Jenny Virtanen

# FAS vs. IFRS Impact Analysis in International Private Equity and Venture Capital Valuation Framework

Case Study

School of Accounting and Finance
Master's thesis in Finance
Master's Degree Programme in Finance

Vaasa 2023

**UNIVERSITY OF VAASA**
**School of Accounting and Finance**
**Author:** Jenny Virtanen
**Title of the thesis:** FAS vs. IFRS Impact Analysis in International Private Equity and Venture Capital Valuation Framework : Case Study
**Degree:** Master of Science in Economics and Business Administration
**Discipline:** Master's Degree Programme in Finance
**Supervisor:** Timo Rothovius
**Year:** 2023 **Pages:** 65

**ABSTRACT:**

It is mandatory for the public companies to publish their financial statements. After the year of 2005, all public companies in the EU are required to report their statement by using IFRS standards. The purpose of the study was to research which financial statement, FAS or IFRS, reports information that is more valuable from the private equity's point of view and which shows greater value for the company. The empirical findings of the research provided value of three case companies through creating additional information for the client about the FAS and IFRS differences based on the valuations and experts' views.

In the theoretical part the focus was on FAS, IFRS and International Private Equity and Venture Capital Valuation (IPEV). The main difference between FAS and IFRS were introduced and the IPEV valuation guidelines were stated from the most important parts from this thesis's point of view. The limitations of the study focused on IFRS standards and discounted cash flow method and took into consideration the parts that are eliminated from the calculations. In the thesis the valuation framework and how the Discounted Cash Flow was used were described as a valuation method. This thesis has both quantitative and qualitative research methods. The calculations of the values used descriptive and inferential research methods and the interview was completed by using semi-structured base.

The results of the study stated that adoption of IFRS has mostly positive outcome in the cases, from the private equity's point of view. The amount of EBIT grew after the adoption of IFRS and consequentially the value of the case companies grew in two out of three cases. For example, there could be differences between sectors and because of some companies benefit from the adoption of IFRS standards more. The results of the thesis concluded that IFRS based numbers show better image of the firm to the investors since the value of the firm is greater.

**KEYWORDS:** Financial Statements, Finnish Accounting Standards (FAS), International Financial Reporting Standards (IFRS), Private Equity (PE), International Private Equity and Venture Capital Valuation (IPEV), Valuation, Discounted Cash Flow (DCF)

**VAASAN YLIOPISTO**
**School of Accounting and Finance**
**Tekijä:** Jenny Virtanen
**Tutkielman nimi:** FAS vs. IFRS Impact Analysis in International Private Equity and Venture Capital Valuation Framework : Case Study
**Tutkinto:** Master of Science in Economics and Business administration
**Oppiaine:** Master's Degree Programme in Finance
**Työnohjaaja:** Timo Rothovius
**Valmistumisvuosi:** 2023 **Sivumäärä:** 65

**TIIVISTELMÄ:**

Julkisten yhtiöiden on julkistettava tilinpäätöksensä. Vuoden 2005 jälkeen kaikkien EU:n julkisten yhtiöiden on raportoitava lausuntonsa IFRS-standardien mukaisesti. Tutkimuksen tarkoituksena oli selvittää, kumpi tilinpäätös, FAS vai IFRS, raportoi pääomasijoittamisen kannalta arvokkaampaa ja yritykselle arvokkaampaa tietoa. Tutkimuksen avulla oli mahdollista luoda lisätietoa asiakkaalle FAS:n ja IFRS:n eroista laskelmien ja asiantuntijoiden näkemysten perusteella.

Teoreettisessa osassa painopiste oli FAS:ssa, IFRS:ssä ja kansainvälisessä pääomasijoitus- ja riskipääoman arvostuksessa (IPEV). Pääasiallinen ero FAS:n ja IFRS:n välillä esiteltiin ja IPEV-arvostusohjeet esitettiin tämän opinnäytetyön kannalta tärkeimmistä osista. Tutkimuksen rajoitukset keskittyivät IFRS-standardeihin ja diskontatun kassavirran menetelmään, sekä huomioivat laskelmista pois jääneen osan. Neljännessä luvussa keskityttiin arvostuskehykseen ja siihen, miten diskontattua kassavirtaa käytettiin arvostusmenetelmänä. Tässä tutkielmassa on sekä kvantitatiivisia että kvalitatiivisia tutkimusmenetelmiä. Arvojen laskennassa käytettiin deskriptiivisiä ja päättelymenetelmiä, mutta haastattelu toteutettiin puolistrukturoidun haastattelurungon avulla.

Tutkimuksen tulosten perusteella voidaan todeta, että IFRS:n käyttöönotolla on pääosin positiivinen vaikutus pääomasijoittajan näkökulmasta. Liikevoiton määrä kasvoi IFRS:n käyttöönoton jälkeen ja sitä kautta tutkimuskohteiden arvo kasvoi kahdessa kolmesta tapauksesta. Esimerkiksi toimialojen välillä voi olla eroja ja tämän vuoksi jotkut yritykset hyötyvät enemmän IFRS-standardien käyttöönotosta. Tutkimuksen johtopäätöksenä voidaan todeta, että IFRS-pohjaiset luvut antavat sijoittajille paremman kuvan yrityksestä, koska yrityksen arvo on suurempi.

**AVAINSANAT:** Tilinpäätösaineisto, Suomen kirjanpitostandardit (FAS), Kansainväliset tilinpäätösstandardit (IFRS), Pääomasijoitus (PE), Kansainvälinen pääomasijoituksen arvonmääritys (IPEV), Arvonmääritys, Diskontattu kassavirta (DCF)

## Table of Contents

1 Introduction 8

1.1 Research Topic 9

1.2 Previous Studies 11

1.3 Research Problem and Objectives 13

1.4 Special Considerations Regarding IFRS Standards and Research 14

1.5 Research Methodology and Structure 16

2 FAS and IFRS Background 18

2.1 Finnish Accounting Standards 19

2.1.1 Financial Assets 19

2.1.2 Financial Statements 21

2.2 International Financial Reporting Standards 22

2.2.1 Financial Assets and Liabilities 23

2.2.2 Financial Statements 24

2.2.3 Fair Value 26

3 International Private Equity and Venture Capital Valuation Background 28

3.1 Fair Value 28

3.2 Valuation Techniques Regarding IPEV 31

3.2.1 Market Approach 32

3.2.2 Income Approach 33

3.2.3 Replacement Cost Approach 34

3.3 Additional Considerations on IPEV Valuation Guidelines 35

4 Methodology and Valuation Framework of the Research 36

4.1 Case Companies 36

4.2 Valuation Method 37

4.3 Valuation Objectives 39

4.3.1 Free Cash Flow 40

4.3.2 EBIT 40

4.4 Collection of Study Material 41

5 Results of Empirical Research 43

5.1 Results of the Case A 43

5.2 Results of the Case B 46

5.3 Results of the Case C 48

5.4 Comparisons of the Key Figures 51

5.5 Interview 54

6 Discussion and Conclusion 55

6.1 Discussion 55

6.2 Reliability and Validity 57

6.3 Implications for Further Research 59

References 60

Appendices 64

**Appendix 1**. Questionnaire Based on Open Interview 64

**Appendix 2.** Discounted Cash Flow Valuation Method 65

## Figures

**Figure 1.** Finnish Balance Sheet 20

**Figure 2.** IFRS Balance Sheet 24

**Figure 3.** Valuation Approaches and Methods (Evans and Mellen, 2018). 32

## Tables

**Table 1.** Dual Reporting (Bellandi, 2012). 10

**Table 2.** Balance Sheet (Accounting Tools, 2022). 18

**Table 3**. Completed Jurisdictions all Around the World (IFRS Foundation 2022, Who uses IFRS Accounting Standards?). 23

**Table 4.** FAS and IFRS Assets of Company A 43

**Table 5.** FAS Free Cash Flow Calculation of Company A 44

**Table 6.** IFRS Free Cash Flow Calculation of Company A 45

**Table 7.** FAS and IFRS Assets of Company B 46

**Table 8.** FAS Free Cash Flow Calculation of Company B 47

**Table 9.** IFRS Free Cash Flow Calculation of Company B 48

**Table 10.** FAS and IFRS Assets of Company C 49

**Table 11.** FAS Free Cash Flow Calculation of Company C 49

**Table 12.** IFRS Free Cash Flow Calculation of Company C 50

**Table 13.** Comparison of Asset Under Testing 51

**Table 14.** Comparison of EBIT in Terminal Period 52

**Table 15.** Comparison of Present value of FCF in Terminal Period 53

**Table 16**. Comparison of Value in Use 53

## Abbreviations

**GAAP** – Generally Accepted Principles

**FAS** – Finnish Accounting Standards

**FCF** – Free Cash Flow

**DCF** – Discounted Cash Flow

**IFRS** – International Financial Reporting Standards

**IPEV** – International Private Equity and Venture Capital Valuation

**PE** – Private Equity

# 1 Introduction

One of the biggest changes in the International Financial Reporting Standards (IFRS) occurred in 2005, when International Accounting Standards Board made the decision that all European listed companies must use these standards in their financial statements (Halonen etc, 2021, p.5). According to IFRS Foundation (2022) the purpose of the standards is to bring transparency, strengthen accountability and contribute to economic efficiency by helping investors to understand where they can invest on all around the world and the financial statements are alike.

Finland as many of the other countries in EU had to take these standards into consideration while making the financial statements of the listed companies. Halonen and the others (2021) express that the transition from Finnish Accounting Standards (FAS) into IFRS takes significant effort and orientation with the standards. Christensen and the others (2013) stated in their article that there are indications to the positive outcome from these changes, but they also explained that it was unclear which of the positive outcomes were merits from the IFRS standards. From IFRS point of view the private equity and the changes that the adjustments drive is important from the investor's perspective.

International Private Equity and Capital Valuation (IPEV) has guidelines that can be used as a framework that particularly focus on IFRS13 which is the standard for Fair Value Measurement. Private equity refers to the segment of the asset management industry in which investments are made in securities that are not typically traded on public markets and it can be divided into buyout and venture capital funds (Vasvari et al., 2011, p.4). As said in the above, the IFRS takes into consideration different areas than FAS and from this point of view for example the IFRS13 makes the numbers differ from each other and the outcome is different from Finnish Accounting Standards.

## 1.1 Research Topic

Finland is governed by the accounting, auditing, and financial reporting requirements that European Union Regulations and Directives created. In Finland, the Ministry of Economic Affairs and Employment set the accounting standards and the Finnish Accounting Board is responsible for the improvements according to accounting legislation. After 1997 the requirements for the statements are made by adopting EU-endorsed IFRS or Finnish Generally Accepted Principles (Finnish GAAP). The entities of the regulations are based on the size and type of the company and small-sized companies are only required to follow the Finnish GAAP. (International Federation of Accountants 2021)

The European Union has attempted to promote a wide market across the member countries, and the determination after 2005 was to operate under the same principles. One of these principles has been financial reporting and make it as similar as possible between the listed companies across the EU. The purpose of financial reporting is to provide financial information and more importantly the information should be useful for the existing and potential investors, lenders, and other creditors. The reporting based on IFRS standards provide more information for the investment decisions regardless of the country that the parent company and the data are located to. (Haaramo, Palmuaro, Peil, 2021)

According to Bellani (2012) a survey that was made in 2007 showed how 23% of the European companies reported slightly increasement in profits and 8% indicated that the improvement was high, since the IFRS was adopted, and the standards were taken into use. On the other hand, Bellani also declared a 2005 survey which showed that the first-time adopters of IFRS told the profit or loss of the company increased approximately 34% and equity changed by 13%. The biggest change in profit or loss in this survey was in goodwill by 63%. These outcomes prove that the adoption of IFRS changes the outcome of the reporting and Bellani refers that some of the countries have adopted these standards into every company even if they were not listed. The case studies of this thesis have

reported their first IFRS statements in recent years and are one of these first-time IFRS adopters.

In the table 1 below the dual reporting is explained from the United States Generally Accepted Principles point of view. The table shows that in the U.S. the situation is the same as in Finland and they still use their own GAAP even though the IFRS is in the use in some of the companies. The companies all around the world are interested in the fact how IFRS is compared to their own Generally Accepted Principles and the table 1 shows an example of the differences the U.S. GAAP and IFRS have from each other.

**Table 1.** Dual Reporting (Bellandi, 2012).

**Exhibit 1-1 Companies that May Need Dual Reporting under IFRSs and U.S. GAAP**

| | *U.S. Company* | | *Company of an IFRS Jurisdiction* | |
|---|---|---|---|---|
| | *Parent Company* | *Subsidiary/Entity* | *Parent Company* | *Subsidiary/Entity* |
| *For use in the U.S.* | • A U.S. public parent would prepare IFRS consolidated financial statements, to the extent allowed by the SEC<br>• A U.S. public parent consolidates under U.S. GAAP an IFRS subsidiary | • A U.S. public company, would prepare IFRS financial statements, to the extent allowed by the SEC.<br>• A U.S. subsidiary that files under U.S. GAAP or a foreign issuer not meeting the definition of an FPI prepares IFRS financial statements for consolidation by an FPI | • An IFRS parent consolidates under U.S. GAAP a foreign nonpublic company or an FPI subsidiary, that uses a jurisdictional version of IFRSs<br>• An FPI consolidates under IASB-IFRS a U.S. subsidiary or a foreign issuer not meeting the definition of an FPI | • A foreign nonpublic company or a FPI that uses a jurisdictional version of IFRSs restates under U.S. GAAP for Form 20-F<br>• An IFRS subsidiary prepares U.S. GAAP statements for the U.S. parent |
| *For use in foreign jurisdictions* | • A U.S. parent prepares IFRS consolidation of foreign entities for use outside the U.S. | • U.S. company reports under IFRS to a foreign parent<br>• U.S. nonpublic company present, listed or going public abroad<br>• U.S. campany prepares IFRS statements for use abroad | • Foreign parent consolidates under IFRS a U.S. subsidiary that is nonpublic or going private<br>• Foreign parent consolidates under IFRS a subsidiary that is a U.S. public company not yet allowed to report under IFRS in the U.S. | • An IFRS foreign company reports under U.S. GAAP to a parent for use abroad |

Since the adoption of IFRS changes certain areas especially in the balance sheet, the numbers from investors point of view are also going to change. According to Vasvari et al (2011) the Private Equity (PE) is an asset management where investments normally

have special purpose fund structures, and it provides capital for distinct types of companies. They clarify that the principles of valuing a private company is comparable to valuing a public company, but the difference is in the information that is narrower for the valuer since the company is private. Since the managers that oversee the private equity funds are also in the cases required to carry a periodic valuation of the portfolio the International Private Equity and Venture Capital Valuation Guidelines Board (IPEV Guidelines Board) made guidelines for this purpose.

## 1.2 Previous Studies

International Financial Reporting Standards became mandatory among listed companies (in EU) in 2005 and due to this change the previous studies regarding this topic are quite recent. Since IFRS as a topic is new the studies that focuses directly for example, to private equity, are not common. From the International Private Equity Valuation point of view there are no studies directly focused on Finnish Accounting Standards and due to this the study brings added information.

From the FAS perspective Jarva and Lantto (2012) have authored an article of the impact of the IFRS to the quality of listed Finnish companies. They used a sample of 94 Finnish firms that published their first IFRS statements in 2004. The study stated that the adoption of the standards, on average, increases earnings, decreases equity, and increases liabilities. There was not valuation made in the study and they compared FAS to IFRS and calculated the differences between these two statements. Their conclusion from the study is that the adoption of IFRS does not have improved accounting quality from FAS.

Markelevich, Shaw and Weihs studied in their article (2016) the changes that occurred in Israel while they adopted the IFRS statements in the listed companies. They compared the local GAAP (Generally Accepted Accounting Principles) and IFRS to each other and concluded the shift in the values or in the underlying distribution of firm rankings. On the other hand, they discovered that some sectors are more impacted than others. For

example, real estate sector was one of those sectors which were more affected than others. Their findings show that there was no significant improvement in value relevance but on the other hand the adoption of IFRS might be able to attract foreign investment to the company with disruption in valuation. On the other hand, Beuren, Hein and Klann (2008) researched the differences between international and American accounting standards and concluded that the effect of economic-financial indicators is not significant. Furthermore, Qu, Fong, and Oliver (2012) studied the stock market consequences of the IFRS adoption and established findings from the Chinese stock market. The results indicated that the reliance of the investors became greater after the IFRS standards were taken into use and they rely on the earnings that are published after the adoption. They also discovered that the interest in the stocks might be outcome from the investor's knowledge of the higher quality standards of IFRS and this way they are more interested of the IFRS "stocks" rather than the pre-IFRS markets. Therefore, it depends on the countries and sectors of the companies whether their own GAAP has positive outcome from the financial indicators perspective.

Chadda and Vardia researched in 2020 the adaptability of the fair value concept from IFRS point of view, in Indian Accounting Standards. They managed to find that 3% of companies use fair value for owner-occupied property and 47% use it for property investment. The reason for the fair value in property investment since fair values are most likely to occur for this type of asset. The findings show that companies with less growth are more likely to use fair value and that in the companies that choose to use fair value the contracting is more universal rather than valuation.

From the private equity's and IFRS's perspective Oberli authored an article (2012) about the implications of the fair value accounting standards on private equity and more specifically the buyout returns. The findings of the study show that buyout return indices are more correlated with the implementation of fair value accounting principles but on the other hand the fair value accounting satisfies the investors' demands for the accuracy since the data is more comparability.

The studies, articles, and hypotheses that this chapter refers to show the field is professionally researched, but there are not that many studies that refer to Finnish Accounting Standards and how big the change is from that perspective. According to Anson (2017) the private equity and the lack of its liquidity make the subject hard to analyze and makes this thesis rare from that point of view.

Christensen, Hail and Leuz studied in their article (2013) the changes of IFRS to the enforcement. Their study reports that the benefits of IFRS adoption are far more pronounced in nations with tougher and better-functioning legal systems, and that they are more pronounced in the EU than in other parts of the world. The results of the article show that a few interpretations and that it is still unclear how much the improved and internationally standardized accounting standards contribute to the positive capital-market impacts around mandated IFRS adoption. The study was able to show that the mandatory IFRS reporting had only a minor impact on liquidity and that liquidity often improved after substantive changes in enforcement rather than after the IFRS adoption.

The previous studies show there is evidence regarding the transitions into the new IFRS standards and how they effect. On the other hand, there is not studies from the private quoters point of view and how much the value of the firm can change only by using different accounting standards.

## 1.3 Research Problem and Objectives

Due to the changes that occurred in 2005, the reporting of the listed companies had to change at the same time. Because of this transformation the financial statements focus on different areas and the target is to make the statements as clear and equal as possible. The research problem is what the impact from FAS to IFRS from International Private Equity and Venture Capital Valuation (IPEV) frameworks point of view is, and which statement style show more valuable picture of the company. Since the IPEV guidelines take into consideration the IFRS outcomes and has instructions to show how the changes

affect various parts of the financial statements, the outcome is different from the venture capitalists' point of view as well. According to the previous studies regarding this subject, the IFRS statements change the value of the firm. On the other hand, the amount of change might not be significant but there is going to be difference between the values of the firms. The hypotheses of this study are:

*$H_0$ :* IFRS statements does not change the value of the company

*$H_1$ :* IFRS statements change the value of the company

This study focuses to understand the main outcomes of how the adoption of IFRS affects the picture of the company and does the image and perspective of the company change since the values on the balance sheet and income statement differ from Finnish Accounting Standards. The case companies (A, B and C) are under inspection and the purpose is to analyze their financial statements between Finnish and International regulations. Another aspect the study focuses to find answer to does the change from FAS to IFRS have effect from the private equity funds perspective.

## 1.4 Special Considerations Regarding IFRS Standards and Research

IFRS financial statement presentation requirements are included in several different IFRS standards. The largest limitations according to this thesis are in the standards and which of them are chosen from the IPEV's point of view. International Private Equity and Capital Valuation's guidelines focus on IFRS 9, 10 and 13. From this perspective those standards are the ones that are under inspection and the study is limited into those three standards. The values in the balance that are focused on IFRS 9,10 and 13 are the ones that this study is going to focus on.

IFRS 9 concentrates on financial instruments. The standard classifies and measure financial assets, financial liabilities, and the contracts to buy or sell non-financial assets. When an entity becomes a party to the contractual provisions of an instrument, IFRS 9 requires

it to recognize a financial asset or a financial liability in its statement of financial position. (IFRS Foundation 2022)

IFRS 10 focuses on consolidated financial statements and form principles for presenting and preparing consolidated financial statements. Consolidated financial statements are financial statements that present a parent's and its subsidiaries' assets, liabilities, equity, income, expenses, and cash flows as if they were a single economic entity. (IFRS Foundation 2022)

IFRS 13 concentrates on fair value measurement. The requirements point is to define the fair value, establish a framework for measuring fair value, and mandate disclosures regarding fair value measurements. Except in specific situations where other Standards apply, it is applicable when another standard mandates or authorizes fair value measures or disclosures regarding fair value measurements. According to IFRS 13, fair value is the amount that would be paid or received in an orderly transaction between market participants at the measurement date to sell an asset or transfer a liability. (IFRS Foundation 2022)

At the same time with the standards limitations there are restrictions from the valuation method's direction. The Discounted Cash Flow style is most relevant when it takes into consideration all the aspects of the companies but in this study, it focuses only on the information that the financial statements give. For example, normally in the Discounted Cash Flow method the maintenance investments are part of the calculation but in these estimations, they are not taken into consideration. From this point of view the data that is received from the valuation method is only directive and superficial conclusions of the company's value can be made. The focus of this study is to compare FAS and IFRS statements outcome, not to measure the actual valuation of the companies.

## 1.5 Research Methodology and Structure

The thesis investigates the impact analysis from FAS to IFRS from IPEV valuation frameworks point of view. The thesis uses three companies (A, B and C) as cases in this study and compare FAS statements and IFRS statements to each other and analyzes the difference from private equities point of view.

The data for the thesis is gathered from financial statements and by interviewing a professional valuer. The thesis analyzes the statements that first reported IFRS standards since these statements have IFRS numbers from the last year for comparability. The reports are studied from Finnish Accounting Standards point of view and after this from the International Financial Reporting Standards perspective. After the evaluation from these aspects is made, the focus is on International Private Equity and Venture Capital Valuations guidelines and how the framework should be used in the cases.

Since the data is gathered from financial statements it can be said to be descriptive and inferential from statistical data's point of view. There are comparisons between FAS and IFRS statements and how much the statements differ from each other in certain areas. The comparisons are shown as thousands of euros. There is another part of the study and in this part a professional valuator is interviewed with a semi-structured base.

The gathered data is both quantitative and qualitative. The quantitative method is shown in the thesis as the financial statements and how the exact numbers and amounts are gathered from the statements and calculations. On the other hand, the qualitative method takes into consideration the companies and opinions of a professional valuer. The analyzed data is written as descriptive comparisons. The methodology behind the thesis is to calculate cash flows and compare the differences between the statements. After the calculations and studying the framework of the IPEV by using the guidelines, the purpose is to make estimation if the outcomes are positive or negative from private equites perspective.

In this thesis, the first chapter is the introduction, where the topic, research problem, limitations, definitions of the most central concepts, methodology and the structure of the study are reviewed. The second-, third- and fourth chapter focuses on the theoretical point of views of Finnish Accounting Standards, International Financial Reporting Standards and the structure of the International Private Equity and Venture Capital Valuation and the framework of the study. They focus on the standards and how FAS and IFRS differ from each other and on the other hand, show the most important concepts that the IPEV takes into consideration and what are the most important aspects from that point of view.

The chapters five and six review the empirical research on the case study regarding companies A, B and C. The fifth chapter describes the background, objectives, implementation, and the reliability/validity of the company. The sixth chapter examines the results of the research and what are the main findings between FAS and IFRS accounting. The chapter also reviews the differences from the valuations point of view. The closing chapter focuses on the conclusions and discussion of the potential future research ideas.

# 2 FAS and IFRS Background

Finnish Accounting Standards and International Financial Reporting Standards differ from each other, and most of the differences are on the balance sheet. Ahmed, Neel, and Wang (2012) concluded in their study that the adoption of IFRS increases the income smoothing and accrual combativeness but overall, the accounting quality increased after IFRS adoption.

IFRS changes effect mostly on the balance sheet and the table 2 shows the basic concept of balance sheet and what it contains. AccountingTools (2022) accumulated the assets, liabilities, and equity clearly in one table that gathers the most important parts of the balance sheet, and the base of it is universal even though the format of it is not mandated by any accounting standards.

**Table 2.** Balance Sheet (Accounting Tools, 2022).

| ASSETS | LIABILITIES AND EQUITY |
|---|---|
| **Current assets** | **Current liabilities** |
| Cash and cash equivalents | Trade and other payables |
| Trade receivables | Short-term borrowings |
| Inventories | Current portion of long-term borrowings |
| Other current assets | Current tax payable |
| **Total current assets** | Accrued expenses |
| | **Total current liabilities** |
| **Non-current assets** | |
| Property, plant, and equipment | **Non-current liabilities** |
| Goodwill | Long-term debt |
| Other intangible assets | Deferred taxes |
| **Total non-current assets** | **Total non-current liabilities** |
| | |
| **Total assets** | **Total liabilities** |
| | **Shareholders' Equity** |
| | Capital |
| | Additional paid-in capital |
| | Retained earnings |
| | **Total equity** |
| | |
| | **Total liabilities and equity** |

FAS and IFRS both have their own requirements, and the following subtitles show the main qualities and standards regarding this thesis. The areas that are under review are the same subjects that are also important from the International Private Equity and Venture Capital Valuation's perspective.

## 2.1 Finnish Accounting Standards

Finnish accounting practice is similar with international accounting standards but on the other hand the international accounting is wider and has more regulations on it. Halonen and the others (2021, p.549-550) describes that the international financial statements have several times as many pages as Finnish, since there are more detailed appendices because of the regulations. They continue that according to one of the International Accountig Standards (IAS) for example the conditions for recording a provision are stricter in the international system rather than in the Finnish standards. There are differences between FAS and IFRS, but this chapter of the thesis focuses on the topics that are important from IPEV's point of view such as assets and financial statements.

### 2.1.1 Financial Assets

The balance sheet consists of assets, liabilities, and equity. As the table 2 above shows, the first row on the left side is current assets, then becomes non-current assets and after this the amount of total assets is received. On the right side the first row contains current liabilities, then non-current liabilities and then it can count the total liabilities of the balance sheet. The last part is the equity of the shareholder's which can be seen after the liabilities and after calculating the amount of total equity, the total amount of liabilities and equity can be received.

The difference between the universal and Finnish balance sheet is in the presentation style. The assets are other way around than in table 2 and the same with equity and

liabilities. The order of long-term debt and short-term debt is the opposite, but the outcome is the same in the end. The figure 1 is made by using Leppiniemi and Kykkänen's (2019) balance sheet based on FAS and the main factors that differ from the table 2 are shown below in figure 1. For example, the assets, equity, and liabilities are in different order depending on the standards side.

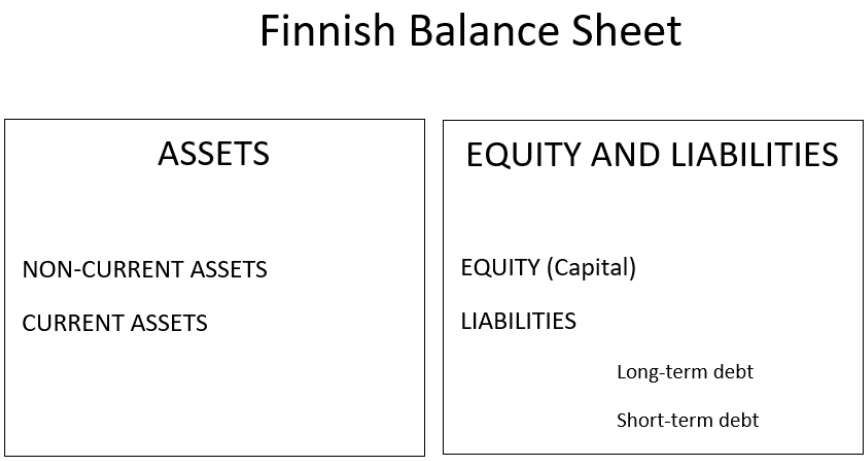


**Figure 1.** Finnish Balance Sheet

The following description of the Finnish balance sheet and the financial statements is based on Leppiniemi and Kykkänen's (2019) work. They describe that the non-current assets of the firm are meant to generate the income for several fiscal years. The return expectations of the permanent equivalent apply to a longer period than 12 months and for example an interest-bearing receivable that is 18-months long is entered to the non-current assets because the period is over a year. Non-current assets are divided into three different subtitles that are: intangible assets, tangible assets, and investments.

The current assets of the company are the items that are intended to generate income for maximum of 12 months. The current assets are presented in the balance sheet, and it contains four separate groups that are: current assets, receivables, financial securities, and cash/bank receivables.

The other side of the balance sheet contain equity and liabilities. The equity is the basis of company's solvency. According to the balance sheet the free equity of the company provides the company owner the possibility of dividend distribution of the firm. The equity is divided into six sub-items that are: share or other similar capital, premium fund, appreciation fund, fair value fund, other funds, and profit/loss of previous years and profit/loss of the budget year.

The last part of the balance sheet is the liabilities. The liabilities of the firm are divided into two main categories in the balance sheet, and they are long-term liabilities and short-term liabilities. When the company loans money and the repayment happen over a year later, the liability is long-term. On the other hand, if the capital is paid back less than year from the loaning date the debt is short-term.

### 2.1.2 Financial Statements

By reviewing the financial statements, a lot can be learned about accountant, and it is worthwhile to attempt to learn what sort of objectives the financial statement has set for the financial statements. The accountant considers what the financial position and outcome of the person responsible for accounting will be once all account have been closed and the balance sheet and income statement required by accounting legislation have been formed from them. They remind that in some cases, the financial statements are prepared solely with the goal of accuracy. Since the financial statements are served as the foundation for determining a company's goodness, trustworthiness, certainty, and security, the accountant may attempt to affect the company's reputation by using the judgments made during the preparation of the financial statements.

The observations in the financial statements include for example, the following points:

- There are intangible assets in the balance sheet and the purchase price could have been deducted in taxation if the deduction had also been made in the income statement.
- Depreciation is minor compared to investments.

- The attachment notes explain, for example, the valuation of similar permanent properties or shares and the value seems too high in the balance sheet.
- A company that is problematic for its owner is usually also a problem for the creditor and for example company with negative equity indicates a problematic company from the owner's point of view.

By reviewing the financial statements, the idea of the goals and procedures are raised to knowledge, but it is still necessary to go further and analyze the statements. It is important to be able to find out the company's development and the differences between companies. The calculation of the key figures is often standardized to achieve comparability and sometimes they are developed for the requirements of a specific user or situation. For example, there are differences between companies in sizes and the problems of inflation that reduce the comparability between different years and those can be eliminated with key figures.

The key figures usually describe the company's financial operating conditions. The financing and profitability are the indicators that are often described as the company's financial operating conditions. These two items are viewed from two perspectives, and they are solidity and liquidity. From the universal and from this study's perspective Earnings Before Interest and Taxes (EBIT) is one of the crucial key factors.

## 2.2 International Financial Reporting Standards

IFRS has become well known between companies that are obligated to use the standards but on the other hand, there is a lot of information the experts on this field need to gain. According to official IFRS site (IFRS Foundation 2022, Why global accounting standards?) the G20 and other important international organizations support the idea of global accounting standards since the transactions between countries are expected to grow in the future because of the globalization. According to IFRS Foundation (Who uses IFRS

Accounting Standards?) in the end of 2022, there were 167 countries that are using IFRS accounting standards by jurisdiction and the percentage is highest in Europe as is shown below in the table 3.

**Table 3.** Completed Jurisdictions all Around the World (IFRS Foundation 2022, Who uses IFRS Accounting Standards?).

| | Number of jurisdictions | Per cent of total |
|---|---|---|
| Europe | 44 | 26% |
| Africa | 38 | 23% |
| Middle East | 13 | 8% |
| Asia and Oceania | 35 | 21% |
| Americas | 37 | 22% |
| Totals | 167 | 100% |

The jurisdictions differ between countries since there are, for example, differences between professional infrastructure and regulatory interests. Financial assets and liabilities, financial statement and fair value are objects of interest since the considerable changes between FAS and IFRS are in these areas.

The main purpose of the IFRS Accounting Standards is to bring transparency, strengthen accountability and contribute the economic efficiency (IFRS Foundation 2022, Why global accounting standards?).

### 2.2.1 Financial Assets and Liabilities

In the IFRS financial statements the assets are divided into short-term and long-term areas and the balance sheet is that way different from Finnish statements since in the Finnish system they are divided into current and non-current assets. The same system continues in liabilities since the assets and liabilities are divided the same way into short-

term and long-term sections. Rather than separating assets and liabilities into short-term and long-term, in IFRS the assets and liabilities should be displayed in order of liquidity since this arrangement produces more accurate and pertinent information and for example presentation of assets and liabilities in order of liquidity is natural when it comes to financial statement information of banks. (Haaramo, Palmuaro & Peill, 2021)

According to Haaramo et al (2021) the International Accounting Standards (IAS) does not have an exact mandatory financial statement formulas that needs to be used, but if the balance sheet is more accurate in liquidity order, the following figure 2 shows the form of it.

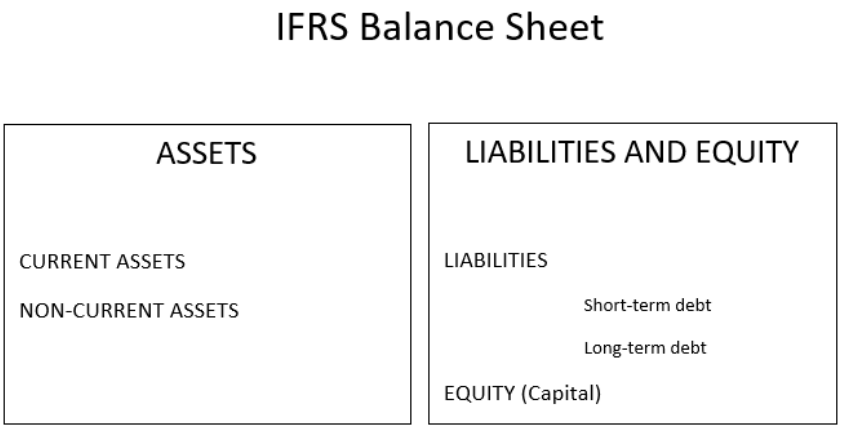


**Figure 2.** IFRS Balance Sheet

As Haaramo et al (2021) stated earlier the balance sheet can also be shown the same way as the Finnish balance sheet but the number differ from each other since the international system demands some of the amounts from income statement transferred into balance sheet.

### 2.2.2 Financial Statements

According to Haaramo et al (2021) the financial statement is a structured presentation that describes the entity's financial position and results, and it is useful for a wide range

of users in financial decision-making. Although the financial statements primarily contain historical information it is also useful for users in forecasting the company's future cash flows and timing, as well as the associated uncertainty. On the other hand, Halonen et al (2021) remind that the goal of IAS 1 is to determine the basis of presenting financial statements to ensure comparability with both, the entity's own financial statements for different fiscal periods and the financial statements of other entities. IAS 1 contains general requirements for the presentation of financial statements, instructions for the structure and the minimum content requirements to achieve the goal.

Halonen et al (2021) describes the IFRS financial statements to include the following financial statements:

- balance sheet
- statement that shows profit or loss for the specific period and other comprehensive income items (comprehensive income statement)
- a calculation that describes the change in equity, and
- cash flow statement

They continue that there are also notes on the accounts which are included to the financial statements since the summary of significant accounting principles is an important part of the IFRS financial statements. For example, the statements require a report of the changes in equity and there must be reference to any accompanying information in the cash flow statement. From IFRS point of view the materiality of an item is important and the reports should include everything necessary.

Haaramo et al (2021) and Halonen et al (2021) describe in their books how in the IFRS standards there is not a quantitative limit for the materiality of an item. On the other hand, the assessment of materiality in IFRS reporting of listed entities must be made specifically from the perspective of the investor's decision-making. Since the IAS1 has

developed, the application of materiality has grown, and the management's opinions have significant role in the estimation.

According to Honkamäki and Reponen (2022, p.20) there are significant differences between FAS and IFRS. For example, the presentation of non-controlling interests' share in IFRS are shown only after the financial year's result, the non-controlling interest are presented as a part of equity and the presentation of discontinuation activities is made separately from continuing operations. On the other hand, they (p.21) refer that the IFRS standards are attached to the balance sheet and the main target is on assets and liabilities. For example, this means that while in Finnish system the lease agreements are on the income statement, the IFRS system sees them in the balance sheet as assets and liabilities, and this way the company has less leverage to show more profitable outcome from the income statement.

One of the areas that is more closely observed from this study's point of view is the amount of goodwill. In the Finnish Accounting Standards, the goodwill of the company was one of the annual elimination targets in the income statement. Since the adoption of IFRS the elimination of the goodwill is terminated. (Pörssisäätiö, 2005)

### 2.2.3 Fair Value

International Financial Reporting Standards require many financial statement items to be valued at fair value. Halonen et al (2021) describe that on the valuation date, fair value is the price that would be received from the sale of an asset or paid for the transfer of a liability between market parties in a normal transaction. On the other hand, the IFRS organization state that the fair value also has a measurement date under the current market conditions even though the price could be estimated by using another technique.

The official IFRS website quotes that "A fair value measurement assumes that the asset or liability is exchanged in an orderly transaction between market participants to sell the asset or transfer the liability at the measurement date under current market conditions."

According to Cannon and Bedard (2017) the fair value measurements (FVM) have become more known since the IFRS has become mandatory in numerous companies. They continue that the FVMs are seen to be useful to market participants and this way for example to the investors.

IFRS 13, which targets on fair value measurements, focuses on financial assets and financial liabilities, entity's own equity instruments, non-financial assets, and valuation techniques regarding fair value.

The fair value is not often used in the FAS, and it is more known as a concept in IFRS. The International regulations require that if the book value of the asset exceed the fair value, the difference between the values must be entered to the balance sheet. Some items in the balance sheet are obligated to be shown as fair value but not all which can lead to a situation where the amount of profit or equity presented for the fiscal year might differ a lot from the last statements. The companies are required to estimate the differences between book values and fair values more closely after the adoption of IFRS. (Pörssisäätiö, 2005)

# 3 International Private Equity and Venture Capital Valuation Background

Vasvari and others (2011) write that the valuation of companies can be quantitative, occur quickly once the information is available but also take time and effort. They continue that private equity funds are often required to estimate what is the amount the third party is ready to pay for the asset in the portfolio. In the book, the guidelines of IPEV are brought up and they describe that IPEV guidelines are not an accounting standard, and they follow GAAP. The main purpose of the guidelines is to focus on the estimation of the fair value and there are valuation methodologies that IPEV guidelines use.

## 3.1 Fair Value

The concept of fair value from the International Private Equity and Venture Capital's point of view is written out in the valuation guidelines (IPEV 2022) they have made. There are six parts of fair value IPEV guidelines as following

> 1.1 Fair Value is the price at which an asset could be sold between market participants in an orderly transaction on a specific date.
>
> 1.2 A Fair Value measurement implies that a hypothetical transaction to sell an asset occurs in the principal market if the principal market is unavailable.
>
> 1.3 For actively traded (quoted) Investments, available market prices will serve as the sole basis for the calculating the Fair Value of identical instruments.
>
> 1.4 The measurement of Fair Value for unquoted investments requires the valuer to assume the investment is realized or sold at the measurement date.
>
> 1.5 Some funds invest in multiple securities or tranches issued by the same investee company. If a market participant is expected to transact all positions in the same underlying investee company simultaneously, such as separate Investments made in series A, series B, and series C, then Fair Value is estimated for the Investee company's aggregate Investment. Fair

> Value would be more appropriately determined for each individual financial instrument if a market participant was expected to transact separately, for example by purchasing series A separately from series B and series C, or by purchasing debt investments separately from equity.
>
> 1.6 Fair Value should be estimated using consistent valuation techniques from one measurement date to the next, unless there is a change in market conditions or Investment-specific factors that would alter how a market participant would determine value.

They continue that the estimation of fair value assumes that the time required to consummate a transaction began at a point in time prior to measurement date, with the hypothetical exchange culminating on the measurement date.

The fair value measurements are attached to the ownership structure of the investment and this way is reported differently to each reporting entity. After the measurement style is selected the outcome from the valuation must be made by using that exact valuation technique/techniques so it can be seen as truthful. There are situations such as when a new market has developed, and evaluation technique must be changed. In these types of market changes, changing evaluation technique is approved.

Valuation guidelines continue: “To estimate Fair Value, the Unit of Account must be determined. The Unit of Account represents the specific Investment that is measured at Fair Value.” The fair value of an investment is required by the IFRS standards, and the level of aggregation dictated by the accounting standards. The unit of level means the aggregation concept that is made in the purpose of financial reporting, and it specifies how assets and liabilities should be aggregated or disaggregated in the financial statements. Due to the fact, that financial reporting is intended to depict economic phenomena, the unit of account attempts to describe the precise way an investment is owned. The legal rights and responsibilities of ownership participate in the fair value as a complex capital structure, but the transactions are not required to take place at the level of unit of account prescribed by accounting standards.

In the judgement of valuation purposes, the unit of account is calculated for valuation purposes based on the way a market participant would transact for individual investment held by a fund, which is also consistent with the aggregate presented to investors in the schedule of investments.

Value is often realized for private equity and venture capital investments through the sale or flotation of the entire investee corporation, as opposed to the transfer of individual shareholder holdings. The worth of the business as whole as of the measurement date is a crucial indicator of the value of investor holdings in that business. If a market participant transacts for specific instruments, for example individual shares, then fair value is more effectively determined at the level of the individual instrument.

As written in the previous part the measurement date is attached to the valuation process closely. However, the decision between different valuation techniques is important and it must be considered carefully before making the valuation. The purpose is to pick a technique or techniques that take into consideration most important parts of the company and receive a fair value that is as accurate as possible. The IPEV guidelines have list of the key considerations while estimating a fair value from the market participants perspective:

- Fair Value must be estimated at each measurement date.
- The price of a recent investment (if determined to be Fair Value) should be used to calibrate the inputs of the valuation model(s). Accounting standards necessitate calibration.
- At each measurement date, the estimation of Fair Value should incorporate the viewpoints of market participants.
- After considering individual facts and circumstances and applying these guidelines, Fair Value at a subsequent measurement date may be identical to Fair Value at a prior measurement date. This

means that Fair Value may be equal to the price of a recent investment, but the price of a recent investment is not necessarily considered to be Fair Value.

As the guidelines suggested these are the main factors that need to be followed closely while calculating the valuation of fair value and from the thesis's perspective fair value is one of the leading areas that are effective between FAS and IFRS.

## 3.2 Valuation Techniques Regarding IPEV

There are different company valuation techniques that can be adopted and in high significance is the valuer's judgement. This judgement includes terms that might have an impact to the fair values and valuer should take into consideration the economic substance of the investments.

The IPEV guidelines (2022) focuses on three different valuation techniques:

1. Market Approach
2. Income Approach
3. Replacement Cost Approach,

and the advice is to use one or more of these valuation styles. The following explanations according these three techniques is written according to the IPEV guidelines (2022).
According to Evans and Mellen (2018, p.102) the business valuation approaches and methods can be divided as in the following figure 3.

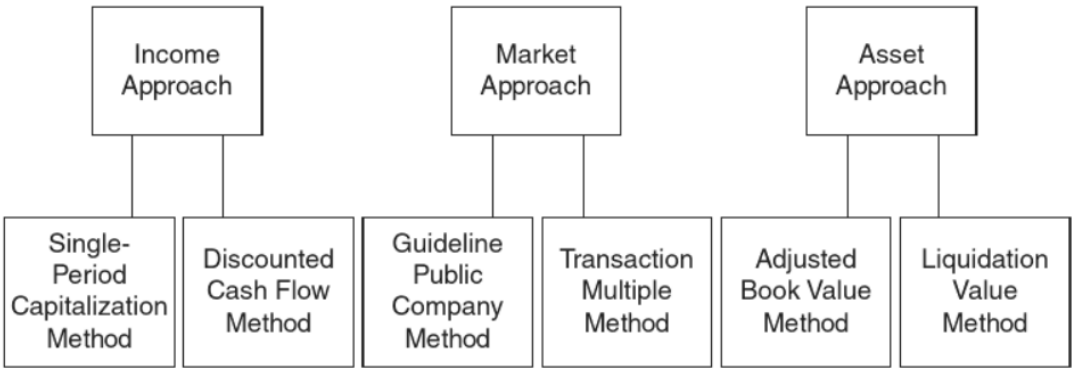


**Figure 3.** Valuation Approaches and Methods (Evans and Mellen, 2018).

Evans and Mellen (2018) describe the valuation methods in different terms but indicates the same ideas as IPEV guidelines do in the previous section. The approach style that this thesis is most interested of is the income approach and more specifically the discounted cash flow method.

### 3.2.1 Market Approach

Market approach valuation style has three different techniques that can be adopted, and they are multiples, industry valuation benchmarks and available market prices. The valuation method this way focuses on market side more than income and replacement cost approach.

Multiples is a valuation technique where an application of convenient multiple performance measure, for example revenue, of the company is selected and this way the value for the business is received. This valuation method is most suitable to the companies that are into investments or are other ways involved with stream of continuing revenue or earnings.

The second valuation technique in market approach is industry valuation benchmarks. The purpose of this style is to use industry benchmarks and get trustworthy data by establishing fair value in certain circumstances since it is more likely to be effective as a sanity check for values derived using other methodologies. Different industries have different benchmarks and for example in the financial field the usage of revenues as benchmarks is common.

The third of the market approach styles is the available market price which includes quoted investments, blockage factors and discounts, discounts, and observable prices. Quoted investments on active markets should be evaluated at the price within the bid/ask spread that is the closest to the fair value. In other words, the valuer must always employ the most representative point estimate in the bid/ask spread. On the other hand, the blockage factors and discounts take into consideration the application of factors that indicate size as a characteristic of the reporting entity's holdings. The discounts can be used in the active markets if there is a government or other this type of resulting in reduced liquidity of the instrument. The last characteristic in the available market price is observable prices and by this the guidelines mean that when observable prices are available, the valuer must use observable prices while estimating the fair value in addition to the other valuation methods.

### 3.2.2 Income Approach

The income approach as a valuation method includes two main subject that are discounted cash flow from the investee company's side and discounted cash flows from the investments side. While using the discounted cash flows from the investee company's side the most critical areas to take into consideration are:

- Acquire the company with the enterprise value by using suitable assumptions and estimates of expected future cash-flows
- Modify the enterprise value by capturing the surplus non-operating assets or liabilities to gain enterprise value for the investee company

- Subtract from the amount the fund's highest-ranking instrument in a liquidation scenario, and
- Appropriately allocate the attributable enterprise value to the applicable financial instruments from the viewpoint of market participants.

The another of the income approach valuation methods is discounted cash flows from the investments side. From this point of view, the purpose is to estimate the fair value of an investment and the valuer should use reasonable assumptions while calculating the present value of the cash flows. The estimations of expected cash flows are in central focus in this type of valuation technique. This type of valuation style is often used to debt investments or similar type of debt objectives.

### 3.2.3 Replacement Cost Approach

The replacement cost approach uses the valuation technique that estimates the fair value of an investment. While using this style, the valuer should take three different things into consideration. As first the valuer should derive the enterprise value for the company by using the market participant as viewpoint and take into consideration the assets and liabilities from the fair values point of view. Secondly, all the financial instruments that are ahead of the highest-ranking instruments should be taken into consideration and notice the effect of instruments that might derive the attributable enterprise value. The last object from the replacement cost approach style is to apportion the attributable enterprise value to the applicable financial instruments from the viewpoint of market participants. Assessing the viewpoint of a market participant requires discretion.

The valuation technique of replacement cost approach is most likely to be used in situation where the company is derived by underlying fair value of the assets more than earnings. These types of companies are often in the field of investment and diverse types of funds.

## 3.3 Additional Considerations on IPEV Valuation Guidelines

This section of the additional considerations is based on IPEV Valuation guidelines (2022) and shares information regarding valuation of private capital investments. The guidelines take into consideration distinct types of situations that the usage of the additional considerations is important.

As mentioned in the previous sections, the IFRS is authorized in the Europe and for example United States has their own GAAP. The purpose in the long way is to make similar accounting standards all around the world. As IFRS has different IAS (International Accounting Standards) in it, the US has ASC (Accounting Standards Codification). IFRS and US GAAP take into consideration the areas differently and for example fair value measurement is one of these.

From the valuation point of view there are considerations that should be noticed when it comes to distressed or dislocated markets. The valuer should rule out whether the scenario analysis is crucial from the current market's perspective and if the market dislocation is extending. Next, the valuation maker should take into consideration the changes in the valuation techniques if another alternative is better for the current situation and shows better outcomes. It is crucial to compare the trading that has been made in the companies that has similar background. In the end one of the most important things that must be taken care of is to make sure that there are not any double-up valuation inputs. For example, if the performance metrics of the companies are relying on other companies' information it is important to make sure that all the companies have adjusted these results from the time of market dislocation, otherwise the outcome of the valuation might be misleading.

# 4 Methodology and Valuation Framework of the Research

From the International Private Equity and Venture Capital Valuation point of view the framework that this study depends on is income approach and more specifically discounted cash flow (DCF) method. The framework focuses to determine the value of the company based on the information how much the firm can make in the becoming years with certain discount rate. The discounted cash flow method is part of the income approach that was explained in the chapter three and in this study, it is used in three cases A, B and C to evaluate the differences between FAS and IFRS.

## 4.1 Case Companies

The empirical research of this study is made by using three case companies, A, B and C. All of them are Finnish companies and published their first IFRS statements in recent years and because of this have both FAS and IFRS financial statements for one year for comparability. On the other hand, the companies differ from each other and have diverse perspectives since they are located to different sectors of business.

Company A is in property services industry and is a big Nordic provider in its field. In recent years, the company has grown a lot and the growth is achieved by making acquisitions and due to this the valuation method take the acquisitions into consideration differently than in the cases of companies B and C. Because of the acquisitions and huge increase, the discounted cash flow method is not optimal valuation technique, and the growth of the company is not linear as in some companies, for example, the sales can be expected to increase 5 percent in a year. Even though the valuation method is not ideal, the results can still be compared and the main differences between FAS and IFRS statements can be measured.

Company B is located to the engineering field and delivers services through expert organization. Case B has zero goodwill in the beginning of the inspection period in both, FAS and IFRS, statements which leads to a situation where the percentage of the assets

is not as big as in the cases A and C. On the other hand, this shows in the results how the amount of goodwill causes the amount of assets to differ from the other cases and how this affects the whole valuation calculation.

The area of expertise of company C is located into external moisture control repairs and renovations. Case C is the most ideal case study from these three companies since there are no acquisitions due to the sector of the company. The growth of the company could be linear, and the results of the calculations are presumed to be the most realistic out of these three cases. There are differences between FAS and IFRS calculations but there is not specific growth via acquisitions observed and the amount of goodwill changes between FAS and IFRS, which leads to interesting outcomes in the results section of the study.

## 4.2 Valuation Method

Discounted cash flow method is professionally researched valuation method and the most important studies according to this method are located between eighties and nineties. Fernandez (2005) studied the financial literature according to discounted cash flow valuation. In his study he gathered the central literature aspects according DCF and managed to collect the main factors in this valuation style. One of these methods is Free Cash Flow which is part of the Discounted Cash Flow methods, and the valuation made by using the Discounted Free Cash Flow (DFCF) valuation style. Fernandez stated that before 1977 when Arditti and Levy suggested the company's value should be calculated by using the capital cash flows, the Free Cash Flow method was popular among the valuers. Since the valuation of a company is not an easy task, many of the valuers use the method due to the clarity of the style. In this thesis the valuation method is made by using the numbers in the balance sheet and income statement and because of this it does not take into consideration all the part the actual valuation style would need. For example, the Fernandez continued in 2007 with another article that was based on the ten methods of the valuing by cash flow discounting. The first one of the methods is Free Cash Flow discounted at the weighted average cost of capital (WACC), which is the method that this

thesis focuses to observe. Fernandez (2007) stated that in the WACC based Discounted Free Cash Flow the equation followed:

$$E_0 + D_0 = PV_0[WACC_t; FCF_t]$$

In this equation equity *(E)* and debt *(D)* are equal with the present value *(PV)* of the future cash flows *(FCF)* and the FCF discounted by using the weighted average cost of the debt and equity after tax *(WACC)*. Fernandez (2007) continued in the article that this method is often used in valuation cases where the balance sheet and income statement are available. In his study there is a certain expected growth rate that this type of valuation method assumes since the purpose is to predict what is the value of the company in the future.

Pratt and Grabowski (2014, p.27-30) state: "The financial community tends to focus on the net cash flow as the preferred measure of economic income to discounted by the opportunity cost of capital for two reasons.

1. Conceptual. Net cash flow provides amounts that are available to compensate providers of capital for their investments in a discrete period.
2. Empirical. It is the economic income measure that best matches discount rate estimates."

Even though Pratt and Grabowski state that the Free Cash Flow is effective, also as a valuation method, there are still disadvantages in it. Later, in their work (p.859), they concluded that the valuator might not be aware of the long-term growth rates of the industry and calculating or choosing the right growth rate is not simple since it is only a prediction. In some cases, it is possible that the businesses are over valuated and because of a little mistake in the growth percent the whole company might fail. Due to these types of reasons the valuation of a company is complex.

The valuation process starts with collecting the data. First step of the valuation process is to calculate the carrying amount of assets. Goodwill, intangible- and tangible assets received directly from the balance sheet and by deducting the current liabilities in the balance sheet from the current assets of the company, the net working capital is received. The next step is to incorporate the information into the Free Cash Flow valuation method by using the FAS numbers and after this the IFRS numbers. The growth of the depreciations estimated to be 2% per year and the amount of it increases quietly. By using the key amounts, for example EBITDA, the EBIT received and after the taxes are deducted, the non-operating profit less adjusted tax (NOPLAT) is calculated. After this the company's depreciation amount added back in and the Free Cash Flow is received. The change in the net working capital chosen to be zero in all three cases but the row is still added to the calculations for the clarity. The Free Cash Flow calculation platform calculates the amount of cash flow to increase with the chosen net sales growth percentage. The FCF calculations of this thesis used the same WACC of 10 % and residual growth of 1%. The present value of FCF calculated by using the WACC as a discount factor. The last step of the valuation is to add the forecast periods together and add this amount into terminal value of the FCF after the discount factor, and finally receiving the amount of value in use.

Since the purpose of this thesis is to seek answers for the questions which accounting standard is more in favour for the private equity owners, the discounted cash flow method was chosen as a valuation method. As said in the previous chapter, the balance sheet and income statement play a crucial role in the income approach. Due to this, it is effective to choose discounted cash flow as a method to make the valuation as clear as possible.

## 4.3 Valuation Objectives

The focus of this this study's objectives is on Free Cash Flow and Earnings Before Interest and Taxes. According to Pratt and Grabowski (2014, p.11) the basic steps of a valuation are estimation of economic income, estimation of the cost of capital and use of the cost

of capital so the present value of the company can be calculated. These steps are used in the discounted cash flow valuation method and are main objectives as well as EBIT that is calculated as part of the cash flow valuation method.

### 4.3.1 Free Cash Flow

Pratt and Grabowski (2014, p.12) state that the net cash flow, which means the same as Free Cash Flow in this context, is the measure of the economic income and it is the amount of money that is available for the stakeholders. Since the Free Cash Flow is the amount, the stakeholders are interested also from this study's point of view the owners of the private equity are committed to see the amount of FCF to grow. Although the amount of FCF is embraced Pratt and Grabowski wants to remind that there are still a lot of analysts that see the reported income as more dependable than the Free Cash Flow amount.

According to Pratt and Grabowski (2014, p.12-13) the present value is often converted by using the cost of capital as discount rate. Even though the discount rate can be used as the cost of capital, the authors remind that the analysts behind the valuations sometimes calculate the cost of capital by applying the future period's expected economic income. The cases where the is applied by using the expected economic income are often an exception since is anticipates that the WACC must be changed due to for example, the changed capital structure.

### 4.3.2 EBIT

According to the valuer this thesis interviewed the amount of Earnings Before Interest and Taxes (EBIT) is one of the most valuable factors in the valuation process. The amount of EBIT is received while calculating the Free Cash Flow.

Nissim (2019) compared the EBITDA, EBITA and EBIT and stated that EBIT most closely corresponds to the accounting definition of operating income. He concludes three reasons why it is problematic to use EBIT as “truthful” outcome while comparing EBITDA, EBITA and EBIT since the numbers can be manipulated by the firms and the capitalization of them might change the outcome. According to him, the EBITDA avoids this problem since the depreciation and amortizations are taken into consideration.

From the theoretical point of view the EBITDA might be more suitable to valuation but often the valuation of the company is not based on only to the historic data. According to the professional valuer that was interviewed for this thesis the historic data; balance sheet and income statement play smaller role in the valuation progress and the biggest weight is on the future. Due to this reason one of the factors, they take into consideration is the EBIT since the depreciations and amortizations are calculated into this amount. From this thesis’s point of view, the IFRS has an effect to the depreciations and amortizations and due to this reason, it is easier to compare statements to each other by using EBIT.

## 4.4 Collection of Study Material

The financial statements of the case studies A, B and C were bought from the Finnish Patent and Registration Office. Due to the transformation into IFRS statement, the companies made consolidated statements and all of them made financial statements that compared FAS and IFRS to each other and calculated what were the amounts of, for example, goodwill that had to be adjusted. First the calculation of the discounted cash flow method was tried to make by using only the key figures but shortly after it was discovered that the results are going to be more relevant if the whole balance sheet and income statement are under review. Even though the financial statements are public, and the name of the companies could be revealed, it was easier to state them as case studies A, B and C.

In the process of the valuation there was also a short interview made with a professional valuator. The valuation process is not easy and due to this reason one valuator from Suomen Yrityskaupat Oy was interviewed to add more reliability to the study. Since there have not been previous studies according to this exact topic, the certainty of the calculations was ensured by a professional. The interview considering the calculations and other questions regarding valuations took place in 30.3.2023.

In the appendices 1 the form of the main interview questions is opened. The interview was semi-structured and there was mostly open discussion of the valuation process which was concluded into three main questions that the valuer answered. In the next chapter the results of the valuation method and the interview are described in more detail.

# 5 Results of Empirical Research

The results of the thesis are based on three case companies and to a semi-structured interview done with a professional valuer. The purpose of the interview is to add information that has already been obtained on from valuation and confirm the theory side of the study.

## 5.1 Results of the Case A

The case company A differs from companies B and C, since the growth of it is based on the acquisitions that have happened in recent years. In the table 4, the amounts of goodwill, intangible assets and tangible assets are transferred directly from the balance sheet to the calculation formula. The FAS amounts receive the net working capital to be -16 449 which leads to the total amount of carrying assets that is 374 440 euros. According to the IFRS balance sheet of the company A, the amount of goodwill is 277 441. After adding the amounts of the assets together the total assets of the company are 407 466 euros based on the IFRS statements. The amount of IFRS intangible assets is highly increased compared to the number of FAS and because of this the total amount of assets is greater from the IFRS perspective.

**Table 4.** FAS and IFRS Assets of Company A

| | FAS | IFRS |
|---|---|---|
| Asset under testing (carrying amount) | | |
| Goodwill | 352 387 | 277 441 |
| Intangible assets | 369 | 112 225 |
| Tangible assets | 38 133 | 38 045 |
| Net working capital | -16 449 | -20 245 |
| Total | **374 440** | **407 466** |

After receiving the amount of assets, the Free Cash Flow of the case company is calculated. Due to the acquisition background of the company, by way of exception, there are two fiscal years that the formula uses to receive more truthful amount to the terminal period. Since there is only one year (2020) where the information is available for both

FAS and IFRS the number from 2021 is calculated by using the percentages the IFRS income statement grows from the year of 2020. In the tables 5 and 6 the increase is seen as 168,7% from the year of 2020. Both tables show calculation formula with the net sales growth of 5% in the future years. Table 5 shows the FAS amounts that are received and the amount of EBIT in the future is 15 101. The amount of Free Cash Flow grows from 2 965 to 82 641 by the end of the terminal period. By using the WACC of 10% and the residual growth rate of 1% the present value of the Free Cash Flows is calculated to be 570 148 in the terminal period. To receive the value in use, the amount of all the other years and the terminal period are calculated together and the amount of the whole value in use is 832 196 euros.

**Table 5.** FAS Free Cash Flow Calculation of Company A

| EUR thousand | | FY20Act | FY21Act | FY22F | FY23F | FY24F | FY25F | Terminal period |
|---|---|---|---|---|---|---|---|---|
| Net Sales | | 135 545 | 364 224 | 382 435 | 401 557 | 421 635 | 442 716 | 447 144 |
| *Net sales growth* | | *N/A* | *168,7 %* | *5,0 %* | *5,0 %* | *5,0 %* | *5,0 %* | *1,0 %* |
| **EBITDA** | | **17 700** | **60 670** | **65 616** | **70 904** | **76 558** | **82 599** | **85 661** |
| **EBITDA margin** | | **13,1 %** | **16,7 %** | **17,2 %** | **17,7 %** | **18,2 %** | **18,7 %** | **19,2 %** |
| Depreciation | | -28803 | -63908 | -65186 | -66490 | -67820 | -69176 | -70559 |
| **EBIT** | | **-11 103** | **-3 238** | **430** | **4 415** | **8 738** | **13 423** | **15 101** |
| *EBIT %* | | *-8,2 %* | *-0,9 %* | *0,1 %* | *1,1 %* | *2,1 %* | *3,0 %* | *3,4 %* |
| Taxes | 20,0 % | -14 734 | -648 | -86 | -883 | -1 748 | -2 685 | -3 020 |
| **NOPLAT*** | | **-25 837** | **-3 885** | **344** | **3 532** | **6 991** | **10 739** | **12 081** |
| Depreciation | | 28 803 | 63 908 | 65 186 | 66 490 | 67 820 | 69 176 | 70 559 |
| Change in NWC | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Free Cash flow** | | **2 965** | **60 023** | **65 530** | **70 021** | **74 810** | **79 915** | **82 641** |
| | | | | | | | | |
| WACC | 10,00 % | | | | | | | |
| Residual growth rate | 1,00 % | | | | | | | |
| | | | | | | | | |
| Timing factors | | | 1,0 | 2,0 | 3,0 | 4,0 | 5,0 | 5,0 |
| Discount factor @ WACC | | | 0,91 | 0,83 | 0,75 | 0,68 | 0,62 | 0,62 |
| **Present value of FCF** | | | **54 566** | **54 157** | **52 608** | **51 096** | **49 621** | **570 148** |
| | | | | | | | | |
| *) NOPLAT = non-operating profit less adjusted tax | | | | | | | | |
| | | | | | | | | |
| Forecast period | 262 048 | 31 % | | | | | | |
| Terminal value | 570 148 | 69 % | | | | | | |
| **Value in use** | **832 196** | | | | | | | |

After the FAS amounts being calculated, the company A's IFRS income statement information is added to the calculation formula of the Free Cash Flow. With the company A the acquisitions that are mentioned in the previous part have problems with the calculations as well so the amounts of the growth percentages in the net sales are the same as in the FAS calculations. As seen in the table 6, the growth of the EBIT is risen from -649 up to 38 821 euros in the end of the terminal period. The table 6 shows the increase

of the FCF between the year of 2020 and the terminal period. After the calculation of present value of Free Cash Flow, the amount of value in use is received to be 722 239 euros. This amount is received by adding the present values of the Free Cash Flows from the years 2020-2025 and adding this amount to the terminal period value.

**Table 6.** IFRS Free Cash Flow Calculation of Company A

| EUR thousand | | | FY20Act | FY21Act | FY22F | FY23F | FY24F | FY25F | Terminal period |
|---|---|---|---|---|---|---|---|---|---|
| Net Sales | | | 135 541 | 364 215 | 382 426 | 401 547 | 421 624 | 442 706 | 447 133 |
| *Net sales growth* | | *N/A* | | *168,7 %* | *5,0 %* | *5,0 %* | *5,0 %* | *5,0 %* | *1,0 %* |
| **EBITDA** | | | **16 625** | **56 985** | **61 746** | **66 841** | **72 292** | **78 120** | **81 137** |
| **EBITDA margin** | | | **12,3 %** | **15,6 %** | **16,1 %** | **16,6 %** | **17,1 %** | **17,6 %** | **18,1 %** |
| Depreciation | | | -17274 | -38327 | -39094 | -39875 | -40673 | -41486 | -42316 |
| **EBIT** | | | **-649** | **18 658** | **22 653** | **26 966** | **31 619** | **36 634** | **38 821** |
| *EBIT %* | | | *-0,5 %* | *5,1 %* | *5,9 %* | *6,7 %* | *7,5 %* | *8,3 %* | *8,7 %* |
| Taxes | 20,0 % | | -7 059 | -23 420 | -4 531 | -5 393 | -6 324 | -7 327 | -7 764 |
| **NOPLAT*** | | | **-7 708** | **-4 762** | **18 122** | **21 573** | **25 295** | **29 307** | **31 057** |
| Depreciation | | | 17 274 | 38 327 | 39 094 | 39 875 | 40 673 | 41 486 | 42 316 |
| Change in NWC | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Free Cash flow** | | | **9 565** | **33 565** | **57 216** | **61 448** | **65 968** | **70 793** | **73 373** |
| | | | | | | | | | |
| WACC | 10,00 % | | | | | | | | |
| Residual growth rate | 1,00 % | | | | | | | | |
| | | | | | | | | | |
| Timing factors | | | | 0,0 | 2,0 | 3,0 | 4,0 | 5,0 | 5,0 |
| Discount factor @ WACC | | | | 1,00 | 0,83 | 0,75 | 0,68 | 0,62 | 0,62 |
| **Present value of FCF** | | | | **33 565** | **47 286** | **46 167** | **45 057** | **43 957** | **506 207** |
| | | | | | | | | | |
| *) NOPLAT = non-operating profit less adjusted tax | | | | | | | | | |
| | | | | | | | | | |
| Forecast period | 216 032 | 30 % | | | | | | | |
| Terminal value | 506 207 | 70 % | | | | | | | |
| **Value in use** | **722 239** | | | | | | | | |

The significant differences between case A's FAS and IFRS bases of the FCF calculations is the amount of the EBIT and the value in use. From the IFRS perspective the amount of EBIT is calculated to be larger but on the other hand the value in use is greater on the FAS statements.

## 5.2 Results of the Case B

The company B diverged from the other case companies because of the amount of the goodwill in the beginning of the observation period. The case company B has the same amount of goodwill in the FAS statements as in the IFRS statements which is zero. The assets of the company case B are transferred directly from the balance sheet and the amount of net working capital is calculated. The table 7 shows the amount of assets under testing is from the Finnish accounting perspective 25 456 euros. The international amount of intangible assets is larger than the FAS, but the amount of net working capital is greater on the FAS side so the total amounts are close to equal.

**Table 7.** FAS and IFRS Assets of Company B

| | FAS | IFRS |
|---|---|---|
| Asset under testing (carrying amount) | | |
| Goodwill | 0 | 0 |
| Intangible assets | 18 219 | 20 435 |
| Tangible assets | 1 156 | 1 335 |
| Net working capital | 6 081 | 3 003 |
| Total | **25 456** | **24 773** |

With the case company B, the table 8 below shows the FAS amounts that are transferred from the income statement directly to the calculation formula of FCF, and the income statement that has both FAS and IFRS amounts is 2020. The net sales growth percent is estimated to be 5% per year and with this increase the EBIT is calculated to receive 8 322 euros in the end of the terminal period. The difference between Free Cash Flow grows from 4 969 to 10 555 and the present value of the FCF in the terminal period is calculated to reach 72 817 euros. The table 8 shows the value in use is calculated to be 104 713 and this is received by adding the terminal period amount of the present value of Free Cash Flow to the amount of previous years.

**Table 8.** FAS Free Cash Flow Calculation of Company B

| EUR thousand | | FY20Act | FY21F | FY22F | FY23F | FY24F | FY25F | Terminal period |
|---|---|---|---|---|---|---|---|---|
| Net Sales | | 72 834 | 76 476 | 80 299 | 84 314 | 88 530 | 92 957 | 93 886 |
| *Net sales growth* | *N/A* | | *5,0 %* | *5,0 %* | *5,0 %* | *5,0 %* | *5,0 %* | *1,0 %* |
| **EBITDA** | | **7 294** | **8 041** | **8 845** | **9 708** | **10 637** | **11 633** | **12 219** |
| **EBITDA margin** | | **10,0 %** | **10,5 %** | **11,0 %** | **11,5 %** | **12,0 %** | **12,5 %** | **13,0 %** |
| Depreciation | | -3460 | -3529 | -3600 | -3672 | -3745 | -3820 | -3897 |
| **EBIT** | | **3 834** | **4 512** | **5 245** | **6 037** | **6 891** | **7 813** | **8 322** |
| *EBIT %* | | *5,3 %* | *5,9 %* | *6,5 %* | *7,2 %* | *7,8 %* | *8,4 %* | *8,9 %* |
| Taxes | 20,0 % | -2 325 | -902 | -1 049 | -1 207 | -1 378 | -1 563 | -1 664 |
| **NOPLAT*** | | **1 509** | **3 610** | **4 196** | **4 829** | **5 513** | **6 250** | **6 658** |
| Depreciation | | 3 460 | 3 529 | 3 600 | 3 672 | 3 745 | 3 820 | 3 897 |
| Change in NWC | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Free Cash flow** | | **4 969** | **7 139** | **7 796** | **8 501** | **9 258** | **10 071** | **10 555** |
| | | | | | | | | |
| WACC | 10,00 % | | | | | | | |
| Residual growth rate | 1,00 % | | | | | | | |
| | | | | | | | | |
| Timing factors | | | 1,0 | 2,0 | 3,0 | 4,0 | 5,0 | 5,0 |
| Discount factor @ WACC | | | 0,91 | 0,83 | 0,75 | 0,68 | 0,62 | 0,62 |
| **Present value of FCF** | | | **6 490** | **6 443** | **6 387** | **6 324** | **6 253** | **72 817** |
| | | | | | | | | |
| *) NOPLAT = non-operating profit less adjusted tax | | | | | | | | |
| | | | | | | | | |
| Forecast period | 31 896 | 30 % | | | | | | |
| Terminal value | 72 817 | 70 % | | | | | | |
| **Value in use** | **104 713** | | | | | | | |

The data for the table 9 is based on the International Financial Reporting Standards statements from the case company B. The calculations are made by using the same balance sheets and income statements as FAS but from the adjusted numbers of IFRS. After the calculation of the assets under testing, the valuation of the company based on the IFRS amounts of the income statements are taken into consideration. The table 9 shows how the amount of net sales growth is kept as considerable as in the FAS calculation, which is 5% and by this increase the amount of EBIT rises from 6 829 up to 12 191. The balance sheet takes various aspects into consideration while calculating the EBIT and due to this the amount of EBIT differ from the FAS amount. The Free Cash Flow is 13 706 and the present value of the free cash flow is 94 559 euros in the terminal period. The amount of Free Cash Flow increases from the 8 627 up to 13 706 and the value in use is calculated to be 137 112 by using the IFRS statements values. The amount of Earnings Before Interests and Taxes is greater from the IFRS point of as well as the amount of value in use.

**Table 9.** IFRS Free Cash Flow Calculation of Company B

| EUR thousand | | | FY20Act | FY21F | FY22F | FY23F | FY24F | FY25F | Terminal period |
|---|---|---|---|---|---|---|---|---|---|
| Net Sales | | | 72 834 | 76 476 | 80 299 | 84 314 | 88 530 | 92 957 | 93 886 |
| *Net sales growth* | | *N/A* | | *5,0 %* | *5,0 %* | *5,0 %* | *5,0 %* | *5,0 %* | *1,0 %* |
| **EBITDA** | | | **10 339** | **11 238** | **12 202** | **13 233** | **14 338** | **15 519** | **16 144** |
| **EBITDA margin** | | | **14,2 %** | **14,7 %** | **15,2 %** | **15,7 %** | **16,2 %** | **16,7 %** | **17,2 %** |
| Depreciation | | | -3510 | -3580 | -3652 | -3725 | -3799 | -3875 | -3953 |
| **EBIT** | | | **6 829** | **7 658** | **8 550** | **9 509** | **10 539** | **11 644** | **12 191** |
| *EBIT %* | | | *9,4 %* | *10,0 %* | *10,6 %* | *11,3 %* | *11,9 %* | *12,5 %* | *13,0 %* |
| Taxes | 20,0 % | | -1 712 | -1 532 | -1 710 | -1 902 | -2 108 | -2 329 | -2 438 |
| **NOPLAT*** | | | **5 117** | **6 127** | **6 840** | **7 607** | **8 431** | **9 315** | **9 753** |
| Depreciation | | | 3 510 | 3 580 | 3 652 | 3 725 | 3 799 | 3 875 | 3 953 |
| Change in NWC | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Free Cash flow** | | | **8 627** | **9 707** | **10 492** | **11 332** | **12 230** | **13 191** | **13 706** |
| | | | | | | | | | |
| WACC | 10,00 % | | | | | | | | |
| Residual growth rate | 1,00 % | | | | | | | | |
| | | | | | | | | | |
| Timing factors | | | | 1,0 | 2,0 | 3,0 | 4,0 | 5,0 | 5,0 |
| Discount factor @ WACC | | | | 0,91 | 0,83 | 0,75 | 0,68 | 0,62 | 0,62 |
| **Present value of FCF** | | | | **8 824** | **8 671** | **8 514** | **8 353** | **8 190** | **94 559** |
| | | | | | | | | | |
| *) NOPLAT = non-operating profit less adjusted tax | | | | | | | | | |
| | | | | | | | | | |
| Forecast period | 42 553 | 31 % | | | | | | | |
| Terminal value | 94 559 | 69 % | | | | | | | |
| **Value in use** | **137 112** | | | | | | | | |

## 5.3 Results of the Case C

The company C is most convenient from this study's valuation method's perspective since the company does not have acquisitions in the recent history that would have been able to influence the outcome or the results of the valuation. On the other hand, the amount of goodwill is above zero, unlike case B, so the comparing between the Goodwills is ideal and conclusions can be made.

The table 10 shows the amounts of assets that are transferred from both FAS and IFRS statements. The calculation of the assets is the sum of goodwill, intangible assets, tangible assets, and net working capital. Regarding the FAS amount of assets, the net working capital is calculated by using the current assets and current liabilities, which leads to a total amount of assets 58 757 euros. The total figure of the assets from the IFRS perspective is 71 674. The main difference between these two statements is the amount of tangible assets, since the IFRS has over 10 000 more in it compared to the FAS.

**Table 10.** FAS and IFRS Assets of Company C

| | FAS | IFRS |
|---|---|---|
| Asset under testing (carrying amount) | | |
| Goodwill | 34 138 | 39 472 |
| Intangible assets | 1 016 | 873 |
| Tangible assets | 15 299 | 25 570 |
| Net working capital | 8 304 | 5 759 |
| Total | **58 757** | **71 674** |

The table 11 describes FAS based calculations of the FCF of the company C and the 5% nets sales growth in the following years. With the annual growth of 5% the EBIT grows from 2 768 up to 8 233 in the end of the terminal period. The present value of Free Cash Flow is calculated by using the WACC amount of 10% and residual growth rate of 1% which leads to total amount of present values of 107 745. The value in use is calculated by the amount from the last years and after this the terminal periods amount is added which leads to a sum of 156 186 euros.

**Table 11.** FAS Free Cash Flow Calculation of Company C

| EUR thousand | | FY18Act | FY19F | FY20F | FY21F | FY22F | FY23F | Terminal period |
|---|---|---|---|---|---|---|---|---|
| Net Sales | | 86 854 | 91 197 | 95 757 | 100 544 | 105 572 | 110 850 | 111 959 |
| *Net sales growth* | *N/A* | | *5,0 %* | *5,0 %* | *5,0 %* | *5,0 %* | *5,0 %* | *1,0 %* |
| **EBITDA** | | **10 787** | **11 782** | **12 850** | **13 995** | **15 223** | **16 539** | **17 264** |
| **EBITDA margin** | | **12,4 %** | **12,9 %** | **13,4 %** | **13,9 %** | **14,4 %** | **14,9 %** | **15,4 %** |
| Depreciation | | -8019 | -8179 | -8343 | -8510 | -8680 | -8854 | -9031 |
| **EBIT** | | **2 768** | **3 603** | **4 507** | **5 486** | **6 543** | **7 685** | **8 233** |
| *EBIT %* | | *3,2 %* | *4,0 %* | *4,7 %* | *5,5 %* | *6,2 %* | *6,9 %* | *7,4 %* |
| Taxes | 20,0 % | -1 478 | -721 | -901 | -1 097 | -1 309 | -1 537 | -1 647 |
| **NOPLAT*** | | **1 290** | **2 882** | **3 606** | **4 389** | **5 235** | **6 148** | **6 587** |
| Depreciation | | 8 019 | 8 179 | 8 343 | 8 510 | 8 680 | 8 854 | 9 031 |
| Change in NWC | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Free Cash flow** | | **9 309** | **11 062** | **11 949** | **12 898** | **13 915** | **15 002** | **15 617** |
| | | | | | | | | |
| WACC | 10,00 % | | | | | | | |
| Residual growth rate | 1,00 % | | | | | | | |
| | | | | | | | | |
| Timing factors | | | 1,0 | 2,0 | 3,0 | 4,0 | 5,0 | 5,0 |
| Discount factor @ WACC | | | 0,91 | 0,83 | 0,75 | 0,68 | 0,62 | 0,62 |
| **Present value of FCF** | | | **10 056** | **9 875** | **9 691** | **9 504** | **9 315** | **107 745** |
| | | | | | | | | |
| *) NOPLAT = non-operating profit less adjusted tax | | | | | | | | |
| | | | | | | | | |
| Forecast period | 48 441 | 31 % | | | | | | |
| Terminal value | 107 745 | 69 % | | | | | | |
| **Value in use** | **156 186** | | | | | | | |

The case C is an ideal target for these types of valuation methods since there is goodwill among the assets and the Discounted Cash Flow method as a valuation style is optimal

due to the positive outcome and the growth percent of 5% is ideal. The table 12 below shows that the EBIT grows from 7 956 to 14 458 between the review period, regarding the IFRS amounts of the case C. The calculation shows evidence of the increase in Free Cash Flow and the amount of it is 11 685 in the 2018 and due to the increase, it is 17 399 in the end of the terminal period. After the Free Cash Flow is received, the present value of the FCF is calculated by using WACC and residual growth rate and the terminal period of value is 120 037 euros. The value in use is received by adding the previous amounts of the present value of Free Cash Flow and the terminal period value all together receiving the amount of 174 387 euros.

**Table 12.** IFRS Free Cash Flow Calculation of Company C

| EUR thousand | | FY18Act | FY19F | FY20F | FY21F | FY22F | FY23F | Terminal period |
|---|---|---|---|---|---|---|---|---|
| Net Sales | | 86 854 | 91 197 | 95 757 | 100 544 | 105 572 | 110 850 | 111 959 |
| *Net sales growth* | | *N/A* | *5,0 %* | *5,0 %* | *5,0 %* | *5,0 %* | *5,0 %* | *1,0 %* |
| **EBITDA** | | **13 135** | **14 248** | **15 439** | **16 714** | **18 077** | **19 535** | **20 290** |
| **EBITDA margin** | | **15,1 %** | **15,6 %** | **16,1 %** | **16,6 %** | **17,1 %** | **17,6 %** | **18,1 %** |
| Depreciation | | -5179 | -5283 | -5388 | -5496 | -5606 | -5718 | -5832 |
| **EBIT** | | **7 956** | **8 965** | **10 051** | **11 218** | **12 471** | **13 817** | **14 458** |
| *EBIT %* | | *9,2 %* | *9,8 %* | *10,5 %* | *11,2 %* | *11,8 %* | *12,5 %* | *12,9 %* |
| Taxes | 20,0 % | -1 450 | -1 793 | -2 010 | -2 244 | -2 494 | -2 763 | -2 892 |
| **NOPLAT*** | | **6 506** | **7 172** | **8 041** | **8 974** | **9 977** | **11 054** | **11 567** |
| Depreciation | | 5 179 | 5 283 | 5 388 | 5 496 | 5 606 | 5 718 | 5 832 |
| Change in NWC | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Free Cash flow** | | **11 685** | **12 455** | **13 429** | **14 470** | **15 583** | **16 772** | **17 399** |
| | | | | | | | | |
| WACC | 10,00 % | | | | | | | |
| Residual growth rate | 1,00 % | | | | | | | |
| | | | | | | | | |
| Timing factors | | | 1,0 | 2,0 | 3,0 | 4,0 | 5,0 | 5,0 |
| Discount factor @ WACC | | | 0,91 | 0,83 | 0,75 | 0,68 | 0,62 | 0,62 |
| **Present value of FCF** | | | **11 323** | **11 098** | **10 872** | **10 643** | **10 414** | **120 037** |
| | | | | | | | | |
| *) NOPLAT = non-operating profit less adjusted tax | | | | | | | | |
| | | | | | | | | |
| Forecast period | 54 350 | 31 % | | | | | | |
| Terminal value | 120 037 | 69 % | | | | | | |
| **Value in use** | **174 387** | | | | | | | |

The variation between FAS and IFRS FCF calculations focuses on to the amount of EBIT and to the value in use. Both key figures are significantly larger on the IFRS calculations. The present value of the Free Cash Flows is greater on the IFRS side of valuations and due to this the amount of the terminal value increases steeper on the IFRS calculation.

## 5.4 Comparisons of the Key Figures

There are differences between Finnish Accounting Standards and International Financial Accounting Standards, and the valuations of the case studies in the previous part disclosed the actual amounts of how much different adjustments make from the company's values point of view. In the following tables 13,14,15 and 16 the key figures from the previous calculations are revealed with comparisons to other companies' results.

The first step of the valuation process was to calculate the amount of assets regarding Finnish standards and after that the international standards. The table 13 shows the assets of the cases based on FAS and IFRS. The amount of assets of companies A and C increased while adopting the international standards into use and the amount of case B decreased only by 683 euros. The case company B also had zero amount of goodwill in the beginning of the year in both statements and the amounts of the assets did not change as much as in the other case studies. The biggest changes in the case companies of A and C happened in intangible- and tangible assets.

**Table 13.** Comparison of Asset Under Testing

**Comparison of Asset Under Testing** (1 000€)

| Case company | FAS | IFRS |
|---|---|---|
| **A** | 374 440 | 407 466 |
| **B** | 25 456 | 24 773 |
| **C** | 58 757 | 71 674 |

The table 14 below describes the differences between the amount of earnings before interest and taxes between FAS and IFRS. The amount of EBIT increases in every case

study and the greatest difference is in the case A where the FAS amount in the terminal period is 15 101 and the IFRS receives 38 821 by using the same valuation method. The least change can be seen in the case study B, where the amount from FAS to IFRS changes 3 869 euros. Even though the revolution is smallest with the company case B, the IFRS amount is greater in the IFRS based valuation.

**Table 14.** Comparison of EBIT in Terminal Period

**Comparison of EBIT in Terminal Period** (1 000€)

| Case company | FAS | IFRS |
|---|---|---|
| **A** | 15 101 | 38 821 |
| **B** | 8 322 | 12 191 |
| **C** | 8 233 | 14 458 |

After the valuation forms has been produced the present value of Free Cash Flow is received. The table 15 presents the main differences between present values of the Free Cash Flow valuation in the end of the terminal period. The case companies B and C increase their present value of the FCF while adopting the IFRS standards into use. On the other hand, the company A decreases the present value of the Free Cash Flow after introducing the IFRS standards usage in the company. The most considerable amount of growth regarding the present value of FCF is having the company B.

**Table 15.** Comparison of Present value of FCF in Terminal Period

**Comparison of Present Value of FCF in Terminal Period** (1 000€)

| Case company | FAS | IFRS |
|---|---|---|
| **A** | 570 148 | 506 207 |
| **B** | 72 817 | 94 559 |
| **C** | 107 745 | 120 037 |

The last step of the valuation process in this thesis is the calculation of the actual value in use, and this amount is received from the Free Cash Flows of the review period. The results between companies A, B and C shows that only company A decreases its value in use by adopting the IFRS standards into use. On the other hand, the case companies B and C indicates that there is noteworthy amount of growth in the value in use. The results from the table 16 show that the amount of company B has increased the value in use from 104 713 up to 137 112, which is over 30% growth and on the other hand the case company A decreases the amoun of value in use by 13% while adopting the IFRS standards.

**Table 16.** Comparison of Value in Use

**Comparison of Value in Use** (1 000€)

| Case company | FAS | IFRS |
|---|---|---|
| **A** | 832 196 | 722 239 |
| **B** | 104 713 | 137 112 |
| **C** | 156 186 | 174 387 |

## 5.5 Interview

The interview with the professional valuator occurred 30.3.2023 and it was semi-structured. Since the valuator's purpose is to understand the actual value of the company it was consistent to interview the opinions and views of a person who is an expert on this field.

From the valuators point of view the first question regarding the historical data was easy to answer and the valuator pointed out that historical data is important and plays a significant role in the valuation process but is not ideal to make the valuation based only on the financial statements. The value of the company is mostly based on the future and the valuation is inconvenient if the value is calculated only by using the historic data.

The second question was challenging to the valuator to answer since the questions focused only on one main importance. The valuator pointed out that the valuation process is important from the financial side since the financier of the company wants to know what the main ideas they invested or are going to invest on. From the owner's perspective the return amount of money intrigues and the equity owners are interest about the growth of the value in the company if they would sell it.

With the last question the valuator stated that from the acquisitions and valuations perspective the most important key figures from the historic data are EBIT and FCF of the company. Often EBIT is used as the key valuation number and the amount of it is multiplied by three or five to receive the worth of the company. The valuator concluded that from this perspective the amounts of EBIT that changed in the table 14 are intriguing since with IFRS numbers the value of EBIT, and this way value of the company, is higher.

# 6 Discussion and Conclusion

The purpose of the study was to research does the implementation of IFRS standards influence the value of the firm from the private equity owner's perspective and if it does, how large is the difference between FAS and IFRS. To add the quality of the DCF calculations of the valuation, the study interviewed a professional valuator whose knowledge added information regarding the valuation between FAS and IFRS. The results from the calculations between FAS and IFRS statements are analyzed through the knowledge acquired from the valuator. In addition, the chapter highlights the reliability of the research and suggestions for further research.

## 6.1 Discussion

In the beginning of the research couple of main questions were brought up that this research focuses to find results for. The purpose was to calculate the value of the company with the information from the financial statements of FAS and IFRS, and after this analyse the results from the private equity owner's perspective. By using the FAS amounts and after this the IFRS amounts and by comparing these amounts, the results show which one of the standards implicates more valuable picture of the firm.

The amount of total assets grew in two out of three cases. With the case company B, the amount of goodwill affected to the amount of assets in the end since the amount was zero in the beginning. From this perspective the larger the amount of goodwill is in the company, the higher is the value of the assets while adapting the IFRS standards into use. On the other hand, the EBIT amounts indicates that the adoption of IFRS standards has positive correlation to the earnings before interest and taxes. The professional valuator stated that the amount of EBIT is often used as a key figure and all these three case studies grew their value in the eyes of the EBIT by using the IFRS standards as one of the key figures. Qu, Fong, and Oliver (2012) stated in their study that the investors rely on the amount of earnings that is published after the adoption of IFRS. They concluded that the investors have knowledge over the positive effects from the reporting quality side

and choose to invest on due to this. If the Finnish investors would act the same way as in the study by Qu and others (2012), the results of this thesis indicate that the value of the stocks would also increase due to the interest of the investors. In most parts of the calculations the results from the IFRS statements showed better results from the Free Cash Flow calculations. From the final calculations only company B's assets and company A's Free Cash Flow decreased out of all calculations which leads to a conclusion that in most parts the adoption of IFRS standards increases the value of the company in the eyes of the investors if they focus on the numbers.

Based on the results of this study, even though the change from FAS to IFRS should not influence the value of the company, it does. The numbers behind the accounting standards are the same but the appearance of them is different which leads to different outcomes and this way the IFRS shows better picture of the company. For example, by using the EBIT amount, some valuers multiply the amount of it by five and that is the value of the company. From this thesis's results show that in these types of cases the value of the company would be much greater according to the IFRS standards. Since the value of the firm is, in most cases, greater with the IFRS amounts, the private equity's owners see it as positive due to the greater value of the business.

With all three case companies, after the IFRS standards were taken into use, the companies published only IFRS numbers to the investors and the reason is that the companies know the IFRS statements show better numbers to the world even though they are the same as in the FAS but placed into different areas. Jarva and Latto (2012) stated in their study with ninety-four sample companies, that the earnings increased while adopting the IFRS. Their results confirm the conclusions that have been made in this thesis. While Jarva and Latto (2012) did not make the valuations of the companies, they compared the amounts of the financial statements which have the same information as this thesis so the results from both studies correlate. On the other hand, they came to conclusion that the quality of the accounting did not improve after adoption of IFRS standards, and this

conclusion can be made from this study's perspective as well, but there are still differences between FAS and IFRS standards and the differences point out that IFRS is better accounting style with the key figures (such as EBIT) from the private equity's perspective.

The comparisons of value in use showed that in two out of three cases the value grew while adapting the IFRS statements into use. From the perspective of this thesis, the case companies located into different sectors, and it is possible that this is the reason for the differences between, for example, values in use in the end. Markelevich, Shaw and Weihs (2016) studied the differences between their local GAAP and IFRS and came to conclusion that some sectors are more impacted than others. For example, in this research, the amount of case A's EBIT grew considerably while adapting the IFRS standards into use, but the other aspects of the Free Cash Flow calculation led to an outcome where the value in use was better with the FAS amounts. The sector differences are one of the reasons that explain these types of contrasts between two accounting standards. Markelevich and others (2016) came to conclusion in their study that there was no significant transformation improvement from their GAAP into the IFRS standards, but since the research was made in another country it cannot be compared with the FAS amounts due to the differences between countries GAAPs. From this thesis's point of view, there is difference from the values point of view between FAS and IFRS statements and the rejection of the $H_0$*:* IFRS statements does not change the value of the company, is accurate.

## 6.2 Reliability and Validity

The research attempts to avoid errors, but despite this, the reliability and validity of the results vary. The reliability of the research means the repeatability of the measurement results. Validity means, for example, the ability of a research method to measure exactly what it is intended to measure. (Hirsjärvi et al. 2018, 231.)

This study focused to evaluate the case companies by the amounts from their financial statements. The professional valuator this thesis's interviewed pointed out that this type

of valuation of a company is not ideal since the historical data is often used only as part of the valuation process. Due to this reason the values of the companies are only indicative. The reliability and validity of the study are high since it can be repeated but the outcome from the valuation could differ since there are other objects that the valuer might take into consideration.

The DCF method is often implemented inside the companies as impairment calculations and in these cases the valuators have information that is not public to external stakeholders. Due to this reason the Free Cash Flow from the calculations is only indicative and for example the amount of the maintenance investments is not taken into considerations in these calculations. For example, with the case company A, the results from the value in use could have been different if the amount of maintenance investments would have been public. The calculations are based on only the balance sheet and income statements, which does not take into consideration all the information the company has on themselves. Since the calculations are based on financial information, the reliability and validity are high, but the calculations could be more accurate if the valuator would have all the information that they have inside of the company.

The research and calculations of this study are indicative and there can be assumptions made, but in the end, the amounts and numbers are only demonstrations. Since the valuation of the company is not an easy task the amount of time that one valuation takes is considerable and due to this reason, this thesis focused on three case companies and calculated their DCF from the financial information that were public. The study would have been more dependable if there would have been more case studies but due to the amount of work in the valuations, the study focused on three different field case companies. Even though the study focused only on three cases, the results from the calculations showed same direction outcomes and for example the amount of EBIT grew in every case. The numbers are directly transferred from the balance sheet and income statement, and this indicates that the reported numbers are the same as in the calculations. The calculations show the results of the published reports, and the outcome is that

with most of the key figures, the IFRS standards show more optimistic picture of the firm and the private equity owners would like to publish these numbers. Since there are only three case studies, the reliability and validity could be increased by adding the amount of case studies and this way receiving more reliable data.

## 6.3 Implications for Further Research

One of the further research proposals is the valuation of larger group and stating what are the main differences between different sectors from the perspective of FAS and IFRS. What things are emphasized in the calculations of these sectors and are there situations where it is known that these sectors should publish both FAS and IFRS statements for their investors. By focusing the research only on the differences between FAS and IFRS in different sectors a new perspective on value determination could be obtained.

Since the private equity's point of view was new from the perspective of IFRS and FAS differences, the other research proposal is to study that are companies and investors aware of these differences between FAS and IFRS. The impression of the company changes with the adoption of IFRS standards and from the private equity's point of view the IFRS statement shows better value. The research could seek answers for the fact that how many potential companies with private equity has adopted IFRS standards just because of the more valuable picture of the company.

## References


AccountingTools. (2022). Articles. *Balance sheet definition.* Retrieved 2022-02-07 from https://www.accountingtools.com/articles/the-balance-sheet

Ahmed, A., Neel, M., Wang. (2012). *Does Mandatory Adoption of IFRS Improve Accounting Quality? Preliminary Evidence.* Contemporary Accounting Research. 30, 1344-1372. https://doi.org/10.1111/j.1911-3846.2012.01193.x

Anson, M. (2017). Measuring Liquidity Premiums for Illiquid Assets. *The Journal of Alternative Investments.* 20, 39-50. https://doi.org/10.3905/jai.2017.20.2.0394

Bellandi, F. (2012). The Handbook to IFRS Transition to IFRS U.S. GAAP Dual Reporting. John Wiley & Sons, Incorporated. https://ebookcentral-proquest-com.proxy.uwasa.fi/lib/tritonia-ebooks/detail.action?docID=818558#

Beuren, I., Hein, N., Klann, R. (2008). *Impact of the IFRS and US-GAAP on economic-financial indicators.* Managerial Auditing Journal. 23, 632-649. https://www-emerald-com.proxy.uwasa.fi/insight/content/doi/10.1108/02686900810890616/full/pdf?title=impact-of-the-ifrs-and-usgaap-on-economicfinancial-indicators

Cannon, N. & Bedard, J. (2017). *Auditing Challenging Fair Value Measurements: Evidence from the Field.* The Accounting Review. 92, 81-114. https://web-p-ebscohost-com.proxy.uwasa.fi/ehost/pdfviewer/pdfviewer?vid=0&sid=07075e82-d940-446e-9e30-0c56951c85aa%40redis

Chadda, N., Shilpa, V. (2020) Fair Value Accounting and Valuation of Non-Financial Assets: A Study of Impact of IFRS Adoption. *Journal of commerce and accounting research.* 9, 63-72. https://www.proquest.com/docview/2546591531?parentSessionId=uIYIQcWFxsIzC5kac%2BOyERp9%2BTevW%2BCv8UgARzmu1a0%3D&pq-origsite=primo&accountid=14797

Christensen, H., Hail, L., Leuz, C. (2013). *Mandatory IFRS reporting and changes in enforcement*. Journal of Accounting and Economics. 56, 147-177. http://dx.doi.org/10.1016/j.jacceco.2013.10.007

Director's Institute Finland. 4.3.2020. *Kirjanpito- ja tilinpäätöskäytännöt.* Retrieved 2022-01-31 from https://dif.fi/osa/kirjanpito-ja-tilinpaatoskaytannot/

Fernandez, P. (2005). *Financial Literature About Discounted Cash Flow Valuation.* IESE Business School – University of Navarra. https://media.iese.edu/research/pdfs/DI-0606-E.pdf

Fernandez, P. (2007). *Valuing companies by cash flow discounting: ten methods and nine theories.* Managerial Finance. 33, 853-876. https://www.proquest.com/docview/212672977?parentSessionId=oLXGXDsdQFf8fc9Eo7FEjjuYv14pGkb2zG5z4jUppS0%3D&pq-origsite=primo&accountid=14797

Evans, F. & Mellen, C. (2018). Valuation for M&a: Building and Measuring Private Company Value. https://ebookcentral-proquest-com.proxy.uwasa.fi/lib/tritonia-ebooks/reader.action?docID=5349036#

Haaramo, V., Palmuaro S., Peill, E. (2021). IFRS-Raportointi. https://proxy.uwasa.fi/login?qurl=https%3A%2F%2Fproxy.uwasa.fi%2Flogin%3Furl%3Dhttps%3A%2F%2Fverkkokirjahylly.almatalent.fi%2Fteos%2Fkt111

Halonen, J., Jalkanen-Steiner, J. Pihlgren, K., Sundvik, P., Suomela, M., Tolvanen, M., Torkkel, T., Torniainen, T., Tuomala, M. (2021). *IFRS – käytännön käsikirja* (fifth revised edition). Edita Publishing Oy. ISBN: 978-951-37-8117-0.

Hamberg, M., Beisland, L. (2014). *Changes in the value of relevance of goodwill accounting following the adoption of IFRS 3.* Journal of International Accounting, Auditing and Taxation. 23, 59-73. https://doi.org/10.1016/j.intaccaudtax.2014.07.002

Hirsjärvi, S., Remes, P. & Sajavaara, P. 2018. Tutki ja kirjoita. 22th edition. Porvoo. Bookwell Oy.

Honkamäki, T. & Reponen, M. (2022). Konsernitilinpäätöksen laadinta. (Fifth revised edition). Alma Talent. ISBN 978-952-14-4605-4

IFRS Foundation 2022. *IFRS 9 Financial Instruments.* Retrieved 2023-01-31 from www.ifrs.org

IFRS Foundation 2022. *IFRS 10 Consolidated Financial Statements.* Retrieved 2023-01-31 from www.ifrs.org

IFRS Foundation 2022. *IFRS 13 Fair Value Measurement.* Retrieved 2023-01-31 from www.ifrs.org

IFRS Foundation 2022. *Who uses IFRS Accounting Standards?* Retrieved 2023-4-8 from www.ifrs.org

IFRS Foundation 2022. *Why global accounting standards?* Retrieved 2023-01-31 from www.ifrs.org

International Federation of Accountants. 2021. *Finland, Member Organizations.* Retrieved 2022-02-02 from https://www.ifac.org/about-ifac/membership/profile/finland

IPEV. 2023. *Legal Disclaimer*. Retrieved 2023-02-01 from https://www.privateequityvaluation.com/Legal-Disclaimer

IPEV. 2022. *Valuation Guidelines.* Retrieved 2023-04-09 from https://www.privateequityvaluation.com/Valuation-Guidelines

Jarva, H. & Lantto, A-M. (2012). *Information Content of IFRS versus Domestic Accounting Standards: Evidence from Finland.* The Finnish Journal of Business Economics. 2, 141-177. http://dx.doi.org/10.2139/ssrn.1588087

Leppiniemi, J., Kykkänen, T. (2019). Kirjanpito, tilinpäätös ja tilinpäätöksen tulkinta. (Tenth revised edition). Alma Talent Oy ja tekijät. ISBN: 978-952-14-3562-1.

Markelevich, A., Shaw, L., Weihs, H. (2016). *Information content of IFRS versus domestic accounting standards: evidence from mandatory IFRS adoption in Israel.* International journal of accounting, auditing and performance evaluation. 12, 167-211. https://doi-org.proxy.uwasa.fi/10.1504/IJAAPE.2016.075622

Nissim, D. (2019). *EBITDA, EBITA, or EBIT?* Columbia Business School. 17-71. *https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2999675*

Oberli, A. (2012). *The Implications of Fair Value Accounting Standards on Private Equity Buyout Returns*. The Journal of Private Equity. 15, 55-78. https://www.jstor.org/stable/43503723

Pratt, S. & Grabowski, R. (2014). Cost of Capital. (Fifth revised edition). John Wiley & Sons, Incorporated. ISBN: 978–1–118–55580–4.

Qu, W., Fong, M., Oliver, J. (2012). *Does IFRS Convergence Improve Quality of Accounting Information? – Evidence From the Chinese Stock Market.* Corporate Ownership &

Control. 9, 187-196. https://d1wqtxts1xzle7.cloudfront.net/32622229/Wen_Qu_Michelle_Fong_Judy_Oliver_paper-libre.pdf?1391149082=&response-content-disposition=inline%3B+filename%3DWen_Qu_Michelle_Fong_Judy_Oliver_paper.pdf&Expires=1682710504&Signature=J1wSAIQWJDu-QKyg4fWEs6nl6CHAPe1RyfKrRP61ms4MN4xdkHFs3VgTFOKhHr4KEDP3dQas9Uafg6UvohhbU6zsERXb7rMTSW3YoYHs1fPJh3THKLrtGLvfLTfwm4VVKtEAbcI8lH8r-nwFxdQtNhYVFOMIdydoDbKyP~SnICN56qHM2i1wRw-r-bxUE-bFrJtj0rzV2mo0~64USoee7dfBdh9r5NGB6F7c1Pt72FWpnf9CbJ51GVtN5sQTDEDIFuWhlqOxGFRvLwOFDoWoBtEendPUN-mud~3IYss0dqXnXZhz5UOAMXFckSm5zNUOiiI28LQoe9I6NoSz9lt9k3mg__&Key-Pair-Id=APKAJLOHF5GGSLRBV4ZA

Pörssisäätiö. (2005). *Miten tilinpäätös muuttuu?* Opas IFRS-Standardien vaikutuksista. https://www.porssisaatio.fi/wp-content/uploads/2012/01/1117-IFRS-opas_suomi.pdf

Vasvari, F., Talmor, E., Talmor, E. (2011). International Private Equity. John Wiley & Sons, Incorporated. Online ISBN: 9781119973904.

# Appendices

## **Appendix 1.** Questionnaire Based on Open Interview

1. How ideal is it to make valuation of the company only based on the historical data (balance sheet and income statement)?
2. If there is no acquisition occurring, in which point of view the valuation of the company is important?
3. If you would have to make a valuation of the company based on historic data and couple of key figures, what would they be?

# **Appendix 2.** Discounted Cash Flow Valuation Method

| Asset under testing (carrying amount) | |
|---|---|
| Goodwill | |
| Intangible assets | |
| Tangible assets | |
| Net working capital | |
| Total | |

| EUR thousand | | FYxxAct | FYxxF | FYxxF | FYxxF | FYxxF | FYxxF | Terminal period |
|---|---|---|---|---|---|---|---|---|
| Net Sales | | | | | | | | |
| *Net sales growth* | | | | | | | | |
| **EBITDA** | | | | | | | | |
| **EBITDA margin** | | | | | | | | |
| Depreciation | | | | | | | | |
| **EBIT** | | | | | | | | |
| *EBIT %* | | | | | | | | |
| Taxes | 20,0 % | | | | | | | |
| **NOPLAT*** | | | | | | | | |
| Depreciation | | | | | | | | |
| Change in NWC | | | | | | | | |
| **Free Cash flow** | | | | | | | | |
| | | | | | | | | |
| WACC | 10,00 % | | | | | | | |
| Residual growth rate | 1,00 % | | | | | | | |
| | | | | | | | | |
| Timing factors | | | 1,0 | 2,0 | 3,0 | 4,0 | 5,0 | 5,0 |
| Discount factor @ WACC | | | 0,91 | 0,83 | 0,75 | 0,68 | 0,62 | 0,62 |
| **Present value of FCF** | | | **0** | **0** | **0** | **0** | **0** | **0** |

*) NOPLAT = non-operating profit less adjusted tax

| Forecast period | 0 |
|---|---|
| Terminal value | 0 |
| **Value in use** | **0** |