1 billion and the non-current assets decreased by ISK 5.9 billion, improving the current ratio from 0.58 to 1.16. Operating assets increased by ISK 0.6 billion while intangible assets decreased by ISK 2.4 billion, because of the sale of non-core assets. The current intangible assets are mainly goodwill with a book value of ISK 16.6 billion and trademarks-and slots with a book value of ISK 4 billion. Trade and other receivables increased by ISK 4.8 billion in connection with the share capital subscription in December of ISK 2.7 billion. The ISK 2.8 billion assets held for sale are the shares in SmartLynx and the remaining share in Travel Service. Finally the cash and cash equivalents and marketable securities have increased by ISK 11.1 billion due to the divestments. Additionally, the new share capital injection in the amount of ISK 5.5 billion improved the Groups liquidity position significantly.

ISK millions	31.12.2009	31.12.2010	YoY Δ	% Δ
Assets:				
Operating Assets	27.014	27.594	(580)	(2%)
Intangible assets	23.598	21.212	2.386	10%
Prepaid aircraft acquisitions	1.134	0	1.134	100%
Long-term receivables and deposit:	3.449	1.424	2.025	59%
Other non-current assets	2.032	1.096	936	46%
Total non-current assets	57.227	51.326	5.901	10%
Assets classified as held for sale	17.500	2.815	14.685	84%
Trade and other receivables	9.725	14.574	(4.849)	(50%)
Marketable securities	0	1.306	(1.306)	(100%)
Cash and cash equivalents	1.909	11.688	(9.779)	(512%)
Other current assets	2.743	2.530	213	8%
Total current assets	31.877	32.913	(1.036)	(3%)
Total assets	89.104	84.239	4.865	5%

Figure 3.4: Total assets 31.12.2010

Source: Own creation & Icelandair Group Annual Report 2010.

Equity and liabilities

The equity ratio has gone up from 16.4% to 33.7% following the financial restructuring. Total equity increased from ISK 14.6 billion to ISK 28.4 billion. As figure 3.5 shows, interest bearing debt decreased from ISK 36.4 billion to ISK 24.6 billion. The current

liabilities have become less burden with a decrease from ISK 54.9 billion to ISK 28.5 billion while the non-current liabilities increased by only ISK 7.8 billion, to 27.4 billion.

ISK millions	31.12.2009	31.12.2010	YoY Δ	% Δ
Equity and liabilities				
Stockholders equity	14.605	28.403	13.798	94%
Non-current loans and borrowings	13.676	21.356	7.680	56%
Other non-current liabilities	5.942	6.012	70	1%
Total non-current liabilities	19.618	27.368	7.750	40%
Current loans and borrowings	22.714	3.248	(19.466)	(86%)
Liabilities classified as held for sale	10.597	2.365	(8.232)	(78%)
Deferred income	7.178	8.807	1.629	23%
Other current liabilities	14.392	14.048	(344)	(2%)
Total current liabilities	54.881	28.468	26.413	(48%)
Total equity and liabilities	89.104	84.239	(4.865)	(5%)

Figure 3.5: Total equity and liabilities 31.12.2010
Source: Own creation Icelandair Group Annual Report 2010.

Maturity profile

Icelandair Groups liabilities had become an excessive constraint on its cash flow. All the short term borrowings were restructured and the maturity profile was extended. Figure 3.6 compares the maturity profile before and after the financial restructuring and as can be seen, there was a payment of ISK 25.5 billion scheduled this year which has now been stretched over the next couple of years. There is a big payment coming up in 2013 but overall I estimate that the new maturity profile will be manageable for the Group.

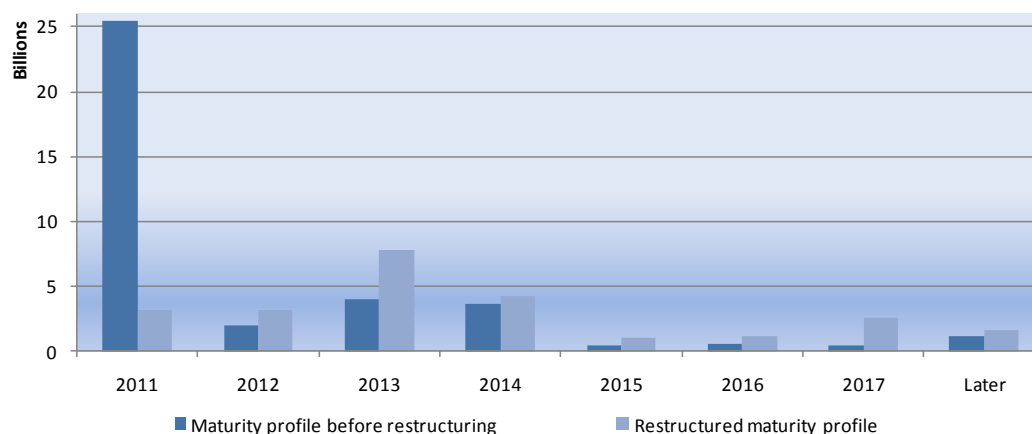


Figure 3.6: The restructured maturity profile
Source: Own creation & Icelandair Group Annual Report 2010.

3.4 Summary

After investing too much with foreign currency debt, the balance sheet was not sustainable after the financial crisis. The financial restructuring was based on three components: the Group sold off non-core assets to companies owned by the creditors

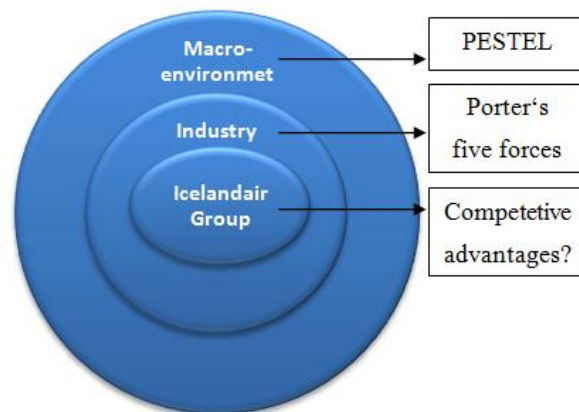
and the proceeds were used to reduce interest bearing debt by ISK 9.4 billion. The banks swapped ISK 3.6 billion debt into equity. Finally ISK 8.2 billion was raised in new share capital. The current ratio increased from 0.58 to 1.16, the equity ratio went up from 16.4% to 33.7% and the cash balance improved by ISK 9.8 billion.

4 Strategic analysis

The previous chapters have introduced Icelandair Group and the latest developments in the company thoroughly to the reader. In this chapter I will apply this knowledge in a strategic analysis, in order to get a better understanding of the Groups business environment and strategic position.

The chapter provides a framework for understanding the business environment in which the Group operates, for the purpose of identifying the key drivers of change. The framework is organized in a series of layers as shown in picture 4.1. I start from a broad perspective, by analyzing the external macro-environmental factors with the use of a PESTEL analysis.

Thereafter, I narrow the focus to the key aspects of the firm's industry environment. There I apply the Porters five forces model. The object is to find the strength of the competitive forces in the airline and tourist industry and hence the profitability.



As I go along and analyze the external environment, I will point

Figure 4.1: Layers of the business environment
Source: Own creation & Johnson et.al (2006) .

out Icelandair Groups strategic moves and position in relation to the relevant topics covered. These points will be concluded at the internal level where I determine whether Icelandair Group has a competitive advantage to defend the company against the competitive forces and get a solid position in the industry.

Finally I summarize the key findings of the chapter in a SWOT model which can be seen in figure 4.4. The analyses will later come to a good use in the forecasting process in the financial part.

4.1 PESTEL analysis

I use the PESTEL framework to identify how strategies are affected by political, economic, social, technological, environmental and legal environmental factors. The past history can give evidence about how future trends might impinge on Icelandair Group (Johnson, Scholes, & Whittington, 2006). The key drivers of change in the industry are summarized in figure 4.2.

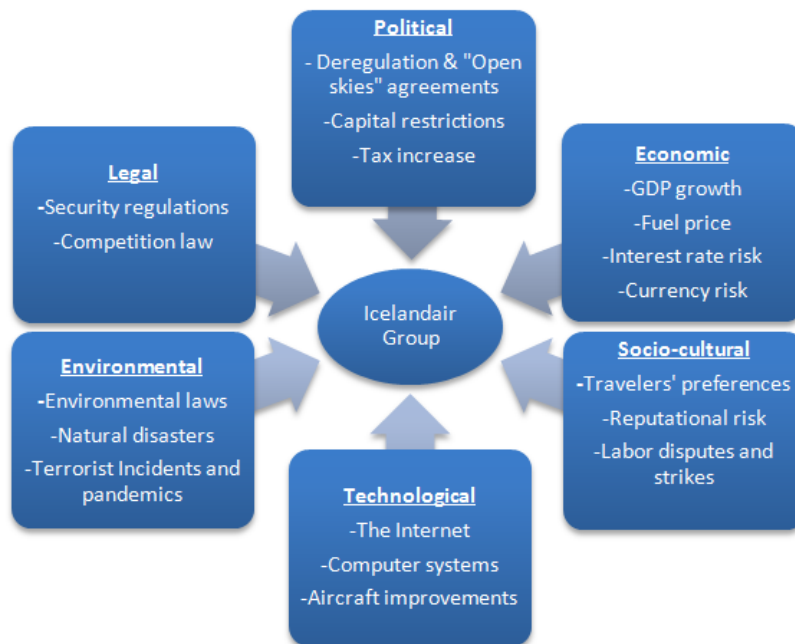


Figure 4.2: The PESTEL framework
Source: Own creation & (Lynch, 2006).

4.1.1 Political factors

Deregulation, capital restrictions and tax increases are among important political factors that drive changes in the industry.

The liberalization of the airline industry

Political decisions have great impact on the airline industry. Government influence has nevertheless reduced significantly since The Airline Deregulation Act was passed in the USA in 1978. Governmental control of routes and fare pricing was handed out to the free market (Encyclopedia of American Industries, 2011). This resulted in the emergence of hub and spoke systems, the entry of low cost carriers¹⁶ with nationwide route networks, new entrants and integrated cargo carriers.

The airline industry in the USA experienced benefits through free competition almost immediately and the deregulation process in Europe started subsequently and

¹⁶ LCC.

was concluded in 1997. The European liberalization process generated the Single European Aviation Market in 1993 which led to substantial traffic growth and economic benefits. Low-cost operators increased their share of capacity from 1.4% in 1996 to 20.2% in 2003. A causal chain can be identified in figure 4.3, which links the changes in air service regulation to the broader economy and the failure of any one link can halt the process of expansion (IATA, 2006):

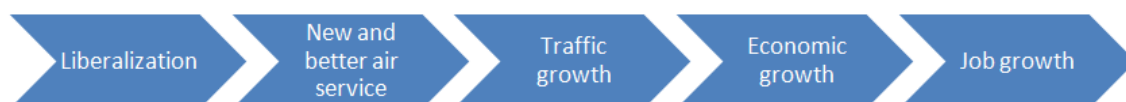


Figure 4.3: Changes in air service regulation
Source: Own creation & IATA.

After the liberalization of the airline industry, bilateral “open skies” agreements have been signed between more and more countries resulting in the removal of many barriers to competition. Airlines were allowed to have foreign partners, access to international routes to and from their home countries, and freedom from many traditional forms of economic regulations (Cox, 2008). These air service agreements have led to incremental passenger traffic and economic growth (IATA, 2006).

Capital controls in Iceland

Foreign exchange transactions have been subject to comprehensive capital controls in Iceland since November 2008 after the banking system collapsed and the local currency Krona plunged. This is part of a Government economic programme, in co-operation with the International Monetary Fund¹⁷, in order to support the exchange rate, control inflation and secure financial stability. Stability of both banks and currencies are based on confidence and if that confidence disappears, banks fail and currencies fall, often lower than justified by fundamentals (Sighvatsson, 2010).

It is not the optimal financial environment for an international company like Icelandair Group to operate in. The main negative consequences of the capital restrictions are the difficulties in getting new international investors, as they are forced to stick with its investment until the controls will be lifted. All exporting companies are also according to the regulations, forced to return foreign income to Iceland at an official foreign exchange rate or divert it to a foreign currency account. This has not a considerable direct impact on Icelandair Group as around 70% of the income and costs

¹⁷ IMF.

are denominated in foreign currency (Icelandair Group hf., 2010). The Groups hedging and risk management policies have been affected on the other hand as various hedging instruments are not offered to the same extent as before the time of capital controls. Furthermore, the ISK forward market is non-existent today.

The Central Bank of Iceland introduced a plan to gradually liberalize the capital controls in August 2009. The strategy is implemented in two phases without a timetable, but depends on whether certain conditions have been met. The latest development by the Government is to propose an extension of the capital controls until the end of 2015 (The Central Bank of Iceland, 2011). The uncertainty about the liberalization of the controls puts managers of Icelandic firms in a very challenging position and some of the larger corporations have already stressed their intention to move operations abroad.

Changing tax policies

The airline and tourism industries are subject to an ever changing environment of taxes, aviation and license fees and the trend has been to increase taxation rather than reduce it (Icelandair Group hf., 2010). The airline industry is subject to charges regarding take-off and landing along with emission, noise, navigation charges and ticket tax. Added local taxation is always a threat, especially now due to growing imbalance in public finance and they can have a direct effect on ticket pricing and demand. The Icelandic Government has recently announced increased taxation in 2011 that will affect Icelandair, Icelandair Hotels and Air Iceland. These are taxes and charges on passengers, hotel rooms, ticket tax and more. The increased cost can to some extent be shifted to air travelers. Björgólfur Jóhannsson, the CEO of Icelandair Group, says that the ticket price on the domestic routes could increase by 10-15% but less on the international routes (Vísir.is, 2010).

4.1.2 Economic factors

There are several economic factors that a company operating in the international aviation industry, has to take into consideration. Some of these factors like fuel price, interest rate and currency fluctuations are so important that if they are not favorable for a firm, they can have serious effects on its viability. The global GDP growth is the single most important factor because GDP affects other important external factors in the industry.

Fuel price

Fuel price makes up a major part of an airline operating costs and has been the second largest cost for Icelandair Group the recent years. Fluctuations in fuel price and how well a company's hedging strategy turns out, has great influence on its operating outcome. Understanding the price of oil therefore plays a leading role in the future strategy of an airline. Figure 4.4 demonstrates a 100% correlation between the price of crude oil and jet fuel.

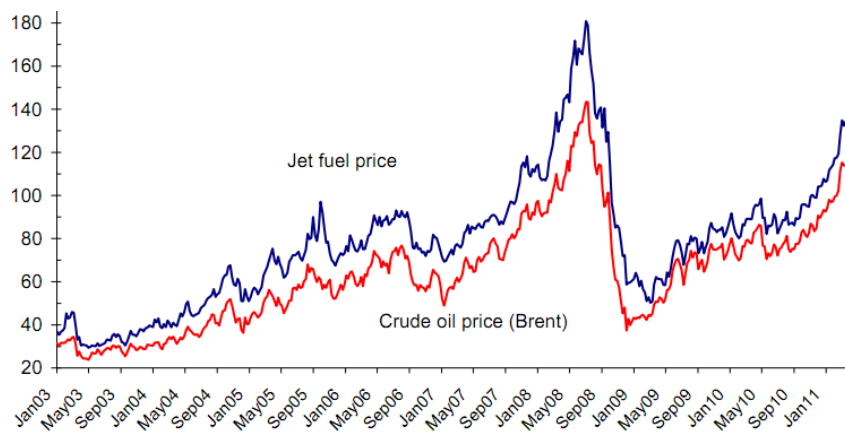


Figure 4.4: Jet Fuel and Crude Oil Prices (\$/barrel)
Source: IATA (2011).

The fundamental factors, supply and demand, are the largest determinants of the oil price. An excessive world demand drove the price of Brent crude oil close to USD 150 a barrel in the summer of 2008 but after the US housing crisis, the credit crunch and later the fully-fledged global recession, the price dropped to around USD 40 a barrel. Since the fourth quarter 2010 the airline profits have been squeezed by sharply increasing oil price to almost USD 125 a barrel in April 2011 (Bloomberg, 2011). Supply shocks like hurricanes and the oil rig accident in the Mexican gulf and escalating violence in the Middle East add on to the oil price volatility. Cartels like the Organization of Petroleum Exporting Countries¹⁸ which accounts for around 55% of oil exports seems to control the world supply of oil to a great extent and subsequently the price (IATA, 2009).

Although supply and demand are rather simple economic concepts it is a very challenging task to account for their effects on the jet fuel price. No one knows how much oil there is exactly left in the ground or how much the countries are storing. In addition to this uncertainty there are unknown effects on the oil price stemming from speculator investors that trade on its high volatility. An evidence of this is the fact that

¹⁸ OPEC.

the world consumption of oil in 2009 was about 85 million barrels a day whereas oil trading is thought to have involved more than one billion barrels a day (IATA, 2009). A part of this trading can be explained by the hedging activities of airlines, their effort to bring stability to their cost base. Icelandair Group maintains a policy of hedging fuel price exposure by a ratio of 40-80% but because of the capital controls, high opportunity costs and up-front payments, the ratio has fallen below lower limits in this current climate (Icelandair, 2011).

Interest rate risk

Interest rate risk is a great concern for the Airlines, given the high leverage ratio in the industry. The airline sector is capital intense, the cost of equity is high and it is difficult to attract new equity as a result of high earnings volatility. An increase in interest rates has direct effects on the firms in higher borrowing costs and more expensive leasing contracts. Higher interest rates is also costly for aviation firms indirectly, as higher yield has an effect on general economic conditions and thus negative effects on the cyclical demand in the airline industry.

The largest share of Icelandair Groups outstanding long-term loans are directly related to aircraft financing and denominated in USD like the majority of the loans in the most liquid market for commercial aircraft. These loans carry 3- 6 months floating interest rates but the Group hedges the interest rate exposure with fixed-rate loans or SWAP contracts up to 5 years ahead, where the floating rates are exchanged for fixed interest rates. The floating rates exceeded the fixed rates in recent years and the SWAP contract contributed to a profit. The last two years however, the floating interest rates have fallen sharply and the contracts proved unfavorable. All the contracts have expired except for one that expires in 2011 (Icelandair Group hf., 2010).

Foreign currency risk

Management of exchange rate risk is important for airlines as revenues, expenses and borrowings are often denominated in several different currencies. Tourist demand is also affected by the exchange rate levels. When the Icelandic Krona depreciates, it increases the tourist flow to Iceland but decreases the customers travelling from the country. Laudon (2004) argues that the competitive structure of the industry has a great influence on the exposure determinant. For example industry related factors such as markup and pass-through can be used to protect the revenues from the impact of

currency movements. This is difficult to implement in the airline industry because of the high competition and low markup.

Icelandair Groups strategy is to minimize the foreign currency exposure by firstly, matching receipts and payments in each individual currency as far as possible. Secondly the Group reduces any mismatch with internal trades across the range of subsidiaries as possible before turning to outside parties. Figure 4.5 presents the Groups total revenues and expenses in 2010 split down to currencies (Icelandair, 2011). The biggest currency mismatch is found in Icelandair, or USD 100 million in 2010.

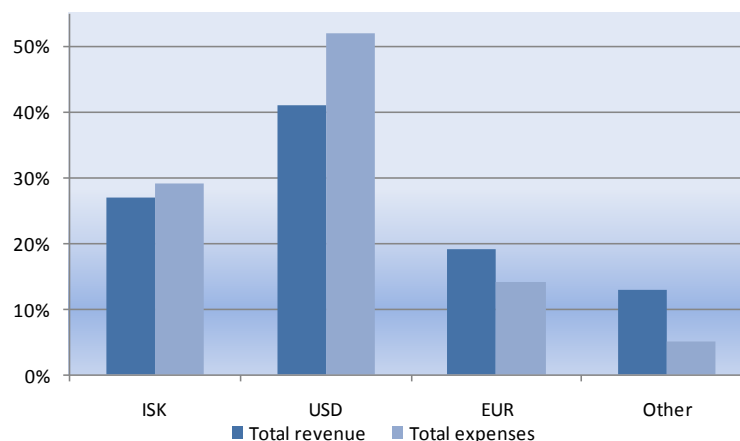


Figure 4.5: Total revenues and expenses 2010 split down to currencies
Source: Own creation and Icelandair Group Annual report 2010.

The USD inflow does not cover the USD outflow because fuel costs, lease payments and capital-related payments, are to a large extent denominated in US dollars and the shortage is financed mainly with surplus in Euro and Scandinavian currencies. The hedging ratio of currency risk also fell below lower limits after the banking crisis in 2008 but the Group managed to resume accordance with its policy at the end of 2010, mainly because of the Groups improved liquidity (Icelandair, 2011).

4.1.3 Socio-cultural factors

It is very valuable to have an overview of the socio-cultural factors affecting the industry, because these inspire people's behavior and customers are the main premise in the service business. The fact that international airlines operate across many borders makes it an even more crucial factor to be aware of. Travelers' preferences, the company's reputation and labor disputes and strikes can change the business environment.

Travelers' preferences

Economic changes and the general condition of the economy are closely tied to socio-cultural actions. In a booming economy people have afford a more luxurious lifestyle and tend to travel more than during recessions, both for business and pleasure. The financial turmoil and the credit crunch in 2008 made the average consumer worse off and it was clearly noticed in a demand squeeze on worldwide air carrier services. Icelandair felt the consequences of this and had to respond with drastic reduction of the scope of its operations. Furthermore the consumer behavior changed in the way that travelers shifted from flying business class to flying economy class. Icelandair managed to reduce the yield drop caused by this change by altering its pricing structure to include the “Economy-Comfort” class as of November 2008. In that way the airline could better meet the altered demand pattern (Icelandair Group hf., 2010). Lifestyles, needs, tastes and fashions are amongst the numerous social and cultural influences and they vary from country to country. Understanding the impact that these factors have on the business makes it possible for companies to be prepared when the environmental conditions change and respond in a convenient way.

Reputational risk

It is essential for a company in the aviation and tourism industry to have a good reputation of safety and quality service. Not only to attract customers but also the secure access to existing and new markets. A poor reputation can directly hinder an airline in getting a first class access to airports which is vital to minimize the likelihood of delays. Delays and cancelled flights cause additional costs for operations but also indirect cost through damage to reputation and brand names. It can take years or decades to establish outstanding reputation but any misfortune can easily wipe it out instantaneously. Some of Icelandair Groups registered trademarks have been known for over 70 years and are of great value for the company. Through good business relations and because of long history in the aviation service, Icelandair has gained access to airport slots on important destinations and is known for being one of the most punctual airlines in Europe (The Association of European Airlines, 2009). Airlines reputation can easily be seriously damaged if one of their aircraft were to be involved in an accident or crash. The Scandinavian airline SAS experienced a reputational shock in 2007 when three of their aircraft were involved in accidents when landing, in just two months period (Politiken, 2010). A public perception that a company’s aircrafts are not reliable is hard to recover from.

Labor disputes and strikes

Another socio-cultural influence worth to mention is the human factor. The airline industry is labor-intensive and having high-quality employees is a key success factor. There is always the risk that airline do not reach an agreement about employee salaries and benefits with the unions and thus ending in a strike. Strikes have usually very high consequences for airlines as they have effect on many people and therefore attract negative global publicity. If a strike forces an airline to shut down routes temporary, subsidiaries that rely on the incoming passengers can be financially adversely affected and the high fixed cost in the industry can soon become a heavy burden for the company. There is also uncertainty about the willingness of key employees to continue working for a company and risk that they resign, or worse, that they join a competitor. Icelandair is known for having very experienced aviators but its current union agreement with its pilots and cabin attendants expired at the end of 2010 (Icelandair Group hf., 2010). It is of great importance for the Group to reach a new agreement with the Icelandic Air Line Pilots' Association in the current renegotiations (The Icelandic Air Line Pilots' Association, 2011).

4.1.4 Technological factors

It is safe to say that technological factors have significant influences on the airline and tourism industry. The internet has made communication, marketing and booking a lot easier than before and technological improvements have made the aircraft fleet safer, more eco friendly and a more relaxed travel option. Companies need to be aware of the latest relevant technologies so they can take advantage of them before their competitor does so.

The internet

The internet has improved the infrastructure of the airline and tourism industry in many ways. Like in other sectors it has shortened the communication channels and allowed for quicker decision making with for example e-mails and modern teleconference equipments. The internet has completely altered the marketing world and the ways companies approach customers and vice versa. Home pages, databases and search engines have to a large extent substituted travel agencies. Information about the service is distributed quicker to the online customers with fewer intermediaries. These changes have reduced costs, improved services and made it possible to respond faster to

opportunities in an ever changing business environment. Icelandair has websites in local languages in all markets and attracts unusually high percentage of its customers, or 75% from outside its home market (Icelandair Group hf., 2010).

Computer systems

It is not enough for an airline to have a well executed route network. A key ingredient for a successful airline is the revenue management, and the way it controls capacity, booking and pricing. Although computer systems are very expensive to develop and manage for airlines, hotels and travel agents, they have been extremely helpful. The costs can be reduced with cooperation between players in the industry and Icelandair is for example in a partnership in the Amadeus computer reservation system¹⁹. Through the distribution engine and numerous agreements with other airlines, the Group can sell airline tickets and other reservations through more than 12,000 travel agents in addition to its own sales offices. This has significantly improved revenues (Icelandair Group hf., 2010). Icelandair has established a control station on the Keflavík international airport that operates a Data Link computer system. The system keeps constant communication and track of the aircraft locations on the route system. The computer system has helped in preventing delays and reacting to unexpected events (AMX News Centre, 2009). Furthermore, recent technological progresses in the travelling process, like self check-in on airports and mobile boarding passes have saved time and money.

Aircraft improvements

Technological changes have reduced negative externalities like carbon emissions in the environment. Aircraft engines are designed to use less amount of fuel than previous models. Icelandair has recently invested in winglets on its Boeing aircraft fleet. Those are designed to reduce fuel consumption and noise, lower emissions and make the aircraft safer to handle (Boeing, 2011). The company is also the first airline in Europe to make certain changes to the cockpits in the whole Boeing 737 fleet which make the aircraft lighter and subsequently more fuel efficient. The aircraft flight safety improves, maintenance costs are reduced and the pilots working conditions increases. Furthermore, the company has been renovating the fleets with new interiors including new seats and personal entertainment systems in all aircrafts (Viðskiptablaðið, 2011).

¹⁹ CRS.

4.1.5 Environmental factors

With a growing concern for the environment, governments keep on fighting for its sustainability with regulations and restrictions. The airline industry, as a fuel intense sector, is partly responsible for rising carbon emissions and is therefore expected to contribute to this fight. This comes with a price for the airlines. Unforeseen events like natural disasters and decesses that hold back air traffic can also become very costly.

Environment law

Airlines can be affected by local restrictions around airports to reduce noise and pollution. If opening hours of airports, availability of slots and the usage of airspace is limited to honor environmental restrictions, delays and complexity of departures can have adverse effect on efficiency in the industry. As a step to meet the obligations of the Kyoto Protocol, the European Union²⁰ has issued legislation intended to minimize excess emissions. The laws are enforced with carbon limits on the airline industry. The airlines who stay within the limits can sell their emission quotas to other airlines (Icelandair Group hf., 2010). The price of the quota trading brings additional uncertainty to the airlines cost base.

Natural disasters

The volcanic eruptions in the Icelandic Eyjafjallajökull in April 2011 showed the world just how vulnerable the airline industry is to unexpected natural disasters. The volcanic ash plume led to the closure of large parts of Europe's airspace over a period of seven days, causing over 100,000 flights to be cancelled and an estimated USD 1.7 billion revenue loss from scheduled services. The International Air Transport Association stated that airlines based in Northern Europe had all of their fleet effectively grounded as a result of the airspace closures. (IATA, 2010). Icelandair managed to minimize the loss of income by moving its hub to Glasgow and fly to Akureyri in the Northern Iceland instead of Keflavík. The passengers were then transported between Reykjavík and Akureyri. The estimated losses were ISK 1.5 billion but the long-term effects of a communication and marketing campaign launched shortly after the eruptions are estimated to balance out the damages (Icelandair Group, 2011). Airlines were challenged by Mother Nature yet another time in late 2010 when middle Europe was hit by a snowstorm resulting in grounded airplanes in England. The pilots of an Icelandair

²⁰ EU.

aircraft were told that there was not enough snow clearing equipment to clear a path for the refueling car and therefore had to face an overnight stay. Instead of delaying the flight like other airlines did, they cleared the path with shovels in their hands, got their aircraft refueled and took off (Moussaieff, 2010).

The 11 March 2011 earthquake and tsunami in Japan is another recent natural catastrophe that is expected to effect the air transport market adversely (IATA, 2011).

Terrorist Incidents and pandemics

General fear of travelling has negative effects on demand for air and tourism service. The airline industry has throughout the history experienced unanticipated incidences that have had instant depressing effects that in some cases lasted for years. For example, the terrorist attacks in September 2001 turned an industry downturn into a major slump and the following years became some of the most difficult times that the sector has ever faced (Morrell, 2007). The war in Iraq and the terrorist attacks in London the summer of 2005 made the outlook even worse.

On the of the unstable environment in the current decade, demand for airline travel has dropped several times due to global outbreaks of deceases like the SARS in 2003, the bird flu pandemic in 2007 and 2008 and the swine flu pandemic in 2009. The airlines have to accept and be prepared for times when people lose their appetite for traveling, which can occur at any time.

4.1.6 Legal factors

Although laws and regulations are set in good faith for the purpose of hindering something dangerous or unethical from happening, they can have negative consequences for companies in an industry. Security regulations, competition laws and other aviation regulations have the tendency to reduce the profit margin. Legal influences in the environment are closely tied to the political factors. To avoid repetition I briefly touch up on what I belief are the central legal issues.

Security regulations

Disasters like the 9/11 terrorist attacks have considerable indirect cost implications for the airline industry, even years after its recovery, in the form of safety precautions. International security measures where tightened up after the fly-capture incidents. For instance, legislation regarding the booking process, the security checks and the baggage

handling procedures were stepped up. Incidents like these have caused short term and long term flight interruption before and could possibly have similar effects in the future.

Competition law

The competition in the airline industry is fierce. Transparency in ticket pricing has increased with the appearance of the internet and companies must constantly come up with keener marketing campaigns than the competitors, in the battle for the customers. The competition authorities monitor every move and they are ready to cut in and penalize the airlines if they are guilty of breaching the competition laws. Apart from big fines in this sector, the firms then might have to change strategies and the way they usually conduct their business, going against the regulations can thereby have serious consequences. Companies with strong market position, like some of Icelandair Groups subsidiaries have in their home market, are subject to even more stringent anti-trust regulations than smaller players. Icelandair has since 2004 been involved in a dispute with Iceland Express, which was at the time a new Icelandic low cost carrier²¹. Icelandair was charged for alleged misuse of its market position by offering low fares on its route from Keflavík to London and Copenhagen, the exact markets Iceland Express was penetrating. Icelandair was ruled guilty on part of the charges but the courts have not reach a final decision whether the airline has to pay a fine to the amount of ISK 130 million (Viðskiptablaðið, 2011).

4.2 Porter's five forces

In the last chapter I identified the main external macro-environmental factors that effect the airline industry. The companies have no control over these influences but they must be aware of them and make their best effort to act in a pro-active way rather than taking a reactive approach. The coverage gave the reader an insight in the general condition and attractiveness of the industry.

To support discussions I follow up with an analysis of the strength of the competitive forces in the airline industry. I apply the Porter's Five Forces model which can be seen in figure 4.6. The five forces driving industry competition are according to Porter (1980) the threat of new entrants and substitute products or services, the rivalry among existing firms and the bargaining power of suppliers and buyers.

²¹ LCC.

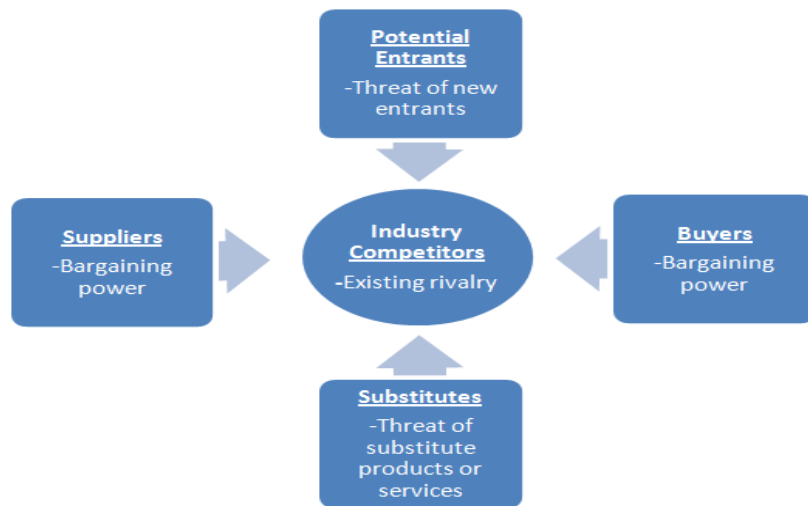


Figure 4.6: Porter's five forces
Source: Own creation & Porter (1980).

These outside forces, usually effect all firms in the industry but the key is found in the differing abilities of firms to find a favorable position to protect themselves against the influences. Knowledge of the forces highlights the critical strengths and weaknesses of the organization and gives the management an opportunity to develop a business strategy that maximizes its profitability (Porter, 1980).

4.2.1 Threat of new entrants

There is always a threat of new players on markets where profit potentials exists. The threat of entry into an industry depends on the barriers to entry coupled with the reaction from existing competitors that the entrant can expect (Porter, 1980). Increased competition for Icelandair Group can stem from completely new air service operators as well as from existing airlines that enter Icelandair's routes. The Group has felt an escalating competition from Iceland Express since its establishment in 2003 (Iceland Express, 2011) and is preparing for Delta Airlines' "break in" on the New York to Keflavík route 1st of June 2011 (Delta Airlines, 2010). Delta has recently started advertising their new destination placing emphasis on their wide spread connection flights in the USA. Icelandair responded with a new break through agreement with JetBlue Airways, the biggest airline that offers domestic flights from Boston and New York to 64 cities in the US (Vísir, 2011).

Government policy

The deregulation of the airline industry increased competition by lowering barriers to entry from a legislation point of view, like I pointed out in the PESTEL analysis in

chapter 4.1.1. The Airline Deregulation Act in the USA, the Single European Aviation Market and the “open skies” agreements have served as stepping stones for new entrants and simultaneously new threats to Icelandair Group.

Capital requirements

Entering the airline industry requires major investment in aircraft and equipment. That is the reason why about 30% of the world’s commercial fleet is owned by leasing companies (IATA, 2010). The airline business is also human capital intensive and a new player may have to enter into long term contracts with aircraft leasing companies and employee unions. Acquiring airport slots before being able to introduce new services or expand the existing ones comes with a great cost and is therefore another major entry barrier. There is always high risk involved in such outflow of capital when a business is established. This can easily repel possible entrants.

Product differentiation, access to distribution channels and switching costs

Brand identity, customer knowledge and special levels of service, create a barrier to entry. These factors are in favor of Icelandair for being the first on the home market. New entrants must also persuade distribution channels that the established firm has utilized, to accept their service. One of Icelandair’s four sale channels is an Internet Club with 600,000 active members of which 90% are foreigners (Icelandair Group hf., 2010). Although switching costs is low in the industry, Icelandair’s well-known distribution channels and its frequent flyer program serve as entry barriers to some extent.

I estimate the threat of new entrants high. This is based on the discussions above and the fact that 13 airlines have announced that they will fly scheduled flight or charter flight to Iceland this summer (Mbl.is, 2011).

4.2.2 Intensity of competitive rivalry

In this section I want to investigate how intense the existing rivalry on the market is by going through couple of interacting structural factors. Rivalry occurs because one or more competitors either feel the pressure or see the opportunity to improve position. In the battle for the customers, existing competitors use tactics like price competition, advertising battles, product introductions, and increased customer service. Price cuts are quickly met by rivals and can damage the markets profitability but advertising battles are likely to expand demand and boost product differentiation (Porter, 1980).

One market leader

Advertising battles is exactly what is currently happening on the Icelandic International Airline market. Latest warlike advertises from Iceland Express are meant to remind customers of how the airline stood up to Icelandair, which was at the time Iceland's only international air service operator, and offered a cheaper alternative. Iceland Express furthermore tries to cause sympathy for the airline because of Icelandair's good market position. Icelandair followed up by launching an advertising campaign that puts its excellent service and customer satisfaction in the spotlight.

Slow industry growth and high fixed costs

As the airline industry can be defined as a mature market, firms seeking expansion must take sales from its competitors. The market share competition is more intense than in rapid growing industries where firms can increase profit by taking advantage of larger market. There are very high fixed costs in the airlines cost base but low variable costs. Furthermore, the fact that it is impossible to store service for later use puts a pressure on carriers to cut prices to make use of excess capacity. Because of high exit barriers, the excess capacity does not leave the industry. Corporations that fall behind the competition tend to hang in there and fight to their last resorts. This can be conducive of low industry profitability (Porter, 1980).

I conclude that the intensity of existing competitive rivalry is high in the industry.

4.2.3 Substitute products

The introduction of substitute products or services is the result of innovation and new technology. Substitute products can perform the same functions as the existing ones only in a more effective way or with lower costs (Lynch, 2006). The task of an airline is to transport passengers and cargo between places and can therefore be substituted by trains, boats, busses, trucks and cars. The choice between these alternatives depends on distance, time, price and personal preferences.

Effectiveness and lower price

Icelandair has a rather unique position when it comes to substitute products because of the geographical position of its Hub. With nothing but the Atlantic Ocean between

Iceland and the mainland, ships and ferries are really the only other transport options to and from the country. Icelandair has a great advantage over boats when it comes to the time and the speed factors, but how much of a constraint the airline fare is depends on what is being transported and who is travelling. The business customer is less concerned about the price than the leisure customer because his main concern is getting to meetings in the shortest time possible. Latest teleconference equipment can serve as a substitute in the sense that business meetings can take place via the internet.

Other subsidiaries of Icelandair Group are more threatened by substitute products. There are no trains in Iceland but Air Iceland faces competition from the improving road network and travel agencies offering coach tours. Icelandair Hotels shares the tourist market with guesthouses and youth hotels. Since the companies do not contribute substantially to the Groups income I will not go into more detail on these substitutes.

In general, I assess that the threat of substitute products is low for Icelandair, and medium for Air Iceland. I believe, that the threat is high for other subsidiaries in the tourism sector as options for tourist activities in Iceland are plenty.

4.2.4 Bargaining power of customers

Bargaining power of customers refers to the amount of pressure customers can place on the industry by forcing down prices, bargain for higher quality or services and play competitors against each other, all at the expense of industry profitability (Porter, 1980). In order to find out the bargaining power of customers in the airline industry, I will in the following section take a look at the most relevant determining factors.

Buying volume, switching costs and undifferentiated service

There are very many individual buyers of airline tickets and usually they do not purchase large volumes relative to the airline sales. My experience as a customer is that I cannot have any influence on the lowest ticket price that is offered at each time. Business customers fly more frequently than the leisure customer but in my opinion they are not in a much better position to bargain unless they are represented by a corporation that is a large volume buyer. The switching cost between airlines for the customer is very low and the service is undifferentiated when comparing flights on same class so the customer usually has alternatives. The price is generally the decisive factor for the leisure customer and he can quickly spot any price discrepancies between airlines on the internet and choose the cheapest one. He is especially indifferent if the

travel is not very long and therefore unnecessary to pay for better service. Icelandair has a niche in business class travelers. When the airline responded to decreasing first class sales following the recession by including the “Economy-Comfort” class, it may have saved the demand but in my view they subsequently reduced the differentiation from Iceland Express.

Overall I estimate that the average individual leisure and business traveler have low bargaining power but large volume buyers like corporations and travel agencies have medium strength.

4.2.5 Bargaining power of suppliers

Suppliers have the bargaining power to squeeze profit out of the industry by threatening to raise prices or reduce the quality of purchased goods and services. To which degree this pressure from suppliers becomes, relies a great deal on conditions that mirror those making buyers powerful (Porter, 1980).

Labor unions

Icelandair Group’s highest items of expenditures are salaries and other personnel expenses with the average of 30% of total operating expenses since 2006. Labor must be recognized as suppliers, particularly as the airline and tourist industry is labor-intensive. Moreover the industry includes highly skilled employees and tightly unionized labor which according to Porter (1980) means that this supplier can bargain away a significant fraction of potential profits. As I mentioned in the PESTEL analysis in section 4.1.3, airlines always run the risk that the labor unions use their rights to strike if the two parties do not reach an agreement in re-negotiations. This right gives the suppliers a powerful weapon to bargain. Icelandair has the reputation of employing very qualified pilots and whilst the airline sticks to that strategy instead of recruiting less experienced pilots on lower salary, this group of suppliers maintains a considerable bargaining power.

Jet Fuel suppliers

Aircraft fuel is the second highest cost item with 18% average of the total cost base over the 5 years period. At present, airlines cannot operate without the jet fuel and there are only a small number of suppliers on the market which is highly concentrated. Jet fuel suppliers have no influence on the world market price of crude oil which is their main

ingredient. That tones down their bargaining power. The search and implementation of more sustainable and cheaper energy like bio fuel is ongoing. As long as that issue remains unsolved, airlines have to accept being highly dependent on the price and the availability of the jet fuel.

Aircraft prices and operations

The market for commercial airplane manufacturers is best described as a duopoly market with the two giant providers Boeing and Airbus dominant. Although they are contingent upon the sales to the commercial airlines, the two airplane suppliers have the bargaining advantage. Icelandair Group for example mainly uses Boeing aircraft, reportedly to minimize costs while maximizing passenger safety (Icelandair Group hf., 2010). When the airlines have investment preferences like that, the aircraft brands are differentiated for the firms and they get stuck with extremely high switching costs.

Airports are in a favorable bargaining position against Icelandair concerning the landing and takeoff authorizations. The airport in Keflavík is the only International airport on the home market and Icelandair does not make up a considerable part of fly traffic abroad. Icelandair Group has a good strategic position against smaller suppliers because of backward integration. The subsidiaries carry out all the aircraft maintenance, ground services, finance and accounting work etc.

I conclude that the suppliers enjoy a medium to strong bargaining power against the Group.

4.3 Icelandair Groups core competences

In order to relate the strategic analysis to the financial analysis I explore the following representation of the ROIC formula that links strategy and competitive advantage to return on invested capital (Tim Koller, 2010):

$$ROIC = (1 - Tax Rate) \times \frac{Price\ per\ Unit - Cost\ per\ Unit}{Invested\ Capital\ per\ Unit}$$

Accordingly, the reasons why companies that enjoy competitive advantage earn higher ROIC is because they charge higher price premiums or produces its products more efficiently, or both.

Competitive advantage is divided into two groups based on its sources: the first being price premium and the second cost and capital efficiency (Tim Koller, 2010). I could list numerous strategic moves from the discussions above that could be categorized into these groups. Icelandair Group increased their cost efficiency for

example when they started to offer self check-in on airports and mobile boarding passes. On the other hand, that did not secure competitive advantage because all the other airlines had the same opportunity for cost improvements which eventually results in lower ticket prices for the customers. Competitive advantage has to be unique for the company, something that is difficult for competitors to replicate. I identified three sources of competitive advantages from which Icelandair Group benefits.

Price premium

A company has competitive advantage when the cost of providing extra quality compared to competitors is less than the price premium that customers are willing to pay for the additional quality. Icelandair has a distinctive standing in the mind of Icelanders thanks to its long aviation history. The airline has a dominant position on the home market and competes based on its high quality perceived by customers and its brand. Quality and brand are usually highly correlated and it can be hard to distinguish their differences but sometimes the brand is what matters more if has lasted very long (Tim Koller, 2010). Icelanders are willing to pay higher fares for better quality from an airline they trust.

Cost and capital efficiency

Icelandair is a small player on the transatlantic route. The competition is high, the brand perception is low and the airline is forced to compete based on prices like all other companies. The airline cannot transport passengers over the ocean with lower costs than others but Icelandair has a competitive advantage in a unique aircraft fleet utilization. The geographical position of Iceland means that Icelandair is closer to its customers on both sides of the Atlantic. The airline manages to exploit this opportunity with the route network that allows for a utilization of a sizable part of the aircraft fleet almost around the clock. Capital efficiency means selling more products or service per unit of invested capital than competitors. In the preceding formula that means lower denominator and higher ROIC.

4.4 SWOT analysis

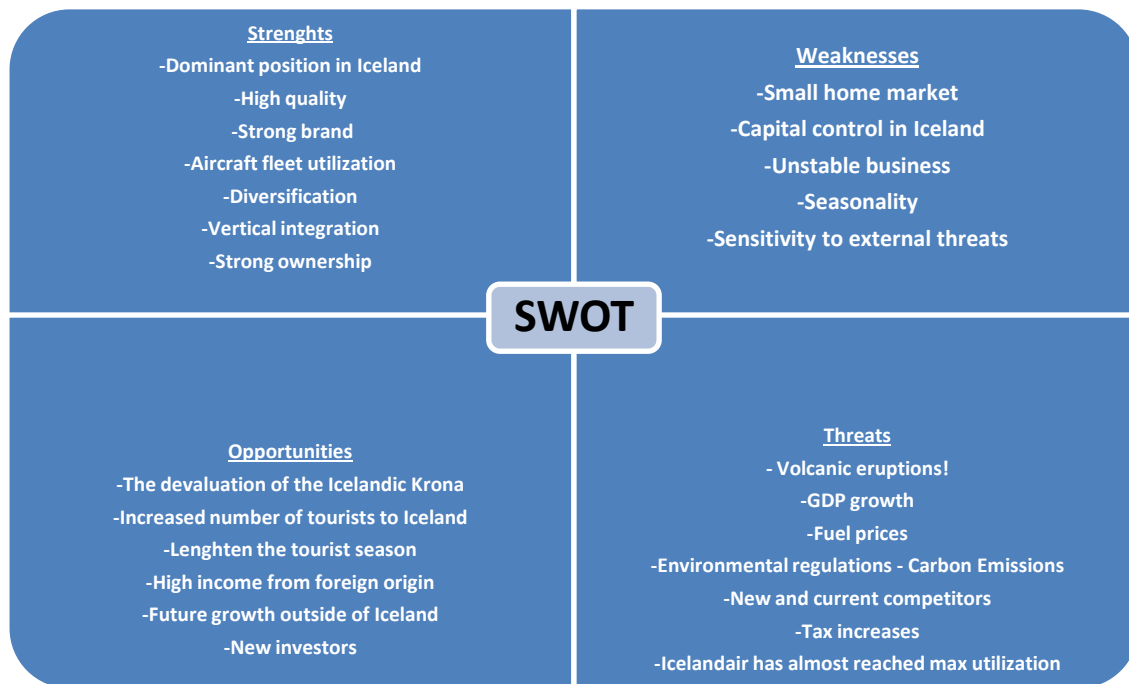


Figure 4.7: SWOT

Source: Own creation & (Lynch, 2006).

4.5 Summary

Overall I conclude that conducting business in the airline and tourist industry is extremely challenging because of many external influences that constantly change the business environment. As a result, the industry is very cyclical and uncertain. These are factors like fuel price fluctuations and currency development, which is especially important to Icelandair Group due to a small home currency. I estimate that the global GDP growth is the single most determinant factor as the GDP has much to do with how others external factors fluctuate. The Groups core competences are price premium on the home market and capital efficiency on the transatlantic market.

5 Financial analysis

Like I mentioned in chapter 1.2 companies value is primarily driven by ROIC and growth. To find out the fair value of Icelandair Group I have to dig into the financial statements and evaluate the historical financial performance. Unfortunately the financial statements are not originally prepared for thorough investigation of operating performance and value. First I have to reformulate the statements into operating items, non-operating items and sources of financing.

With the reformulated financial income statements in place I can calculate the key numbers like value drivers and growth. A company can grow year by year based on

earnings from solid operations, but a quicker way to grow is to take over others operations with a fair premium. I will uncover these acquisition effects and also currency effects to determine the real organic revenue growth.

When I have calculated the organic revenue growth I can analyze it historically along with the Groups cost base, on which I later build my forecast.

5.1 Financial Statement Analysis

The consolidated financial statements of Icelandair Group have from its foundation been prepared in accordance with International Financial Reporting Standards²² as adopted by the EU with additional Icelandic disclosure requirements for listed companies. The management signs the financial statements in good faith and that they give a true and fair view of the financial performance. It is stated that when preparing the financial statements the management is required to make judgements, estimates and assumptions that effect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates (Icelandair, 2011). For me this looks like a safeguard against mistakes but also against manipulation to which accounting is often subject. Especially when the performance has not lived up to expectations and the management wants investors to keep faith in the company until the operations improve. I investigated the numbers critically in my quest for the fair value.

Icelandair Group started operations in October 2006 but the financial statement for the first year was prepared so that it illustrated how the operations might have been if the acquisition of Icelandair Group hf. had been effected at the beginning of the year. I analyzed the pro-forma financial statement for 2006 and the full year financial statements for the years 2007 to 2010.

NOPLAT

The mission of this chapter is to find the historical growth in ROIC which can be calculated according to the following formula (Tim Koller, 2010):

$$ROIC = \frac{NOPLAT}{Invested\ Capital}$$

²² IFRS.

My first step was to reformulate the income statement in order to find the net operating profit less adjusted taxes²³. NOPLAT is the after-tax profit generated from core operations, excluding any gains from non-operating assets or financing expenses, such as interest (Tim Koller, 2010). It is important to underline that NOPLAT is the profit available to all investors not to just equity holders like the net income is.

The main estimation issues in the NOPLAT calculations were how to treat operating lease expenses and operating cash taxes. Corporations are currently not required to record operating leases on the balance sheet. An airline operator like Icelandair Group with substantial operating leases has low artificial operating profits and artificial high capital productivity. The value of operating leases is usually not presented in the financial statements. A common method used to calculate their value is to multiply the operating lease expenses by a multiple of 7-8 (Moody's, 2006). I estimated the value of the leases with the approach recommended by Koller et al. (2010).²⁴ The reported rental expenses were multiplied by an appropriate capitalization factor, based on the after-tax cost of debt (k_d) and average asset life. Then I multiplied the capitalized operating leases by k_d to find the calculated rental expenses, which I added to the EBITA. The difference between the reported and the calculated rental expense is renamed lease depreciation and remains as an operating expense.

I multiplied the adjusted EBITA by the marginal tax rate and adjusted the outcome for currency effects to find the operating taxes. As a final step I converted the operating taxes from accrual basis to a cash basis for valuation by adding the annual organic changes in operating deferred taxes that were 1) recurring and 2) charged or credited to the income statement. I estimated that two items in deferred taxes in the footnotes of the financial statements fulfilled both requirements, operating assets and trade receivables (Tim Koller, 2010)

Invested capital

Next I reformulated the balance sheet by separating operating assets from non-operating assets and financial structure. The reformulation process resulted in the capital required to fund operations, regardless of how the capital is financed. This figure is called the invested capital and is the denominator in the ROIC formula. The following formula is derived from the traditional balance sheet equation and shows that invested capital can be

²³ NOPLAT.

²⁴ The capitalized operating lease calculations can be seen in Appendix 10.5.

calculated using the operating method or the financing method (Tim Koller, 2010). By adding non-operating assets I get the total funds invested.

$$\text{Operating Assets} - \text{Operating liabilities} = \text{Invested Capital} = \text{Debt} + \text{Equity}$$

I capitalized the operating leases and included them in the invested capital, just like if the Group had used debt financing for their aircrafts and hotel buildings.

Free Cash Flow²⁵

I started with NOPLAT in my FCF calculations instead of net income like in the reported cash flow statement and excluded any non-operating flows and items related to capital structure like the following formula shows (Tim Koller, 2010):

$$\text{FCF} = \text{NOPLAT} + \text{Noncash Operating Expenses} \\ - \text{Investments in Invested Capital}$$

Next I added the depreciation and amortization of operating intangibles and subtracted the investments invested capital which resulted in after-tax cash flow as if the company held only core operating assets and financed the business entirely with equity (Tim Koller, 2010). To get the FCF available to all investors I added non-operating cash flows.

I treated the capitalized operating leases in the FCF just like other operating assets by subtracting the annual investments which were substantial in the Groups expanding years.

5.2 Organic revenue growth

Before I went on to build my forecast based on the historical revenue growth I investigated how much of the growth were the contribution of a sound operation and how much growth was due to non-recurring items. Like concluded in chapter 4.1.2, the majority of the Groups income and expenses are denominated in USD. Foreign currency translation differences can recur when the currency is converted to ISK in the end of the fiscal year.

Figure 5.1 presents the difference between the reported and the organic revenue growth caused by currency effects and acquisition effect. In the years 2007 and 2008 when the Group followed its investment strategy, it reported a solid 13% average revenue growth. When I stripped down the effects of currency translations and the acquisition of Travel Service the average organic growth for the two years is only 1%.

²⁵ FCF.

The same number averaged 10.3% for the years 2009 and 2010 when expansion was over and the foreign currency flow became restricted.

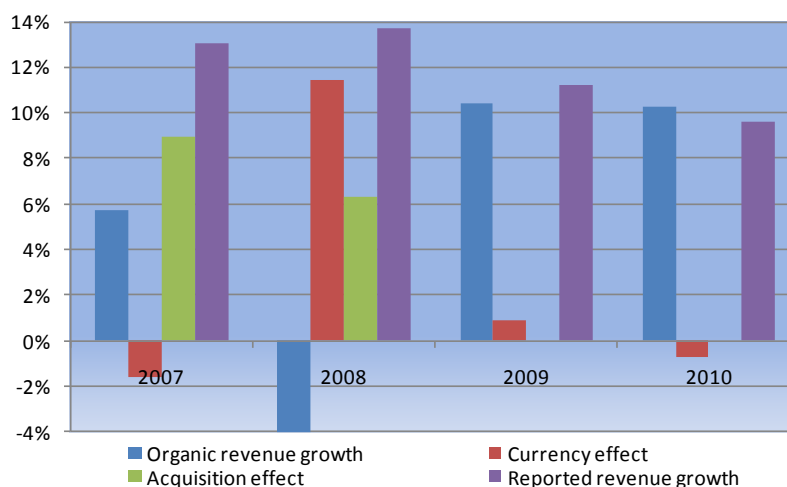


Figure 5.1: Organic revenue growth 2007-2010
Source: Own creation & (Tim Koller, 2010).

5.3 ROCE, ROIC and financial leverage

Return on common equity (ROCE) is determined by operating and financing activities like the ROCE tree in figure 5.2 illustrates. Financial leverage is the degree to which operating assets are financed with borrowing or common equity (Penman, 2010). By increasing the proportion of debt, the financial leverage increases and the effects of operational performance on ROCE

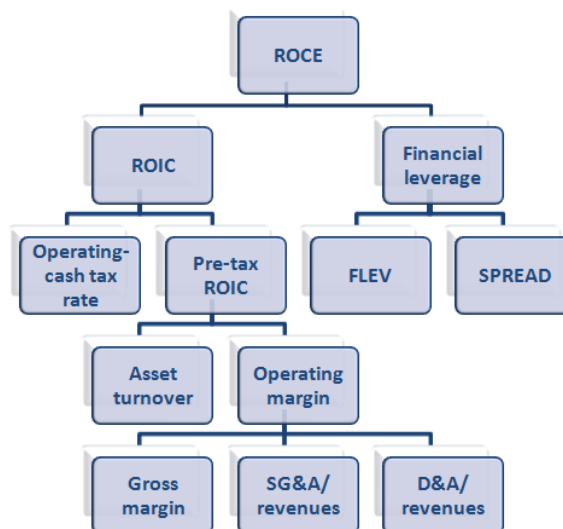


Figure 5.2: ROCE tree
Source: Own creation, (Tim Koller, 2010) & (Penman, 2010).

magnifies. Financial leverage is a powerful way to increase return on equity when the operating results are positive but can be equally dangerous if they are negative. The following formula explains the relationship between the ROCE and ROIC:

$$ROCE = ROIC + [ROIC - (1 - T)Kd] \frac{D}{E}$$

ROCE is a direct function of its ROIC, its SPREAD of ROIC over its after-tax cost of debt, and leverage, which is the book-based financial debt-to-equity ratio²⁶ (Tim Koller, 2010).

The historical effects of financial leverage on Icelandair Groups ROCE are clearly visible in figure 5.3. In 2007 the SPREAD was positive and the leverage a little above today's industry average which is 73.04% according to Damodaran (2011), resulting in higher ROCE than ROIC. In 2008 things began to go wrong. The leverage more than doubled and the Group earned ROIC under its k_d . That caused a negative SPREAD and consequently a negative return on equity. In 2009 the leverage increased even more due to the devaluation of the Icelandic Krona. The operations gave positive results and the „gearing“ effect of the leverage increased the positive outcome, resulting in a 12% ROCE. After the financial restructuring the leverage has decreased drastically and is approaching the industry average. The interests have decreased and along with this development the operating results have improved considerable, resulting in solid 13% ROCE.

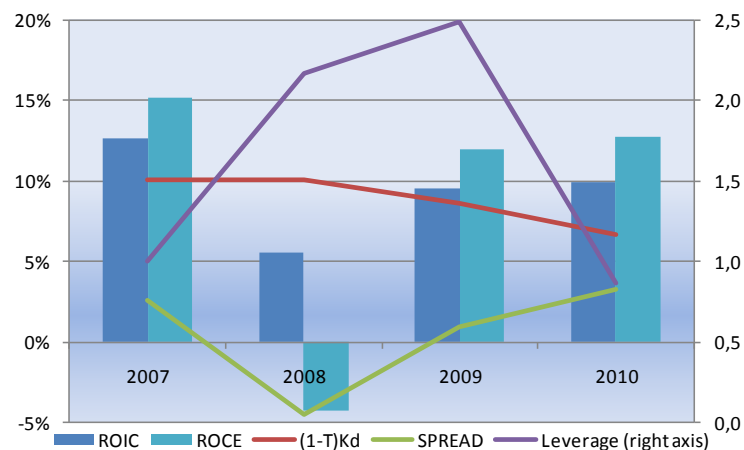


Figure 5.3: Financial leverage
Source: Own creation & (Tim Koller, 2010).

Next I am going to investigate the operating activities. In the preceding coverage we saw how increased leverage makes ROCE more sensitive to operating performance. I will break down the historical ROIC to find out how much of the fluctuations are due to changes in profitability, capital turnover and operating taxes. The following relationship between ROIC and its drivers is one of the most powerful equations in financial analysis (Tim Koller, 2010).

²⁶ $\frac{D}{E}$.

$$ROIC = (1 - \text{Operating Cash Tax Rate}) \times \frac{EBITA}{\text{Revenues}} \times \frac{\text{Revenues}}{\text{Invested Capital}}$$

I calculated the ROIC using the average investing capital each year and both with and without goodwill to see how the premiums paid for acquisitions have a decreasing effect on the ROIC. Like figure 5.4 demonstrates, the ROIC in 2007 was 12.7%. Capital turnover and profitability were high and increase in deferred operating taxes causes an extremely low operating cash tax rate of 5%. In 2008 the ROIC decreased to only 5.5% because of aggregating effects of all the three drivers. In 2009 we see other evidence of improved operational performance as the profitability is the main driver behind an increase in the ROIC to 9.6%. The government increased the marginal tax on corporations from 15% to 18% in 2010. Despite that, the ROIC turned out to be 9.9% because of increase in both capital turnover and profitability after the financial restructuring.

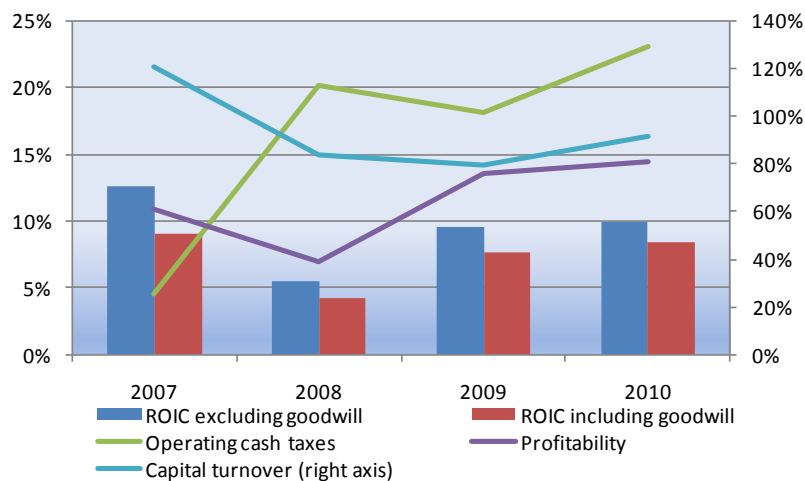


Figure 5.4: ROIC break-down
Source: Own creation & (Tim Koller, 2010).

5.4 Operating costs and cost drivers

In my opinion, the operating margin is a metaphor for the roots of the ROCE tree, the foundation on which the final operating results rely. Next I will compare Icelandair Groups operating margin for 2010 to the operating margin of a chosen peer group. The results are presented in figure 5.5. I complete my investigation of the operating activities of Icelandair Group with an analysis of the historical operational costs, and a search for the main cost drivers.

	2010						
	Icelandair Group	SAS AB	Finnair OYJ	Lufthansa	Air France	Average	IAG vs Peers (PPT)
Operating margin	7,1%	(4,8%)	(1,1%)	3,4%	(7,4%)	(2,5%)	9,6%
Gross margin	62,6%	49,6%	53,8%	46,4%	45,1%	48,7%	13,9%
SG&A/revenues	48,3%	50,4%	48,9%	36,1%	44,8%	45,0%	3,3%
D&A/revenues	7,2%	4,6%	5,8%	5,9%	7,7%	6,0%	1,2%

Figure 5.5: The peer groups operating margin break-down
Source: Own creation & (Tim Koller, 2010).

Icelandair Group performs very well compared to the peer group. Icelandair Group's operating margin is 7.1% compared to Lufthansa's 3.4% but all the other corporations show negative results. The Group's gross margin is 13.9 percentage points²⁷ above the peer group. There seems to be room for further cost reductions in Icelandair Group. Selling, general and administrative expenses as proportion of revenues are 3.3 percentage points higher than the peer group. Depreciation and amortization divided by revenues are 1.2% higher than the average.

The operating margin for airlines is driven by three accounts: aircraft fuel, labor expenses, and other expenses. (Tim Koller, 2010). The ratio of labor expenses to revenues can be broken further down into labor expenses per available seat kilometer²⁸ (ASK) and revenue per ASK like seen in the following equation. From the comparison to the peer group in figure 5.6 we see that Icelandair Group's labor expense per ASK is ISK 2.5 million lower than the peer group average. The revenues per ASK is also lower than the average or by ISK 7.4 millions. The revenues per ASK is lowest for Icelandair Group and part of the reason for this is the decreased airline fares since the discount carrier Iceland Express entered the home market.

$$\frac{\text{Labor Expenses}}{\text{Revenues}} = \frac{\left(\frac{\text{Labor Expenses}}{\text{ASKs}} \right)}{\frac{\text{Revenues}}{\text{ASKs}}}$$

	2010						
% of revenues and ISK millions per thousand ASK	Icelandair Group	SAS AB	Finnair OYJ	Lufthansa	Air France	Average	IAG vs Peers
Labor Expenses/revenues	23,2%	33,1%	21,9%	24,7%	34,8%	27,5%	(4,3%)
Labor Expenses/ASKs	3,8	7,4	9,8	4,4	6,1	6,3	(2,5)
Revenues/ASKs	16,4	22,3	44,8	17,9	17,4	23,8	(7,4)

Figure 5.6: Labor expense break-down
Source: Own creation & (Tim Koller, 2010).

²⁷ PPT.

²⁸ Measure of passenger capacity = number of seats x kilometers flown.

To find out whether the lower labor cost per ASK is a result of lower salaries paid by Icelandair Group or higher employee productivity, I disaggregate the ratio of labor expenses to ASKs in the following way (Tim Koller, 2010):

$$\frac{\text{Labor Expenses}}{\text{ASKs}} = \frac{\left(\frac{\text{Labor Expenses}}{\text{Employees}} \right)}{\left(\frac{\text{ASKs}}{\text{Employees}} \right)}$$

As can be seen in figure 5.7 Icelandair Group pays approximately the same average wages per full-time employee as both Finnair and Lufthansa, but pays ISK 1.58 million less than the peer group average. The productivity of Icelandair Group's staff is higher than in the peer group as per employee works 0.56 ASK more each year than the average.

ISK millions per thousand ASK		2010					
	Icelandair Group	SAS AB	Finnair OYJ	Lufthansa	Air France	Average	IAG vs Peers
Labor Expenses/Employees	9,3	15,5	9,2	9,3	10,9	10,9	(1,6)
ASKs/Employees	2,4	2,1	0,9	2,1	1,8	1,9	0,56

Figure 5.7: Labor expense drivers

Source: Own creation & (Tim Koller, 2010).

5.5 Summary

To find the ROIC I reformulated the financial statements of Icelandair Group to base my valuation on operating performance and calculated historical NOPLAT, invested capital and free cash flow. I uncovered the effects of currency translation differences and acquisitions from the reported revenue growth and discovered that the organic growth the last two years has been stable. ROCE is determined by the ROIC and the financial leverage. Financial leverage has decreased significantly after the financial restructuring and is near the industry average. The ROIC has been increasing since 2008 to 9.9% in 2010 despite higher taxes. I concluded that the reasons are improved profitability and capital turnover over the last two years. In comparison to its peer group average, Icelandair Group has 9.6% and 13.9% higher operating margin and gross margins respectively but the operating costs are higher than the average. I examined labor expenses which is the highest cost item, to find that Icelandair Group has the lowest labor costs per ASK because the Groups pays lower salaries than the average and has the best staff productivity. The revenues per ASK is lowest for Icelandair Group because of competition on the home market that squeezes the profit margin. I will not drag to big conclusions from the cost break down as the reasons for these differences

can be a mixture of a lot of other factors. The analysis gave me insight into the competitive differences between the corporations.

6 Forecasting

After the strategic and financial analysis of Icelandair Groups history the next step was to build a forecast based on the conclusions. The bygone developments and patterns can give an indication of the future but like legendary investor Warren Buffet put it so cleverly: “If past history was all there was to the game, the richest people would be librarians” (Lewis, 2011).

The first mission in the forecasting process was to find a fitting forecast period for the industry. An explicit forecast period of five years tends to be too short and often leads to an undervaluation of the company. Using exceedingly long period creates problems in predicting individual line items perhaps ten to fifteen years into the future (Tim Koller, 2010).

When the length of the explicit forecast period was decided the next assignment was to use the drivers that I concluded were most decisive for the revenue growth to build the revenue forecast. When I had that in place I could base the forecasted income statement and the balance sheet to a great deal on the forecasted revenues. Lastly I calculated ROIC and FCF for the forecast period in the same manner as in the historical analysis, and at that point I had all what I needed for the valuation process.

6.1 The explicit forecast period

Koller et al. (2010) argues that the explicit forecast period should be long enough that the company's growth rate is less than or equal to that of the economy (Tim Koller, 2010). I decided to use a ten years explicit forecast period from 2011 to 2020, because I assume that by then the Group should have reached a steady growth rate. This matches the forecast horizon for airlines recommended by Morrell (2007). The industry is very cyclical and ten years is considered long enough to include any future downturn.

6.2 The revenue forecast

After the strategic analysis in chapter 4 I concluded that the GDP growth has the biggest impact on air traffic growth. The state of the world economy influences other external factors that threaten airlines as they operate across borders. The effects of the current recession on the industry is solid evidence of this.

I decided to build a GDP forecast weighted in each of the major currencies that contribute considerable to Icelandair Groups income. The total revenues for 2010 are

split between regions and displayed in figure 6.1. I gathered GDP forecasts for the largest regions. Revenues from Iceland were 28% of total revenues and Statistics Iceland provides a detailed GDP forecast until 2016 (Statistic Iceland, 2011). I used a detailed forecast until 2012 for all the European countries provided by Eurostat (2011). Revenues from Scandinavia were 14% of the total revenues and 22% from rest of Europe. I used a ten year GDP forecast for North America which contributed 16% of the total revenues (United North America, 2011). For the last years I used the average from 2006 in each currency.

IATA expects 3.1% global GDP growth in 2011 and 5.6% passenger growth (IATA, 2011). That is a multiplier of 1.8 between estimated GDP growth and air traffic growth. Morrell (2007) suggests using air traffic growth that is twice the growth of the GDP and that multiplier should decline steadily towards 1 as maturity is approached. This method

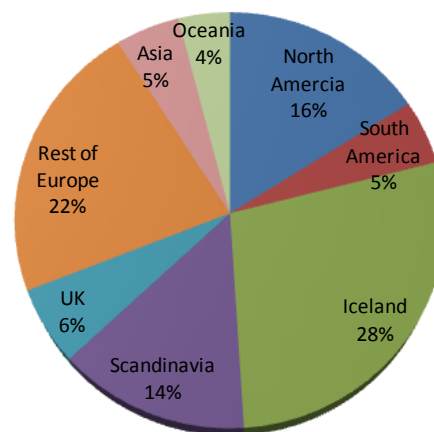


Figure 6.1: Total revenue contribution by regions 2010
Source: Own creation and Icelandair Groups Annual Report 2010.

gave me a 2.17% air traffic growth which is much lower than the historical industry average of 5%-6% (IATA, 2010). Mckinsey&Company (2007) uses a multiplier of 1.65. In my view it is reasonable to assume that the long term air traffic growth approaches the general economy growth to some degree but not completely given the historical facts. That is why I used 1.8 as multiplier for 2011 and 1.65 for the remaining years which resulted in a 3.73% air traffic growth for 2020. Although this is lower than the historical growth in passenger air travel I consider it a fair growth because the Group operates in the cargo, leasing and tourist industries as well.

The measure that airlines use to quantify, predict and promote their air traffic data is ASKs. To estimate the ASKs for 2011 I used Icelandair Groups traffic numbers for the first four months. Icelandair's ASKs increased by 17% compared to the 2010 numbers, passengers increased by 22% and the load factor was 79.2% in April, which is a record. The fleet utilization was amazingly high or 95%, up by 6% since 2010. Air Iceland's ASKs increased by 9%, and the available tonne kilometers (ATKs) in the cargo operations increased by 5%. Available hotel room nights were at the 2010 levels

but the sold hotel room nights decreased by 2% because of renovations according to the company (Icelandair Group, 2011). Icelandair estimates 15%-20% more tourists than in 2010 based on the promising booking status for the high season (Nasdaq OMX, 2011). To meet this increase the airline is raising the capacity by 18% before the summer (Icelandair, 2011). These predictions of increasing tourism can be supported by the latest numbers of traffic through the Keflavík International airport. There was a 17.5% increase in tourists to Iceland in the first four months of 2011 compared to 2010 (Icelandic Tourist Board, 2011))

Derived from these facts I estimated an 18% increase in both Icelandair's ASKs and the available hotel room nights. I predict a 4% increase in Air Iceland's ASK's which is twice the forecasted GDP in Iceland. Loftleiðir Icelandic has increased its capacity by 11.1% following good results last year, consequently, I use that number as the estimated revenue increase in aircraft and aircraft lease (Icelandair, 2011). IATA predicts a 6.1% air cargo growth and as a result I expect the same growth in ATKs.

For the rest of the explicit forecast period I use the growth rate in my weighted GDP and the multiple, times the revenue drivers ASKs, ATKs, and available hotel room nights for 2011. Finally I found the forecast ratio between the 2010 revenues and the relevant forecast driver and multiplied that ratio by the pre-discussed estimate of its driver. I removed Bluebird Cargo's revenues for 2010 from total revenues because the business was divested in the financial restructuring.

6.3 Financial statements forecast

The following are my main assumptions about the forecast drivers for the line items in the financial statements. The forecasted revenues are used for most items but I made exception in cases where I believed there were more relevant drivers available.

Income statement and NOPLAT

When I analyzed the historical cost base I discovered that each cost item has been a rather stable proportion of the total operating revenues. Figure 6.2 shows that the most noticeable differences are the decreasing salary expenses following the cutback in 2008, the fluctuations in the fuel price and escalating leasing costs along with the expanded capacity. Considering this development I decided to use the revenue growth as the driver for all the operating costs. In that way I can make sure that for example the aircraft and aircrew lease expenses rise with the announced capacity increase 2011 which I included in the revenue forecast. The only exception is the aircraft fuel costs for

which I expect a 20% increase in 2011. The estimation is based on the 31% rise in Icelandair Groups fuel costs the first quarter of 2011 (Nasdaq OMX, 2010), its hedging strategy and ISK 9.5 billion EBITDA forecast

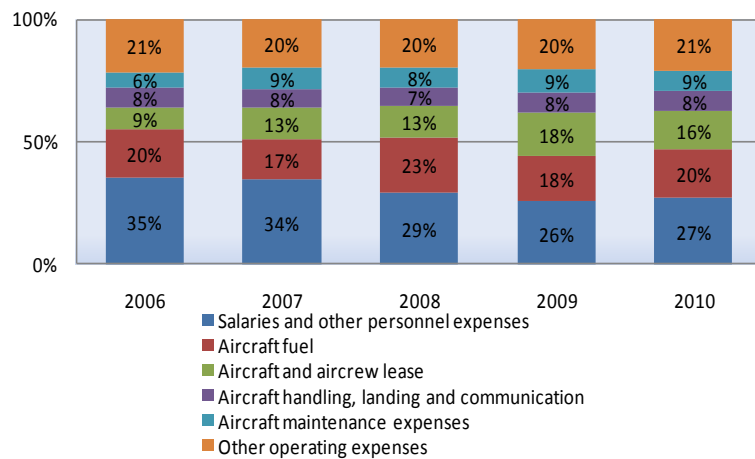


Figure 6.2: Operation costs as percentage of revenues 2006-2010
Source: Own creation and Icelandair Groups Annual Report 2010.

for the year (Icelandair, 2011) and the IATA industry outlook report (IATA, 2011).

I used the operating assets the prior year as a cost driver for depreciation of operating assets. The operating lease depreciation is the difference between the reported aircraft and aircrew lease expenses and the calculated after-tax operating lease expense. Prior year cash and cash equivalents were the drivers for interest income. The interest expenses are set according to the borrowing repayment schedule in the footnotes of the 2010 annual report. I did not forecast the foreign currency fluctuations as they are very unpredictable.

Balance sheet and invested capital

I adopted the 2% proxy used for the working cash from Koller et.al. (2010). The remaining of the cash and cash equivalents is considered excess cash. I concluded that the forecasted revenues were the appropriate driver for the operating intangibles which mainly consist of trademarks and slots. I hold the goodwill at constant level for the reasons that potential acquisitions are difficult to model and the typical acquisition fails to create value according to the empirical literature (Tim Koller, 2010). For the same reasons and the fact that Icelandair Group's future focus will be on core business, I did not allow for any investments in associates. The sale process of the assets held for sale will continue as announced and I expect them to be sold within three years. Long-term cost, receivables and deposits correspond to amounts paid for heavy maintenance, and deposits for aircraft and engine lease according to the annual report (Icelandair, 2011). It was rationale in my view to use the capitalized leases as a driver for these items.

6.4 Summary

I concluded that a 10 year explicit forecast period was long enough to counter for the cyclical nature of the industry. Based on my findings in the strategic analysis, GDP growth has the most effect on revenue growth. I built a GDP growth forecast weighted in the Groups main income currencies. I used the forecasted GDP growth to estimate growth in ASKs, ATKs, and available hotel room nights for 2011 on which I based the revenue forecast. Most of the line items in the forecasted financial statements are driven by these drivers.

7 Valuation

In the following chapter I start on deciding which of the many valuation models available are best suitable in the case of Icelandair Group. Next I explain how I estimate the inputs to the WACC which I use to discount the FCF. Finally I answer the problem statement and test how sensible the share price is to the calculated inputs.

7.1 Valuation models

Damodaran (2002) recognizes three basic approaches to valuation, all with their pros and cons which I considered before choosing a model. These are: discounted cash flow valuation, relative valuation and contingent claim valuation. I started off by investigating the two latter approaches that I was less familiar with than the first one.

Relative valuation

In relative valuation, the value of an asset is derived from the pricing of comparable assets. In reality this is how we value most assets. Whether we are on the market for a new house, car or a stock, the value is based on the price of similar assets. In this approach, company's performances are compared on the basis of performance ratios in the hope to find an undervalued stock compared to the industry average. A multiple comparison is a quick and simple method that is especially useful when there are a large number of comparable firms being traded on financial markets. It is argued that the relative valuation approach is easy to misuse and manipulate when the companies are chosen in the comparison group because less explicit assumptions are required than for example in the DCF valuation. In my view, the most significant disadvantage is the fact that the comparison is not very useful when companies have negative earnings (Damodaran, 2002) as the case is for many airlines today.

Contingent claim valuation

The basis of contingent claim valuation is that the value of an asset may not be greater than the present value of expected cash flows if the cash flows are contingent on the occurrence or non-occurrence of an event. Probabilities of an event happening are estimated and a real option pricing model is used in the valuation just as if it was a traded option. This approach has become widely accepted and DCF models tend to understate the value of assets when payoffs are contingent on the occurrence of an event. The contingent claim approach is very relevant when valuing patents and undeveloped natural resource reserves (Damodaran, 2002) but I concluded that its application is not as relevant in the case of Icelandair Group.

Discounted cash flow valuation

The DCF is the foundation on which the preceding valuation methods are built. The DCF is based on the present value rule, where the value of any asset is the present value of expected future cash flows that the asset generates. The uncertainty around the expected cash flow is taken into considerations when the discount rate is calculated. The discount rate is higher for riskier assets and lower for safer projects (Damodaran, 2011). There are many implementations for the DCF model available. Koller et.al (2010) mentions the five common frameworks in figure 7.1 and covers their properties.

Model:	Enterprise DCF	Discounted economic profit	Adjusted present value	Capital cash flow	Equity cash flow
Measure:	Free cash flow	Economic profit	Free cash flow	Capital cash flow	Cash flow to equity
Discount factor:	WACC	WACC	Unlevered cost of equity	Unlevered cost of equity	Levered cost of equity
Valuation Pros/cons:	Companies with target capital structure	Highlights when company creates value	Highlights changing capital structure	Comparison difficult between companies and over time	Capital structure in FCF, best when valuing banks

Figure 7.1: DCF frameworks

Source: Own creation & (Tim Koller, 2010).

Enterprise DCF is the preferred model amongst practitioners and academics because it relies solely on the cash flow in and out of the company rather than on accounting-based earnings (Tim Koller, 2010). The main advantage of the enterprise DCF model is that it

works best for companies that manage their capital structure to a target level like Icelandair Group after the financial restructuring.

I decided to use the enterprise DCF as my central model. The discounted economic profit model should yield the same results if applied correctly but it has some nice properties. The model closely links economic theory and competitive strategy by highlighting which years the company is earning its cost of capital (Tim Koller, 2010). I applied the discounted economic profit and the relative valuation with multiples as supporting approaches.

7.2 WACC

The weighted average cost of capital (WACC) is the discount factor that is used in the enterprise DCF model and the economic profit model. The WACC represents the opportunity cost that investors face for investing their funds in Icelandair Group instead of other companies with similar risks. Before calculating the WACC I had to estimate its three components: the cost of equity, the after-tax cost of debt and the Group's target capital structure. The WACC is calculated according to the following equation and figure 7.2 presents an overview of the inputs used (Tim Koller, 2010):

$$WACC = \frac{D}{V}k_d(1-T_m) + \frac{E}{V}k_e$$

Where D = Market value of debt, E = Market value of equity, k_d = Cost of debt, k_e = Cost of equity, T_m = Company's marginal income tax rate, V = Enterprise value

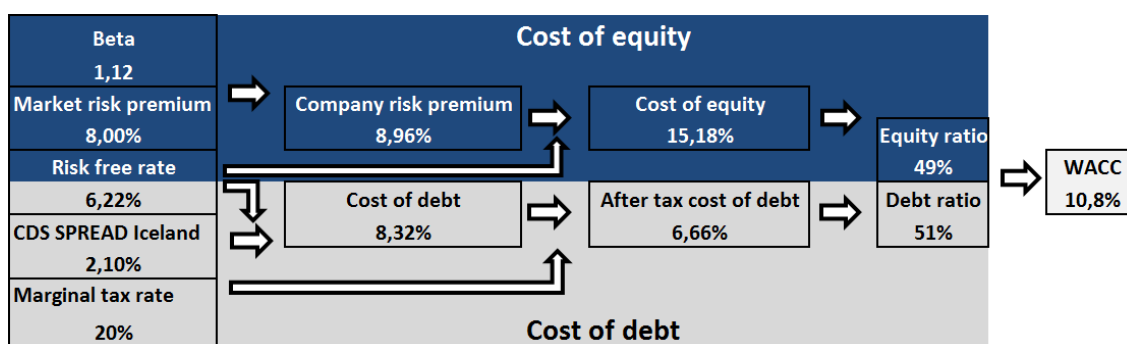


Figure 7.2: The estimated WACC
Source: Own creation.

The cost of equity

The cost of equity represents the required rate of return that investors expect from their investment. There are a number of models that estimate cost of equity such as the Fama-French three-factor model and the arbitrage pricing theory model²⁹. The capital asset

²⁹ APT.

pricing model (CAPM) is easier to implement and the most commonly used model. The subsequent CAPM relationship describes the expected returns on any asset or portfolio of assets as a function of the expected return on the market portfolio (Verbeek, 2008).

$$E(R_i) = r_f + \beta_i [E(R_m) - r_f]$$

Where

$E(R_i)$ = expected return of security i , R_f = risk-free rate, β_i = stock's sensitivity to the market, $E(R_m)$ = expected return of the market

The CAPM formula is not complicated but the challenging part is to estimate its three required inputs, the risk free rate, the market risk premium and the beta.

The risk-free rate

The ideal risk free rate is a government bond in the same maturity as the cash flow that should be discounted. I used the 10 year non-indexed Icelandic government bond RIKB 19 0226 (Government Debt Management, Central Bank of Iceland, 2011). Its maturity is one year before my last explicit forecast year but the next available government bond maturity is in 2025 and that bond is not traded as frequently. Icelandair Group is exposed to many currencies, especially the USD. Consequently, I gathered yields for 10 year government bonds in the main currencies that represented the Groups net cash flow exposure in 2010 (Icelandair Group hf., 2010). Afterward I built a weighted risk-free rate in these currencies and the outcome was 6.22%.

The market risk premium

The market risk premium is the difference between the market's expected return and the risk-free rate. The market risk premium is a hot topic in corporate finance as it is not easily observable and the results from the empirical evidences vary. Dimson et.al (2003) suggests a 3% to 5% risk premium. Fernandez et.al (2010) found that professors used equity premium in a range from 3% to 10% and that investors used an average around 6% in 2010. Koller et.al (2010) recommends using a premium between 4.5% and 5.5%. The market risk premium I decided to use is 8% which is the latest update of the country risk premium for Iceland, published by Damodaran (2011) in January. That market risk premium reflects in my opinion a fair estimate for a market with a small currency and capital restrictions compared to the average around 5% for developed markets.

The beta

The beta measures how the shares in Icelandair Group move together with the market. It is the only variable of the three inputs to CAPM that is not common to all companies on the market. Total risk equals the market risk plus firm-specific risk. The firm-specific risk can be eliminated by constructing a well diversified portfolio and is therefore not compensated. The beta is the key to market return as the beta represents the market risk, which is rewarded (Verbeek, 2008).

The beta is unobservable. For that reason I applied OLS regression on the CAPM relationship to estimate the beta coefficient. I collected five year monthly returns for Icelandair Group, companies from its peer group, the S&P 500 (Yahoo!, 2011), the MSCI world index (MSCI, 2011), and the Bloomberg American airline index (2011). I regressed the return of the companies upon the return on the market indexes. The reported unlevered beta for Icelandair Group against the NASDAQ OMX Iceland is 0.431 according to Bloomberg.com which results in a levered beta of 0.85. I have my doubts about the accuracy of this estimate as the Icelandic stock exchange consists of only 6 corporations and is highly illiquid. I tried my own regression of the Groups return against the return of the MSCI index but the outcome was not statistically significant (Verbeek, 2008). Next I regressed the Bloomberg American airline index upon the MSCI index. The results were highly statistically significant and after applying the Bloomberg smoothing formula (Tim Koller, 2010) I got an adjusted beta of 1.20. This is close to latest beta of 1.21 that Damodaran (2011) suggests for the airline industry.

I was not convinced that these were the right betas for Icelandair Group considering the extremely high concentration on the American airline routes. I undertook several regressions for the companies in the peer group against the S&P index. The regressions that were statistically significant provided adjusted betas ranging from 0.76 to 1.29. It is not possible to average the individual betas because of the varying capital structures between companies. I settled on making my own weighted European airline index including the companies that gave statistically significant results in the former regressions. The peer group index was then regressed³⁰ against the MSCI index which gave statistically significant beta coefficient at the 5% level, with t-value of

³⁰ The regression outputs can be seen in Appendice 10.12.

4, a p-value of 0.00018 and the R^2 value was 21.6. The outcome was a raw beta estimate of 1.17 and the adjusted beta was 1.12.

When the 6.22% risk free rate, beta value of 1.12 and the 8% market risk premium were put in the CAPM formula it provided me with a 15.18% expected return on equity. The only thing needed at this point to calculate the WACC was the cost of debt.

The cost of debt

There is no liquid market for corporate debt in Iceland. My search for an alternative value was based on finding an appropriate risk premium on the risk free rate. Damodaran (2011) suggests using a method where the company is given an estimated bond rating according to the size of the firm and its interest coverage ratio. Icelandair Group is categorized as a small firm with market value under USD 5 billion and has an interest coverage ratio of 3.20. As a consequence the estimated bond rating, default spread and cost of debt are BB, 3.35% and 9.57% respectively.

There is a repayment schedule and detailed interest rates information about Icelandair Groups borrowings in the footnote of the financial statements (Icelandair, 2011). I multiplied the interest rate of each loan with the weight of its remaining principal to the total remaining balance. The summarized weighted cost of debt was 5.08%. It is unlikely that the company can provide debt financing that is lower than the risk free rate today.

I settled on using a 2.10% credit default spread³¹ for Iceland found by Damodaran (2011) in February which is within the 0.5%-4% range suggested by Koller et.al (2010). The 6.22% risk free rate plus the CDS spread resulted in an estimated 8.22% cost of debt.

7.3 Valuation results

I used market value of equity but book value of debt over the enterprise value to complete the WACC calculations because there is no market value available for the corporate debt. I assumed that the Group had reached its target capital structure after the financial restructuring. With all the necessary inputs ready I got an estimated WACC of 10.8%.

³¹ CDS.

7.3.1 Enterprise DCF

To estimate the value of Icelandair Group I separated the expected cash flow into two periods: the present value of cash flow *during* the explicit forecast period which I discounted with the WACC *plus* the present value of cash flow *after* the explicit forecast period which I found by applying the following continuing value formula (Tim Koller, 2010):

$$\text{Continuing value}_t = \frac{\text{NOPLAT}_{t+1} \left(1 - \frac{g}{\text{ROIC}}\right)}{\text{WACC} - g}$$

Where g is the 3.73% forecasted growth rate for 2020. The expected ROIC for 2020 is 18% and the expected NOPLAT in 2021 is ISK 8.6 billion, found with the expected NOPLAT 2020 and the growth rate.

The discounted FCF and continuing value were valued at ISK 71.9 billion and ISK 33.9 billion respectively making the operations worth ISK 105.7 billion. To derive the enterprise value I added to the value of core operations the value of non-operating assets like figure 7.3 shows. These assets were excess cash, marketable securities, tax loss carry-forward and assets held for sale net of liabilities, to the amount of ISK 11.7 billion. The enterprise value was ISK 117.4 billion from which I deducted short-term debt, long-term debt, capitalized operating leases and minority

Amounts are in ISK million		
Discounted FCF	68%	71.850
Discounted Continuing value	32%	33.888
Value of operations		105.738
Excess cash		8.622
Marketable securities		1.306
Tax loss carry-forwards		1.314
Discontinued operations		450
Non-operating Assets		11.692
Enterprise value		117.430
Short-term debt		(3.248)
Long-term debt		(21.356)
Operating leases		(68.045)
Debt and debt equivalents		(92.649)
Minority interest		(28)
Equity value		24.753
Shares outstanding		4.975
Value per share		4.98

Figure 7.3: From enterprise value to value per share
Source: Own creation.

interest, total value of ISK 92.7. Finally I divided the resulting equity value of ISK 24,781 billion by the 4,975 billion shares outstanding. The estimated fair value per share of Icelandair Group hf. on May 10th 2011 is ISK 4.98.

7.3.2 Discounted Economic-Profit

Although the discounted economic profit method resulted in the same share price it serves as a good check up on the enterprise DCF valuation. Furthermore we can see in figure 7.4 which year Icelandair Group is expected to earn incremental economic profit created by additional growth at returns exceeding the cost of capital (Tim Koller, 2010). In the first two years of the explicit forecast period the Groups spread between the

ROIC and WACC is negative because of rising fuel costs and thus negative economic profit. In the last years the invested capital is incrementally decreasing because the remaining balance of the operating lease payments will be paid the last five years. That causes decrease in capitalized operating leases and the ROIC increases subsequently.

Amounts are in ISK million				Economic		Capital		Economic	Discount	Present
Forecast year	Invested capital	ROIC	WACC	Spread	Profit	=	NOPLAT charge	Profit	factor	value
2011	86.462	5,5%	10,8%	-5,3%	-4.593		4.760 9.353	-4.593	0,902	-4.144
2012	74.917	10,6%	10,8%	-0,3%	-189		7.915 8.104	-189	0,814	-154
2013	65.721	11,6%	10,8%	0,8%	501		7.610 7.109	501	0,735	368
2014	53.399	13,4%	10,8%	2,6%	1.394		7.170 5.776	1.394	0,663	924
2015	48.675	15,1%	10,8%	4,3%	2.076		7.342 5.265	2.076	0,598	1.242
2016	52.067	15,2%	10,8%	4,4%	2.302		7.934 5.632	2.302	0,540	1.243
2017	53.687	14,7%	10,8%	3,9%	2.082		7.889 5.807	2.082	0,487	1.014
2018	52.764	15,5%	10,8%	4,7%	2.459		8.166 5.707	2.459	0,440	1.081
2019	50.652	15,8%	10,8%	4,9%	2.506		7.985 5.479	2.506	0,397	994
2020	48.582	17,0%	10,8%	6,2%	3.022		8.277 5.255	3.022	0,358	1.082
Present value of forecasted Economic Profit during the explicit forecast period										3.652

Figure 7.4: Discounted economic profit valuation
Own creation & (Tim Koller, 2010).

7.3.3 Multiples

Valuation with multiples is a quick and useful check of my DCF forecast. With the use of a Bloomberg terminal I assembled information about a peer group consisting of 7 European airlines³² that are in similar operations and markets as Icelandair Group. The first thing I noticed about the peer group is that all of the airlines had a negative return this year compared to a 48% positive return in the Icelandair Group shares. My belief is that the volcanic eruptions in 2010 had varying impact on the airlines and the year is not very convenient for comparison. To avoid inaccuracy due to this, I used forward looking multiples. That is consistent with the principle of valuation that company's value equals the present value of future cash flow not historical. Forward looking multiples are usually normalized as they avoid one-time past charges and the empirical evidence shows that they are more precise than historical (Tim Koller, 2010).

Next I collected information about the peer group's performance ratios. Koller et al. (2010) recommends using the enterprise value (EV) to EBITA multiple for valuation comparison across companies. I used the EV to EBITDA multiplier for two reasons: One, I used forward looking multiples and there are not as many EBITA forecasts available as EBITDA forecasts. Two, Icelandair Group publishes their forecasts in EBITDA.

When applying the EV/EBITDA multiplier on airlines it has to be kept in mind that an airline that own a substantial part of its aircraft fleets do not include the

³² The peer group and the multiples are presented in Appendix 10.15.

depreciation charge in the EBITDA whereas an airline that leases a significant fraction of its fleet deducts the rental expenses before EBITDA. The airlines that use more leasing should, others things being equal, report a lower EBITDA ratio than the ones that own high fraction of their fleets. Price to Earnings (P/E) is a commonly used multiple as earnings are a primary driver in a company's value but the ratio is affected by capital structure and non-operating gains and losses (Tim Koller, 2010). The P/E ratio is meaningless when company's earnings are negative like in cases of many airlines today. Price to book value of equity is favored in such situations as long as the equity is positive (Peterson, 2006). I found the harmonic mean of the estimated EV/EBITDA 2011 and the price to book ratio (P/B) for the peer group. The harmonic mean was chosen because the estimator results in lower pricing errors than the simple mean or median (Jing Liu, 2000). That resulted in an expected 2011 EV/EBITDA multiplier of 5.02 for the peer group compared to 7.31 for Icelandair Group. I applied the peer group multiplier on the expected 2011 EBITDA for Icelandair Group to get a comparable enterprise value and deducted non-operating assets net of liabilities and got a value of ISK 6.52 per share. That is 38.4% higher than the ISK 4.71 market price on the 10th of May. The peer group's harmonic mean P/B ratio was 0.60 compared to 0.82 for the Group. This implied that the Groups equity is valued at ISK 17.1 billion and the share price should be ISK 3.44 or 27% lower.

7.4 Scenarios and sensitivity analysis

The valuation relies on multiple assumptions about how things turn out in the future. By creating scenarios and changing the main assumptions I can simulate how the estimated share price would vary. If the fuel prices are expected to increase 40% worst case in 2011 instead of 20% as in the base case, the expected share price drops from ISK 4.98 to ISK 4.56 as is presented in figure 7.6. If the ASKs growth is estimated 10% instead of the original 18%, the expected share price drops to ISK 2.77. When the GDP growth is predicted 10% less

	Worst case 1,74		Best case 8,19	
Input assumptions:	Effect:		Effect:	
Fuel price increase 2011	40%	4,98 => 4,56	10%	4,98 => 5,18
ASK increase 2011	10%	4,56 => 2,77	25%	5,18 => 6,87
GDP growth (vs base case)	-10%	2,77 => 1,74	10%	6,87 => 8,19

Figure 7.5: Worst case and best case scenarios
Source: Own creation.

than in base case, the expected share price decreases to ISK 1.74. Although it is informative and interesting to see how the expected share price would have turned out differently by altering one variable at the time, the input rarely changes in isolation. By

performing sensitivity analyses I could capture the interacting effects of two variables at the time. Figure 7.6 presents how the estimated share price is more sensitive to change in the WACC than terminal growth rate³³. If the terminal growth rate increases by 0.5ppt from 3.70% to 4.20%, the share price increases by 4.8%. When the WACC is decreased by 0.5ppt from 10.8%-10.30% the share price increases by 10.2%. If both these changes happen simultaneously, their interactions would cause the share price to increase by 16.5%, which is more than the sum of the individual effects.

Share price		Terminal growth rate								
4,98		1,70%	2,20%	2,70%	3,20%	3,70%	4,20%	4,70%	5,20%	5,70%
WACC	8,80%	6,00	6,32	6,69	7,13	7,65	8,29	9,08	10,09	11,43
	9,30%	5,48	5,74	6,04	6,39	6,80	7,29	7,89	8,64	9,59
	9,80%	5,03	5,24	5,49	5,77	6,09	6,48	6,94	7,50	8,19
	10,30%	4,63	4,81	5,01	5,23	5,49	5,80	6,15	6,58	7,10
	10,80%	4,28	4,42	4,58	4,77	4,98	5,22	5,50	5,83	6,23
	11,30%	3,96	4,08	4,21	4,36	4,53	4,72	4,94	5,20	5,51
	11,80%	3,67	3,77	3,88	4,00	4,14	4,29	4,47	4,67	4,91
	12,30%	3,41	3,49	3,58	3,68	3,79	3,91	4,05	4,21	4,39
	12,80%	3,18	3,24	3,31	3,39	3,48	3,58	3,69	3,81	3,96

Figure 7.6: Sensitivity analysis with terminal growth rate and the WACC.
Source: Own creation.

7.5 Summary

I concluded that the most suitable valuation model for Icelandair Group is the enterprise DCF model. The fair value was estimated ISK 4.98 per share. The discounted economic-profit model gets the same results but has the advantage that it highlights which year the company is earning its cost of capital. I decided to use both models. I also performed a valuation with multiples as a check up on my results. The 6.22% risk free rate was found by weighting the yields on 10 year government bonds in the currencies that form the Groups net cash flow. I calculated the beta of 1.12 by regressing my own peer group index including European airlines against the MSCI world index. The CAPM relationship was used to find the 15.22% cost of capital. I used Iceland's current 2.10% CDS spread on the risk free rate to get the 8.3% cost of debt. These inputs with the market value of equity and book value of debt resulted in a WACC of 10.8%. I built a worst case scenario and a best case scenario in which I changed 3 important drivers for costs and revenues. That gave me expected fair values of ISK 1.74 in the worst case and ISK 8.19 in the best case. In the sensitivity analysis I found the expected fair value to be highly sensitive to changes in GDP growth and the WACC.

³³ Sensitivity analyses can further be seen in Appendice 10.17.

8 Conclusion

My motivation for valuing Icelandair Group was to find out whether it was a good deal to buy the Icelandair Groups stock for ISK 2.5 in a share offering in December 2010. The Groups largest creditors converted part of its debt into equity in the company at the price of ISK 5 per share. The government had just taken over the banks after a total collapse of the banking system and the nation felt that money was being wasted again.

To find out the fair value of Icelandair Group I knew I had to start by knowing the company and its business strategy. I learned that Icelandairs *Hub and Spoke* concept is essential to the business model. The route network that consists of 3 subsidiaries, feeds business into the tourist service that consists of 6 subsidiaries. The central focus had been on investing activities in the years before the financial crises. The company made poor investments that did not contribute to the company's viability. This was mainly financed with borrowing in foreign currency. When the Krona had depreciated by 127% since the investments were made, the maturity profile was not manageable for the firm and the balance sheet was not sustainable. In the financial restructuring ISK 8.2 billion were raised in new share capital and ISK 3.6 billion of debt was swapped for shares. Furthermore, non-core assets were divested and the proceeds were used to reduce interest bearing debt by ISK 9.4 billion.

Growth and ROIC are the main drivers of a company's value. Knowledge of Icelandair Groups external business environment was necessary to see whether the company had the capabilities to keep up a long term rate of return. In a PESTEL analysis of the macro-economic factors I found that GDP growth, fuel price and currency fluctuations were the biggest threats for Icelandair Group. I applied the Porter's five forces model which confirmed my belief, that the competitive forces in the airline and tourism industry are very strong and profitability potential low. I identified three sources of competitive advantages from which Icelandair Group benefits. Firstly, price premium through its quality and brand on the home market. Secondly, cost and capital efficiency through the unique utilization of its aircraft fleet on the transatlantic route due to the convenient geographical location of its hub.

I wanted to determine whether Icelandair Groups profits were based on fundamental operations or accounting manipulating and non-recurring items. Profits originating from the core business are expected to be maintained in the future and eventually realized. The financial statements were reformulated to find the drivers for

growth and ROIC. I separated the effects of currency differences and acquisitions from the reported revenue growth, which was 13% on average in 2007-2008. Interestingly, that growth was only 1% attributable to core revenue growth but the same number averaged 10.3% in 2009-2010. The ROIC was calculated with and without goodwill and I discovered how the premiums paid for poor investment decrease the ROIC. ROCE is determined by the ROIC and the financial leverage. In the investment period the increased borrowing “leveraged” the negative ROIC into an even more negative ROCE. Since 2009, the financial leverage has decreased significantly which has increased the positive ROIC into an even higher ROCE. The ROIC has been increasing since 2008 to 9.9% in 2010 despite higher taxes. I concluded that the reasons are improved profitability and capital turnover over the last two years. As a result I could draw the conclusions that the core business following the financial restructuring is likely to deliver real rewards in the future.

In comparison to its peers, Icelandair Group had a 9.6% higher operating margin and a 13.9% higher gross margin than the average in 2010. The operating costs were 3.3% higher. I broke the highest cost item down to its drivers and found that Icelandair Group has the lowest labor costs per ASK. Further investigation revealed that this is caused by lower than average salaries and solid staff productivity. The revenues per ASK was lowest for Icelandair Group. Part of the reason is that the strongest competition on the homer market comes from the low cost carrier Iceland Express which has driven ticket prices down beneath Icelandair’s comfort zone.

Based on my findings in the strategic analysis I used GDP growth as a forecast driver for the revenue growth in the 10 year explicit forecast period. I built a GDP growth forecast weighted in the Groups main income currencies and used it to forecast growth in ASKs. The forecasted ASK growth was used as a driver for the estimated revenues. Most of the line items in the forecasted financial statements are driven by the estimated revenues, except for fuel price for which I predicted a 20% increase in 2011.

My calculations lead me to a 10.8% WACC. The 6.22% risk free rate was found by weighting the yields on 10 year government bonds in the currencies that form the Groups net cash flow. A regression of my own European airline index against the MSCI world index resulted in an estimated adjusted beta of 1.12. The CAPM relationship provided me with a 15.22% cost of capital. I added Iceland’s current 2.10% CDS spread to the risk free rate and used 8.3% cost of debt.

By applying the enterprise DCF model I estimated the fair value per share of Icelandair Group hf. on May 10th 2011 to be ISK 4.98. The discounted economic profit model supported my result. The estimated peer group EV/EBITDA multiplier suggested a fair value of ISK 6.52 per share and the P/B multiplier ISK 3.44 per share. To test the effects of the factors that I previously found to be most decisive to the share price, I built scenarios and performed sensitivity analyses. The worst case scenario resulted in a share price of ISK 1.74 and the best case scenario in the price of ISK 8.19 per share. The estimated share price was highly sensitive to changes in the WACC and GDP growth, which supports previous findings.

I conclude that shares in Icelandair Group are a good investment. My estimated share price is 99% higher than in the share offering, but I build this conclusion on long term prospects. My opinion is that the banks did not waste money by investing in the Group. On the contrary, they now have the opportunity to participate in a possible upside. The balance sheet is strong, the business model is practical and the tourist traffic to Iceland has grown year by year. It is official that the current largest shareholders are not long term investors. The management is considering a secondary listing for its share in another Nordic stock exchange later this year (Euroinvestor, 2011). It will be interesting to watch how that turns out. With new and strong foreign investors onboard and the right amount of momentum I think that Icelandair Group has a bright future.

Overall I estimate that the business in which Icelandair operates is not attractive. Warren Buffet said recently when he was asked about his assessment of a business: “If you’ve got the power to raise prices without losing business to a competitor, you’ve got a very good business. And if you have to have a prayer session before raising the price by 10 percent, then you’ve got a terrible business” (Bloomberg, 2011). The customers in the airline and tourist industry are very price sensitive. In that sense the business is indeed terrible. I believe, that if Icelandair Group knows the external influences and the competitive forces, it can better anticipate changes and exploit its core competences to confront the challenges. Only by doing so can the company sustain long term revenue growth and ROIC.

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10 Appendices

10.1 Historical NOPLAT

Amounts are in ISK million	*Pro Forma				
	2006	2007	2008	2009	2010
NOPLAT			Historical		
Total revenues	56.143	63.477	72.199	80.321	88.015
Salaries	(17.761)	(20.008)	(20.275)	(18.652)	(20.415)
Aircraft fuel	(9.821)	(9.769)	(15.703)	(13.250)	(14.927)
Aircraft handling, landing and communication	(4.038)	(4.367)	(5.060)	(5.881)	(6.103)
Aircraft maintenance expenses	(3.229)	(5.128)	(5.499)	(6.825)	(6.475)
Other operating expenses	(10.747)	(11.375)	(13.688)	(14.781)	(15.651)
Depreciation of operating assets	(2.177)	(2.587)	(3.327)	(4.611)	(5.188)
Aircraft and aircrew lease (depreciation)	(4.489)	(7.353)	(8.921)	(12.797)	(11.866)
EBITA	3.881	2.890	(274)	3.524	7.390
Add: Implicit operating lease interest expense	2.236	4.069	5.317	7.394	5.327
Adjusted EBITA	6.117	6.959	5.043	10.918	12.717
Adjusted operating cash taxes	(1.262)	(320)	(1.014)	(1.986)	(2.930)
NOPLAT	4.855	6.640	4.028	8.933	9.787

10.2 Historical invested capital

Amounts are in ISK million	*Pro Forma				
	2006	2007	2008	2009	2010
Invested capital			Historical		
Working cash	1.123	1.270	1.444	1.606	1.760
Current receivables	6.149	7.284	13.836	9.725	14.574
Inventories	1.131	1.301	2.309	1.393	1.580
Prepayments	271	366	2.536	1.350	950
Operating current assets	8.674	10.221	20.125	14.074	18.864
Trade payables	5.009	4.546	7.898	3.464	3.298
Other payables	7.010	7.902	10.687	10.559	10.697
Deferred income	3.059	3.904	7.875	7.178	8.807
Operating current liabilities	15.078	16.352	26.460	21.201	22.802
Operating working capital	(6.404)	(6.131)	(6.335)	(7.127)	(3.938)
Operating assets	22.935	22.832	36.798	27.014	27.594
Operating intangibles	6.731	6.703	8.487	5.286	4.662
Capitalized operating leases	22.064	36.158	47.282	75.632	68.045
Invested capital excl. intangibles	45.326	59.561	86.232	100.805	96.363
Goodwill	21.114	20.143	20.819	18.312	16.550
Accumulated goodwill amortization and impairments	0	0	5.182	1.023	339
Reversal of intangibles value adjustment (DTL's)	0	0	(38)	(195)	(11)
Adjusted goodwill	21.114	20.143	25.963	19.140	16.878
Invested capital	66.440	79.704	112.195	119.945	113.241
Excess cash	1.653	736	2.531	303	8.622
Marketable securities	0	0	90	0	1.306
Investment in associates	2.058	2.335	1.008	545	178
Receivables from sale of aircraft	1.094	1.753	0	0	0
Derivatives	215	0	0	0	0
Assets classified as held for sale	0	0	0	17.500	2.815
Prepaid aircraft acquisitions	9.669	249	4.226	1.134	0
Long-term cost	0	0	2.029	1.347	918
Long-term receivables and deposits	2.689	1.788	3.834	3.449	1.424
Tax loss carry-forwards	(265)	(1.339)	1.200	2.096	1.314
Deferred tax asset	0	0	0	140	0
Total funds invested	83.553	85.227	127.113	146.459	129.818

10.3 Historical FCF

*Pro Forma					
Amounts are in ISK million	2006	2007	2008	2009	2010
Free Cash Flow	Historical				
NOPLAT	4.855	6.640	4.028	8.933	9.787
Depreciation and amortization of operating intangibles	2.732	3.140	3.989	5.105	5.606
Gross cash flow	7.587	9.780	8.017	14.038	15.393
Investment in operating working capital		273	(204)	(792)	3.189
Operating assets	22.935	22.832	36.798	27.014	27.594
Add: Depreciation	2.177	2.587	3.327	4.611	5.188
Net capital expenditures		(2.484)	(17.293)	5.173	(5.768)
Investment in operating leases		(14.094)	(11.124)	(28.350)	7.587
Long-term cost	0	0	2.029	1.347	918
Long-term receivables and deposits	2.689	1.788	3.834	3.449	1.424
Investments in net long-term operating assets		901	(4.075)	1.067	2.454
(Decrease) increase in foreign-currency translation reserve		(1.019)	8.285	686	(615)
Trademarks and slots	0	0	(884)	0	(370)
Customer relations	0	0	(340)	0	(26)
Other intangibles	0	0	(9)	0	0
Impairments of operating intangibles	0	0	(1.233)	0	(396)
Gross investment	0	(16.423)	(25.644)	(22.215)	6.451
Free cash flow before goodwill and acquired intangibles	7.587	(6.643)	(17.626)	(8.178)	21.844
Investments in goodwill and acquired intangibles		999	(2.422)	5.861	2.189
Free cash flow after goodwill and acquired intangibles		(5.644)	(20.048)	(2.317)	24.033
Gain on disposals in relation to financial restructuring	0	0	0	0	4.245
After-tax interest income	1.311	325	1.455	139	209
After tax interest expense	(1.661)	(2.087)	(3.109)	(5.239)	(3.105)
Investments in associates		(277)	1.327	463	367
After-tax share of (loss) profit of associates	131	(48)	265	41	(321)
After-tax (Loss) profit from discontinued operation	0	0	1.437	(6.681)	(562)
Decrease (increase) in excess cash		917	(1.795)	2.228	(8.319)
Decrease (increase) in marketable securities		0	(90)	90	(1.306)
Decrease (increase) in receivables from sale of aircrafts		(659)	1.753	0	0
Decrease (increase) in prepaid aircraft acquisitions		9.420	(3.977)	3.092	1.134
Decrease (increase) in tax loss carry-forwards		1.074	(2.539)	(896)	782
Operating Assets	589	299	(1.299)	(1.436)	(1.282)
Trade receivables	16	104	(7)	(11)	5
Other operating deferred taxes not in operating cash taxes	605	403	(1.306)	(1.447)	(1.277)
Decrease (increase) in operating deferred tax liabilities		202	1.709	141	(170)
Decrease (increase) in long-term cost		0	(2.029)	682	429
Decrease (increase) in long-term receivables and deposits		901	(2.046)	385	2.025
Nonoperating cash flow		9.767	(7.638)	(5.555)	(4.592)
Cash flow available to investors		4.123	(27.687)	(7.872)	19.441

10.4 Operating cash taxes

*Pro Forma		2006	2007	2008	2009	2010
Amounts are in ISK million						
Operating cash taxes			Historical			
Adjusted EBITA		6.117	6.959	5.043	10.918	12.717
Marginal tax rate		0	0	0	0	0
Marginal taxes on EBITA		(1.101)	(1.253)	(756)	(1.638)	(2.289)
		(0)	(1)	(0)	0	0
Foreign currency subsidiaries		(87)	(151)	207	0	0
Operating taxes		(1.188)	(1.404)	(549)	(1.638)	(2.289)
1) Recurring, 2) Recognised in income statement						
Operating assets		(162)	1.154	(489)	(365)	(809)
Trade receivables		88	(70)	24	17	168
Changes in Operating deferred tax assets and (liabilities):		(74)	1.084	(465)	(348)	(641)
Operating cash taxes		(1.262)	(320)	(1.014)	(1.986)	(2.930)
Operating cash tax rate		21%	5%	20%	18%	23%
Adjusted operating cash taxes		(1.262)	(320)	(1.014)	(1.986)	(2.930)
NOPLAT		4.855	6.640	4.028	8.933	9.787

10.5 Capitalized operating leases

*Pro Forma		2006	2007	2008	2009	2010
Amounts are in ISK million						
Estimated synthetic rating		3,50%	3,50%	3,50%	3,50%	3,50%
Risk-free rate, %		8,86%	10,23%	9,73%	8,00%	6,05%
Pre-tax cost of debt, %		12,36%	13,73%	13,23%	11,50%	9,55%
Marginal tax rate, %		18%	18%	15%	15%	18%
After-tax cost of debt, %		10,14%	11,25%	11,25%	9,78%	7,83%
Asset life		11	11	11	11	11
1/asset life		0,09	0,09	0,09	0,09	0,09
Kd + (1/asset life)		0,19	0,20	0,20	0,19	0,17
Rental expenses		4.489	7.353	8.921	12.797	11.866
Operating lease expense		2.236	4.069	5.317	7.394	5.327
Depreciation		2.253	3.284	3.604	5.403	6.539
Capitalized operating leases		22.064	36.158	47.282	75.632	68.045

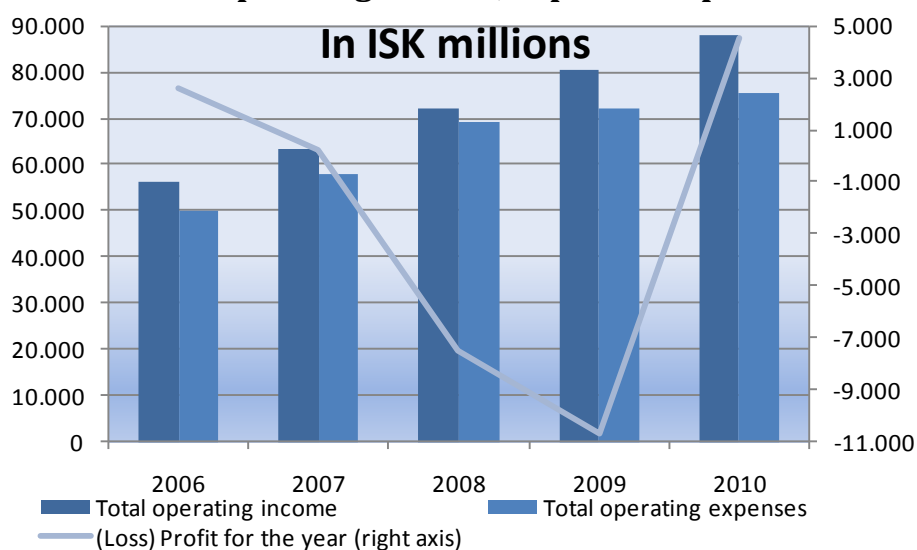
10.6 Historical ROIC break-down

Historical Performance		2006	2007	2008	2009	2010
ROIC						
ROIC incl. Goodwill =						
	$\frac{\text{NOPLAT}}{\text{Average Invested Capital}}$		9,1%	4,2%	7,7%	8,4%
ROIC excl. Goodwill =						
	$\frac{\text{NOPLAT}}{\text{Average Invested Capital}}$		12,7%	5,5%	9,6%	9,9%
Decomposition ROIC	Operating Cash Tax Rate	Operating cash taxes	5%	20%	18%	23%
	$\frac{\text{EBITA}}{\text{Revenues}}$	Profitability	11,0%	7,0%	13,6%	14,4%
	$\frac{\text{Revenues}}{\text{Average Invested Capital}}$	Capital turnover	121,0%	83,7%	79,7%	91,3%
	ROIC excl. Goodwill check.		12,7%	5,5%	9,6%	9,9%

10.7 Performance ratios

	*Pro Forma 2006	2007	2008	2009	2010
Historical Performance					
Operating ratios					
Salaries and other personnel expenses/ Revenues	31,6%	31,5%	28,1%	23,2%	23,2%
Aircraft Fuel/Revenues	17,5%	15,4%	21,7%	16,5%	17,0%
Aircraft ground service/Revenues	7,2%	6,9%	7,0%	7,3%	6,9%
Aircraft maintenance expenses/Revenues	5,8%	8,1%	7,6%	8,5%	7,4%
Other operating expenses/Revenues	19,1%	17,9%	19,0%	18,4%	17,8%
Depreciation of operating assets/Revenues	3,9%	4,1%	4,6%	5,7%	5,9%
Aircraft and aircrew lease (depreciation)/Revenues	8,0%	11,6%	12,4%	15,9%	13,5%
EBITDA (income statement)/Revenues	10,8%	8,6%	4,2%	10,1%	14,3%
EBITA/Revenues	6,9%	4,6%	-0,4%	4,4%	8,4%
Adjusted EBITA/Revenues	10,9%	11,0%	7,0%	13,6%	14,4%
Return on invested capital (average)					
Operating Assets / Revenues		36,1%	41,3%	39,7%	31,0%
Operating working capital/Revenues		-14,9%	-12,9%	-12,3%	-10,3%
Revenues/invested capital (excluding intangibles)		121,0%	99,0%	85,9%	89,3%
Revenues/invested capital (including intangibles)		59,7%	53,2%	46,7%	49,8%
Pretax ROIC (Adjusted EBITA/Invested capital excluding intangibles)		13,3%	6,9%	11,7%	12,9%
Operating cash tax rate	20,6%	4,6%	20,1%	18,2%	23,0%
Growth rates					
Revenue growth rate		13,1%	13,7%	11,2%	9,6%
Adjusted EBITA growth rate		13,8%	-27,5%	116,5%	16,5%
NOPLAT growth rate		36,8%	-39,3%	121,7%	9,6%
Invested capital growth rate (excluding intangibles)		31,4%	44,8%	16,9%	-4,4%
Invested capital growth rate (including intangibles)		20,0%	40,8%	6,9%	-5,6%
Net income growth rate		-90,2%	-3005,8%	42,8%	-142,7%
Investment rates					
Gross investment rate		-167,9%	-319,8%	-158,3%	41,9%
Net investment (Invested capital t+1 - Invested capital 1)		14.236	26.671	14.573	-4.442
Net investment rate: Net investment / NOPLAT		214,4%	662,1%	163,1%	-45,4%
Coverage ratios					
EBIT/interest	1,6	0,9	-2,0	0,2	2,8
EBITA/interest	1,9	1,1	-0,1	0,6	2,0
EBITDA/interest	3,0	2,2	0,8	1,3	3,3
EBITDAR/interest	0,8	-0,7	-1,6	-0,8	0,2

10.8 Historical total operating income, expenses & profit



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Forecasted performance	Short term forecast					Long term forecast				
ROIC	6%	11%	12%	14%	16%	16%	15%	16%	17%	18%
Operating ratios										
Salaries and other personnel expenses/ Revenues	23,2%	23,2%	23,2%	23,2%	23,2%	23,2%	23,2%	23,2%	23,2%	23,2%
Aircraft Fuel/Revenues	20,4%	17,0%	17,0%	17,0%	17,0%	17,0%	17,0%	17,0%	17,0%	17,0%
Aircraft ground service/Revenues	6,9%	6,9%	6,9%	6,9%	6,9%	6,9%	6,9%	6,9%	6,9%	6,9%
Aircraft maintenance expenses/Revenues	7,4%	7,4%	7,4%	7,4%	7,4%	7,4%	7,4%	7,4%	7,4%	7,4%
Other operating expenses/Revenues	17,8%	17,8%	17,8%	17,8%	17,8%	17,8%	17,8%	17,8%	17,8%	17,8%
Depreciation of operating assets/Revenues	5,9%	5,9%	5,9%	5,9%	5,9%	5,9%	5,9%	5,9%	5,9%	5,9%
Aircraft and aircrew lease (depreciation)/Revenues	15,3%	14,6%	13,8%	13,8%	13,8%	13,8%	13,8%	13,8%	13,8%	13,8%
EBITDA (income statement)/Revenues	9,0%	13,2%	14,0%	14,0%	14,0%	14,0%	14,0%	14,0%	14,0%	14,0%
EBITA/Revenues	3,1%	7,3%	8,1%	8,1%	8,1%	8,1%	8,1%	8,1%	8,1%	8,1%
Adjusted EBITA/Revenues	7,0%	10,1%	9,6%	8,8%	8,7%	9,0%	8,6%	8,6%	8,2%	8,2%
Return on invested capital (average)										
Operating Assets / Revenues	29,9%	29,9%	30,5%	30,5%	30,5%	30,5%	30,4%	30,3%	30,4%	30,4%
Operating working capital/Revenues	-6,3%	-6,3%	-6,5%	-6,5%	-6,5%	-6,5%	-6,4%	-6,4%	-6,4%	-6,5%
Revenues/invested capital (excluding intangibles)	112,5%	143,2%	171,8%	220,7%	252,3%	246,7%	250,8%	265,6%	285,2%	305,9%
Revenues/invested capital (including intangibles)	60,8%	77,5%	88,6%	110,0%	126,1%	127,8%	128,5%	138,0%	145,3%	158,2%
Pretax ROIC	7,9%	14,5%	16,5%	19,5%	21,9%	22,1%	21,7%	22,8%	23,4%	25,1%
Operating cash tax rate	30,4%	27,2%	27,6%	28,3%	28,4%	28,1%	28,4%	28,5%	28,9%	28,9%
Growth rates										
Revenue growth rate	10,6%	10,3%	5,7%	5,7%	5,8%	5,9%	6,8%	7,0%	6,2%	6,1%
Adjusted EBITA growth rate	-46,2%	59,0%	0,4%	-3,1%	4,3%	9,1%	2,9%	6,5%	1,4%	6,0%
NOPLAT growth rate	-51,4%	66,3%	-0,2%	-4,0%	4,1%	9,5%	2,4%	6,5%	0,8%	6,0%
Invested capital growth rate (excluding intangibles)	-20,5%	-4,3%	-19,8%	-15,2%	1,6%	14,8%	-3,6%	5,7%	-7,5%	5,9%
Invested capital growth rate (including intangibles)	-17,5%	-3,5%	-16,1%	-11,8%	1,2%	11,1%	-2,8%	4,4%	-5,8%	4,5%
Net income growth rate	-110,1%	-861,0%	-76,1%	392,2%	73,4%	-4,5%	14,9%	13,8%	14,2%	6,6%
Investment rates										
Gross investment rate	128,4%	-24,8%	50,9%	9,5%	-56,8%	-95,9%	-40,0%	-69,3%	-30,2%	-69,0%
Net investment (Invested capital t+1 - Invested capital t) / Invested capital t	-19.802	-3.288	-14.542	-8.907	820	7.515	-2.066	3.209	-4.423	3.214
Net investment rate: Net investment / NOPLAT	-416,0%	-41,5%	-184,0%	-117,5%	10,4%	87,0%	-23,3%	34,1%	-46,5%	31,9%
Coverage ratios										
EBIT/interest	0,6	2,1	1,0	2,0	8,6	4,6	6,6	10,6	45,2	48,2
EBITA/interest	0,9	2,5	1,2	2,3	9,9	5,3	7,5	12,0	51,0	54,1
EBITDA/interest	2,7	4,6	2,0	3,9	17,2	9,1	12,9	20,8	88,2	93,6
EBITDAR/interest	-1,9	-0,5	0,0	0,1	0,2	0,1	0,2	0,3	1,2	1,3

10.9 Weighted GDP forecast

		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
GDP forecast		Short term forecast					Long term forecast				
	Weights										
	29%	2,3%	2,9%	2,7%	2,7%	3,0%	3,0%	3,9%	3,9%	3,9%	3,9%
Iceland	26%	1,8%	1,9%	5,4%	5,4%	5,4%	5,4%	5,4%	5,4%	5,4%	5,4%
Euro zone	5,3%	1,7%	2,1%	1,4%	1,4%	1,4%	1,4%	1,4%	1,4%	1,4%	1,4%
UK		1,7%	1,5%								
Denmark		3,7%	2,6%								
Finland		4,2%	2,5%								
Sweden		2,7%	2,5%								
Norway	13%	3,1%	2,3%	2,9%	2,8%	2,7%	3,2%	5,3%	6,1%	2,7%	2,3%
Scandinavia average	14%	3,0%	3,0%	3,0%	3,0%	3,0%	3,0%	3,0%	3,0%	3,0%	3,0%
North America 10 year growth	12,3%	3,1%	3,1%	3,1%	3,1%	3,1%	3,1%	3,1%	3,1%	3,1%	3,1%
Other	1,00	5,60%	4,22%	5,67%	5,65%	5,78%	5,89%	6,78%	6,96%	6,22%	6,14%
IATA GDP growth forecast		3,1%									
Passenger growth		5,6%									
GDP growth to passenger growth ratio		1,8	1,65	1,65	1,65	1,65	1,65	1,65	1,65	1,65	1,65
IATA Cargo forecast		6,1%									

10.10 The revenue forecast

		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Short term forecast							Long term forecast				
Revenues											
Passenger revenues		51.724	59.808	62.229	64.701	67.303	70.031	72.710	75.486	78.368	81.293
	% change	6,4%	15,6%	4,0%	4,0%	4,0%	4,1%	3,8%	3,8%	3,8%	3,7%
Icelandair											
Number of Passengers (PAX)		1.748.957	1.822.691	1.896.500	1.971.821	2.051.110	2.134.269	2.215.910	2.300.515	2.388.351	2.477.492
	% change	18,0%	4,2%	4,0%	4,0%	4,0%	4,1%	3,8%	3,8%	3,8%	3,7%
Load Factor (%)		78%	78%	78%	78%	78%	78%	78%	78%	78%	78%
	ppt change	0	0	0	0	0	0	0	0	0	0
Available Seat Kilometers (ASK) - in thousand		6.116.105	6.373.953	6.632.063	6.895.460	7.172.733	7.463.540	7.749.039	8.044.905	8.352.067	8.663.791
		17,5%	4,2%	4,0%	4,0%	4,0%	4,1%	3,8%	3,8%	3,8%	3,7%
Air Iceland											
Number of Passengers (PAX)		359.071	379.897	400.411	422.034	447.356	474.197	489.889	506.099	522.847	540.148
	% change	4,6%	5,8%	5,4%	5,4%	6,0%	6,0%	3,3%	3,3%	3,3%	3,3%
Load Factor (%)		69%	69%	69%	69%	69%	69%	69%	69%	69%	69%
	ppt change	1,2%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%
Available Seat Kilometers (ASK) - in thousand		175.015	185.165	195.164	205.703	218.045	231.128	238.776	246.678	254.841	263.273
	% change	4,6%	5,8%	5,4%	5,4%	6,0%	6,0%	3,3%	3,3%	3,3%	3,3%
Scheduled Airlines Total											
Number of Passangers (PAX) - in thousand		2.108.028	2.202.588	2.296.912	2.393.855	2.498.465	2.608.466	2.705.798	2.806.615	2.911.198	3.017.640
	% change	15,5%	4,5%	4,3%	4,2%	4,4%	4,4%	3,7%	3,7%	3,7%	3,7%
Load Factor (%)		76%	76%	76%	76%	76%	76%	76%	76%	76%	76%
	ppt change										
Total Available Seat Kilometers (ASK) - in thousand		6.339.045	6.606.292	6.873.811	7.146.809	7.434.189	7.735.597	8.031.502	8.338.152	8.656.511	8.979.598
	% change	18,0%	4,2%	4,0%	4,0%	4,0%	4,1%	3,8%	3,8%	3,8%	3,7%
Revenue Passenger Kilometers (RPK) - in thousand		4.848.220	5.052.615	5.257.219	5.466.013	5.685.806	5.916.328	6.142.643	6.377.174	6.620.661	6.867.764
	% change	18,0%	4,2%	4,0%	4,0%	4,0%	4,1%	3,8%	3,8%	3,8%	3,7%
Revenue Per Available Seat Kilometre (RASK) (Yield)		8,2	9,1	9,1	9,1	9,1	9,1	9,1	9,1	9,1	9,1
	% change	-10%	11%	11%	0%	0%	0%	0%	0%	0%	0%
Capacity											
Fleet Utilization (%)		95%	95%	95%	95%	95%	95%	95%	95%	95%	95%
	ppt change	3,6%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%
Sold Block Hours		73.283	76.372	79.465	82.621	85.943	89.428	92.848	96.393	100.074	103.809
	% change	18,0%	4,2%	4,0%	4,0%	4,0%	4,1%	3,8%	3,8%	3,8%	3,7%
Revenues											
Cargo and mail		5.634	5.871	6.109	6.352	6.607	6.875	7.138	7.411	7.694	7.981
	% change	6,1%	4,2%	4,0%	4,0%	4,0%	4,1%	3,8%	3,8%	3,8%	3,7%
Available Tonne Kilometers (ATK) - in thousand		177.728	185.221	192.721	200.375	208.433	216.883	225.180	233.777	242.703	251.761
	% change	6,1%	4,2%	4,0%	4,0%	4,0%	4,1%	3,8%	3,8%	3,8%	3,7%
Freight Tonne Kilometers (FTK) - in thousand		88.299	92.021	95.747	99.550	103.553	107.752	111.873	116.145	120.579	125.080
	% change	6,1%	4,2%	4,0%	4,0%	4,0%	4,1%	3,8%	3,8%	3,8%	3,7%
Total transport revenue		57.358	65.679	68.339	71.053	73.910	76.906	79.848	82.897	86.062	89.274
	% change	6,3%	14,5%	4,0%	4,0%	4,0%	4,1%	3,8%	3,8%	3,8%	3,7%
Revenues											
Other operating revenue		16.637	17.338	18.040	18.757	19.511	20.302	21.079	21.883	22.719	23.567
	% change	18%	4,2%	4,0%	4,0%	4,0%	4,1%	3,8%	3,8%	3,8%	3,7%
Tourism											
Available Hotel Room Nights		279.681	291.472	303.275	315.320	327.999	341.298	354.353	367.883	381.929	396.183
	% change	18,0%	4,2%	4,0%	4,0%	4,0%	4,1%	3,8%	3,8%	3,8%	3,7%
Sold Hotel Room Nights		184.751	192.540	200.337	208.294	216.669	225.454	234.078	243.015	252.294	261.710
		18,0%	4,2%	4,0%	4,0%	4,0%	4,1%	3,8%	3,8%	3,8%	3,7%
Utilization of Hotel Rooms		66%	66%	66%	66%	66%	66%	66%	66%	66%	66%
	% change	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%
Revenues											
Aircraft and aircrew lease		23.310	24.292	25.276	26.280	27.337	28.445	29.533	30.661	31.831	33.019
		16,7%	4,2%	4,0%	4,0%	4,0%	4,1%	3,8%	3,8%	3,8%	3,7%
Total operating revenues		97.304	107.309	111.655	116.089	120.757	125.653	130.460	135.441	140.612	145.860

10.11 Weighted risk free rate

Icelandair Group's currency exposure	USD	EUR	DKK	SEK	NOK	ISK
Average FX rate	122,5	162,6	21,8	17,1	20,2	
Forecast revenue	29	13	3	4	3	
ISK million	3.587	2.124	66	60	64	82.113
Forecast purchases	(40)	(9)	(1)	(0)	(0)	
ISK million	(4.856)	(1.427)	(28)	(6)	(9)	(69.111)
Net cash flow exposure	(10)	4	2	3	3	0
ISK million	(1.269)	697	38	55	56	13.002
Net cash flow exposure in absolute value	1.269	697	38	55	56	13.002
Currency weight	8,4%	4,6%	0,3%	0,4%	0,4%	86,0%
Risk free rates	3,47%	3,29%	3,39%	3,36%	3,78%	6,68%
Weighted	0,29%	0,15%	0,01%	0,01%	0,01%	5,75%
Total rf	6,22%					

10.12 Beta regression output

My European airline index vs MSCE

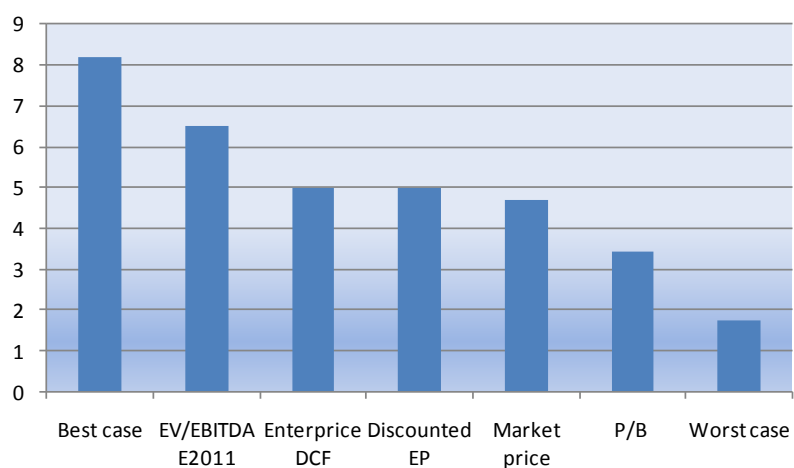
SUMMARY OUTPUT

Regression Statistics	
Multiple R	0,4652
R Square	0,216411
Adjusted R Square	0,202901
Standard Error	0,129109
Observations	60

ANOVA					
	df	SS	MS	F	Significance F
Regression	1	0,267014	0,267014	16,01837	0,000180344
Residual	58	0,966816	0,016669		
Total	59	1,233831			

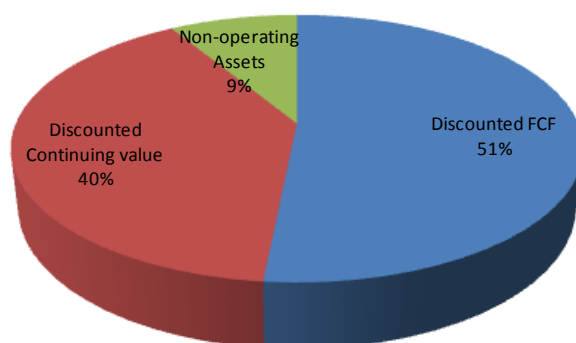
	Coefficients	Standard Err	t Stat	P-value	Lower 95%	Upper 95%	Lower 95,0%	Upper 95,0%
Intercept	-0,0083	0,016687	-0,49735	0,62082	-0,041701298	0,025102881	-0,041701298	0,025102881
X Variable 1	1,174623	0,293487	4,002295	0,00018	0,587144239	1,762101602	0,587144239	1,762101602

10.13 Estimated share price comparison between valuation models

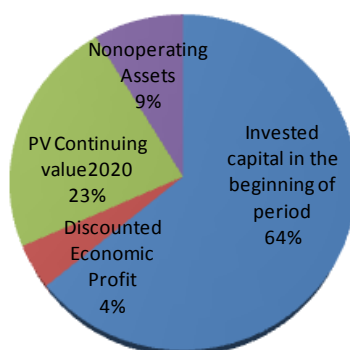


10.14 Discounted FCF, continuing value and non-operating assets

Enterprise DCF



Discounted economic profit



10.15 Multiples

Company	EV/EBITDA E 2011	Price/Book
Air Berlin PLC	7,31	0,53
Air France-KLM	5,75	0,51
Air Lingus	4,95	0,47
Deutsche Lufthansa-RG	2,95	0,84
Finnair OYJ	6,33	0,59
INTL CONSOLIDATED AIRLINE-DI	5,59	1,30
SAS AB	4,84	0,50
Median	5,59	0,53
Harmonic mean	5,02	0,60
Icelandair Group	7,31	0,82
Compared to the median	31%	56%
Compared to the harmonic mean	46%	37%

Icelandair Group calculated EV according to Koller et.al:		Icelandair Group with peer group EV/EBITDA E 2011	
Market value of equity	23.432	EBITDA 2011 (E)	8.794
Market value of debt	24.604	EV/EBITDA E 2011 multiplier	5,02
EV	48.036	EV	44.129
Excess cash	8.622	Excess cash	8.622
Marketable securities	1.306	Marketable securities	1.306
Tax loss carry-forwards	1.314	Tax loss carry-forwards	1.314
Discontinued operations	450	Discontinued operations	450
Non-operating Assets	11.692	Non-operating Assets	11.692
Enterprise value	36.345	Enterprise value	32.437
Shares outstanding	4.975	Shares outstanding	4.975
Value per share	7,31	Value per share	6,52

Icelandair Group Price/Book multiplier		Icelandair with peer Price/Book multiplier	
Icelandair Group market value of equity	23.432	Icelandair Group book value of equity	28.403
Icelandair Group book value of equity	28.403	Icelandair Group book value of equity	0,60
Price/Book multiplier	0,82	Equity value	17.096
Equity value	23.432	Shares outstanding	4.975
Shares outstanding	4.975	Value per share	3,44
Value per share	4,71		

10.16 Peer group comparison based on the Orbis financial database

2010							
	Icelandair Group	SAS AB	Finnair OYJ	Lufthansa	Air France	Average	IAG vs Peers (PPT)
Return on shareholder funds (%)	23,2%	-21,2%	-3,9%	11,7%	█	-4,5%	-620,5%
Return on capital employed (%)	17,8%	-7,2%	-0,4%	7,9%	█	0,1%	17740,0%
Return on total assets (%)	7,8%	-7,3%	-1,4%	3,3%	█	-1,8%	-537,9%
Profit margin (%)	7,5%	-7,5%	-1,6%	3,4%	█	-1,9%	-491,8%
Gross margin (%)	62,6%	49,6%	58,8%	46,4%		51,6%	21,3%
EBITDA margin (%)	14,3%	-0,2%	4,9%	10,4%	█	5,0%	185,2%
EBIT margin (%)	7,1%	-4,8%	-0,9%	4,5%	█	-0,4%	-1792,9%
Cash flow / Operating revenue (%)	12,4%	n.s.	4,7%	9,8%		7,3%	70,6%
Operational ratios							
Net assets turnover (x)	1,6	1,4	1,2	1,5	█	1,4	15,6%
Interest cover (x)	1,9	-1,9	-0,7	2,3	█	-0,1	-1834,4%
Stock turnover (x)	55,7	60,1	42,9	43,3	█	48,8	14,2%
Collection period (days)	23,0	11,0	17,0	3,0	█	10,3	122,6%
Credit period (days)	13,0	15,0	8,0	36,0	█	19,7	-33,9%
Structure ratios							
Current ratio (x)	1,2	0,8	1,2	1,1	█	1,0	13,4%
Liquidity ratio (x)	1,1	0,8	1,1	1,0	█	1,0	14,6%
Shareholders liquidity ratio (x)	1,0	1,0	0,1	0,7	█	0,6	66,8%
Solvency ratio (%)	34%	35%	35%	28%	█	33%	3,1%
Gearing (%)	97%	106%	109%	137%	█	117%	-17,5%

10.17 Sensitivity analyses

WACC	Market risk premium								
10,8%	6%	6,50%	7%	7,50%	8%	8,50%	9%	9,50%	10%
6,30%	8,9%	9,1%	9,3%	9,6%	9,8%	10,0%	10,2%	10,4%	10,6%
6,80%	9,2%	9,4%	9,6%	9,8%	10,0%	10,2%	10,4%	10,6%	10,8%
7,30%	9,5%	9,7%	9,9%	10,1%	10,3%	10,5%	10,7%	10,9%	11,1%
7,80%	9,8%	10,0%	10,2%	10,4%	10,6%	10,8%	11,0%	11,2%	11,4%
8,30%	10,0%	10,2%	10,4%	10,6%	10,8%	11,1%	11,3%	11,5%	11,7%
8,80%	10,3%	10,5%	10,7%	10,9%	11,1%	11,3%	11,5%	11,7%	11,9%
9,30%	10,6%	10,8%	11,0%	11,2%	11,4%	11,6%	11,8%	12,0%	12,2%
9,80%	10,8%	11,1%	11,3%	11,5%	11,7%	11,9%	12,1%	12,3%	12,5%
10,30%	11,1%	11,3%	11,5%	11,7%	11,9%	12,1%	12,4%	12,6%	12,8%

Share price	Tax rate								
4,98	18,0%	18,50%	19,0%	19,50%	20,0%	20,50%	21,0%	21,50%	22,0%
beta	0,96	5,54	5,56	5,58	5,61	5,63	5,66	5,68	5,73
	1,00	5,36	5,39	5,41	5,43	5,46	5,48	5,50	5,55
	1,04	5,20	5,22	5,24	5,27	5,29	5,31	5,33	5,38
	1,08	5,04	5,07	5,09	5,11	5,13	5,15	5,17	5,22
	1,12	4,89	4,91	4,93	4,96	4,98	5,00	5,02	5,06
	1,16	4,75	4,77	4,79	4,81	4,83	4,85	4,87	4,91
	1,20	4,61	4,63	4,65	4,67	4,69	4,71	4,73	4,76
	1,24	4,48	4,50	4,52	4,54	4,55	4,57	4,59	4,63
	1,28	4,36	4,37	4,39	4,41	4,42	4,44	4,46	4,49